Appendix 9

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

☑ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended September 30, 2016

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from __________ to __________

Commission File Number 1-8864

USG CORPORATION

(Exact name of registrant as specified in its charter)

Delaware	36-3329400
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
550 West Adams Street, Chicago, Illinois	60661-3676
(Address of principal executive offices)	(Zip code)

Registrant's telephone number, including area code (312) 436-4000

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.
Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).
Yes ☑ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company (as defined in Rule 12b-2 of the Exchange Act).

Large accelerated filer ☑ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).
Yes ☐ No ☑

The number of shares of the registrant's common stock outstanding as of September 30, 2016 was 146,079,429.

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PART I. FINANCIAL INFORMATION
ITEM 1. FINANCIAL STATEMENTS

USG CORPORATION
CONSOLIDATED STATEMENTS OF INCOME
(Unaudited)

(millions, except per-share and share data)	Three months ended September 30,		Nine months ended September 30,	
	2016	2015	2016	2015
Net sales	$ 767	$ 747	$ 2,283	$ 2,195
Cost of products sold	586	578	1,728	1,710
Gross profit	181	169	555	485
Selling and administrative expenses	74	75	213	225
Long-lived asset impairment charges	10	—	10	—
Recovery of receivable	—	—	(3)	—
Gain on disposal of shipping operations, net	—	—	—	(1)
Operating profit	97	94	335	261
Income from equity method investments	14	13	37	35
Interest expense	(37)	(40)	(115)	(123)
Interest income	—	—	3	1
Loss on extinguishment of debt	(1)	—	(5)	(19)
Other income, net	1	—	6	—
Income from continuing operations before income taxes	74	67	261	155
Income tax (expense) benefit	(18)	1	(78)	2
Income from continuing operations	56	68	183	157
Income from discontinued operations, net of tax	6	8	20	22
Net income	$ 62	$ 76	$ 203	$ 179
Earnings per average common share - basic:				
Income from continuing operations	$ 0.39	$ 0.46	$ 1.26	$ 1.08
Income from discontinued operations	0.04	0.06	0.13	0.15
Net income	$ 0.43	$ 0.52	$ 1.39	$ 1.23
Earnings per average common share - diluted:				
Income from continuing operations	$ 0.38	$ 0.46	$ 1.25	$ 1.07
Income from discontinued operations	0.04	0.06	0.13	0.14
Net income	$ 0.42	$ 0.52	$ 1.38	$ 1.21
Average common shares	146,043,791	145,569,692	145,892,390	145,421,798
Average diluted common shares	148,387,637	147,534,779	147,520,891	147,223,897

See accompanying Notes to Consolidated Financial Statements.

USG CORPORATION
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(Unaudited)

(millions)	Three months ended September 30,		Nine months ended September 30,	
	2016	2015	2016	2015
Net income	$ 62	$ 76	$ 203	$ 179
Other comprehensive income (loss), net of tax:				
Derivatives qualifying as cash flow hedges:				
Loss on derivatives qualifying as cash flow hedges, net of tax expense (benefit) of ($1), $1, ($1), and $1, respectively	(2)	—	(6)	(1)
Less: Reclassification adjustment for loss on derivatives included in net income, net of tax benefit of ($1), $0, ($3), and $0, respectively	(2)	(2)	(6)	(7)
Net derivatives qualifying as cash flow hedges	—	2	—	6
Pension and postretirement benefits:				
Changes in pension and postretirement benefits, net of tax expense (benefit) of ($4), $1, ($7), and $2, respectively	(3)	4	(9)	2
Less: Amortization of prior service cost included in net periodic pension cost, net of tax benefit of ($1), $0, ($2), and ($1), respectively	—	(3)	(1)	(6)
Net pension and postretirement benefits	(3)	7	(8)	8
Foreign currency translation:				
Changes in foreign currency translation, net of tax expense of $0 in all periods	3	(52)	(9)	(91)
Other comprehensive loss, net of tax	$ —	$ (43)	$ (17)	$ (77)
Comprehensive income	$ 62	$ 33	$ 186	$ 102

See accompanying Notes to Consolidated Financial Statements.

USG CORPORATION
CONSOLIDATED BALANCE SHEETS
(Unaudited)

(millions, except share and per share data)	September 30, 2016	December 31, 2015
Assets		
Cash and cash equivalents	$ 634	$ 442
Short-term marketable securities	102	194
Restricted cash	—	9
Receivables (net of reserves - $13 and $9)	197	184
Inventories	228	219
Income taxes receivable	4	5
Other current assets	37	41
Assets related to discontinued operations	385	306
Total current assets	1,587	1,400
Long-term marketable securities	—	36
Property, plant and equipment (net of accumulated depreciation and depletion - $1,938 and $1,881)	1,700	1,771
Deferred income taxes	636	728
Equity method investments	674	682
Other assets	64	68
Assets related to discontinued operations	—	51
Total assets	$ 4,661	$ 4,736
Liabilities and Stockholders' Equity		
Accounts payable	$ 222	$ 208
Accrued expenses	165	186
Current portion of long-term debt	300	500
Income taxes payable	7	9
Litigation settlement accrual	—	9
Liabilities related to discontinued operations	118	80
Total current liabilities	812	992
Long-term debt	1,677	1,675
Deferred income taxes	3	5
Pension and other postretirement benefits	357	392
Other liabilities	183	216
Liabilities related to discontinued operations	—	20
Total liabilities	3,032	3,300
Preferred stock – $1 par value, authorized 36,000,000 shares; outstanding - none	—	—
Common stock – $0.10 par value; authorized 200,000,000 shares; issued: 2016 - 146,079,000 shares; 2015 - 145,667,000 shares	15	15
Additional paid-in capital	3,034	3,027
Accumulated other comprehensive loss	(331)	(314)
Retained earnings (accumulated deficit)	(1,089)	(1,292)
Total stockholders' equity	1,629	1,436
Total liabilities and stockholders' equity	$ 4,661	$ 4,736

See accompanying Notes to Consolidated Financial Statements.

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USG CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

(millions)	Nine months ended September 30, 2016	2015
Operating Activities		
Net income	$ 203	$ 179
Less: income from discontinued operations	20	22
Income from continuing operations	183	157
Adjustments to reconcile net income to net cash:		
Depreciation, depletion and amortization	100	99
Loss on extinguishment of debt	5	19
Long-lived asset impairment charges	10	—
Recovery of receivable	(3)	—
Share-based compensation expense	14	9
Deferred income taxes	85	1
Gain on asset dispositions	(10)	(6)
Income from equity method investments	(37)	(35)
Dividends received from equity method investments	18	18
Pension settlement	3	(1)
(Increase) decrease in working capital:		
Receivables	(10)	(7)
Income taxes receivable	2	(4)
Inventories	(9)	(9)
Other current assets	—	1
Payables	10	(29)
Accrued expenses	(34)	(65)
Decrease in other assets	2	4
Decrease in pension and other postretirement benefits	(47)	(33)
Decrease in other liabilities	(9)	(7)
Other, net	12	15
Net cash provided by operating activities of continuing operations	285	127
Net cash provided by operating activities of discontinued operations	12	26
Net cash provided by operating activities	$ 297	$ 153
Investing Activities		
Purchases of marketable securities	(183)	(96)
Sales or maturities of marketable securities	310	132
Capital expenditures	(44)	(67)
Net proceeds from asset dispositions	12	42
Return of capital	1	—
Release (deposit) of restricted cash	9	(8)
Net cash provided by investing activities of continuing operations	105	3
Net cash used for investing activities of discontinued operations	(1)	—
Net cash provided by investing activities	$ 104	$ 3

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Financing Activities		
Issuance of debt	—	350
Repayment of debt	(205)	(386)
Payment of debt issuance fees	—	(6)
Issuance of common stock	3	6
Repurchases of common stock to satisfy employee tax withholding obligations	(2)	(8)
Net cash used for financing activities of continuing operations	$ (204)	$ (44)
Effect of exchange rate changes on cash from continuing operations	(3)	(7)
Net increase in cash and cash equivalents from continuing operations	$ 183	$ 79
Net increase in cash and cash equivalents from discontinued operations	11	26
Change in cash balance included in discontinued operations	(2)	(1)
Net increase in cash and cash equivalents	192	104
Cash and cash equivalents at beginning of period	442	231
Cash and cash equivalents at end of period	$ 634	$ 335
Supplemental Cash Flow Disclosures:		
Interest paid, net of capitalized interest	$ 124	$ 128
Income taxes paid, net of refunds received	6	2
Noncash Investing and Financing Activities:		
Amount in accounts payable for capital expenditures	8	6
Reversal of USG Boral Building Products earnout	(24)	—

See accompanying Notes to Consolidated Financial Statements.

USG CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

In the following Notes to Consolidated Financial Statements, "USG," "we," "our" and "us" refer to USG Corporation, a Delaware corporation, and its subsidiaries included in the consolidated financial statements, except as otherwise indicated or as the context otherwise requires.

1. Organization, Consolidation and Presentation of Financial Statements

PREPARATION OF FINANCIAL STATEMENTS

We prepared the accompanying unaudited consolidated financial statements of USG Corporation in accordance with applicable United States Securities and Exchange Commission, or SEC, guidelines pertaining to interim financial information. The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. Actual results could differ materially from those estimates. In the opinion of our management, the financial statements reflect all adjustments, which are of a normal recurring nature, necessary for a fair presentation of our financial results for the interim periods. The results of operations for the three and nine months ended September 30, 2016 are not necessarily indicative of the results of operations to be expected for the entire year.

Certain reclassifications have been made to prior year amounts in order to conform with current year presentation. On August 29, 2016, we announced the signing of a definitive agreement to sell L&W Supply Corporation, or L&W, our distribution business, to American Builders & Contractors Supply Co., Inc., or ABC Supply, at which time L&W met the criteria to be classified as held for sale and presented as a discontinued operation. L&W's results of operations have been reclassified to "Income from discontinued operations, net of tax" in our consolidated statements of income for all periods presented. The assets and liabilities of L&W have been reclassified to "Assets related to discontinued operations" and "Liabilities related to discontinued operations", respectively, in our consolidated balance sheets as of September 30, 2016 and December 31, 2015. The cash flows associated with L&W have been reclassified to "Net cash provided by operating activities of discontinued operations" and "Net cash used for investing activities of discontinued operations" for all periods presented. The results of L&W, which consists of our Distribution segment, have been excluded from segment results. Additionally, results of our Gypsum and Ceilings segments have been revised to reflect intercompany transactions as a result of L&W's classification as a discontinued operation. See Note 2 for further discussion.

Our segments are structured around our key products and business units: Gypsum, Ceilings and USG Boral Building Products, or UBBP.

Our Gypsum reportable segment is an aggregation of the operating segments of the gypsum businesses in the United States, Canada, Mexico, and Latin America, our mining operation in Canada, which we indefinitely idled in the third quarter of 2016, and our shipping operations, which we exited in the second quarter of 2015. Gypsum manufactures products throughout the United States, Canada, Mexico and Latin America. These products include USG Sheetrock® brand gypsum wallboard, Sheetrock® brand joint compound, Durock® brand cement board, Levelrock® brand gypsum underlayment, Fiberock® brand backerboard, Securock® brand glass mat sheathing used for building exteriors, Securock® brand gypsum fiber and glass mat panels used as roof cover board and structural panel concrete roofing.

Our Ceilings reportable segment is an aggregation of the operating segments of the ceilings businesses in the United States, Canada, Mexico, and Latin America. Ceilings manufactures ceiling tile in the United States and ceiling grid in the United States and Canada.

UBBP is our 50/50 joint ventures with Boral Limited. UBBP manufactures, distributes and sells certain building products, mines raw gypsum and sells natural and synthetic gypsum throughout Asia, Australasia and the Middle East.

These financial statements and notes are to be read in conjunction with the financial statements and notes included in USG's Annual Report on Form 10-K for the fiscal year ended December 31, 2015, which we filed with the SEC on February 10, 2016.

RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS

In August 2016, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update, or ASU, 2016-15, "Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments," which addresses eight specific cash flow issues with the objective of reducing the existing diversity in practice. The standard will be effective for us in the first quarter of 2018 and we will adopt the new standard using the retrospective approach. The significant components of this standard are as follows:

- Debt prepayments or extinguishment costs are to be classified as cash outflows for financing activities. Upon adoption we will reclassify these costs to financing activities.
- Equity method investments that are a return on investment should be classified as an operating activity where a return of investment should be classified as an investing activity. As we currently apply this methodology to our cash flow statement, there will be no impact.
- Insurance claims are to be classified based on the nature of the loss. As we currently apply this methodology to our cash flow statement, there will be no impact.

In March 2016, the FASB issued ASU 2016-09, “Improvements to Employee Share-Based Payment Accounting,” which simplifies certain aspects of accounting for employee share-based payments. The standard will be effective for us in the first quarter of 2017 and will be applied in part prospectively and in part using a modified retrospective transition approach. The components of this standard that will impact our financial statements are as follows:

- Excess tax benefits and deficiencies related to stock compensation will be prospectively recognized in income tax expense instead of in equity when the awards vest or are settled. For the nine months ended September 30, 2016 and 2015, we recorded a reduction to tax benefits to equity of $9 million and $0, respectively, that would have been recognized as $8 million net tax expense in 2016 and $4 million net tax benefit in 2015 under the new standard.
- Excess tax benefits that were previously unrecognized because the related tax deduction had not been realized through a reduction in taxes payable will be recorded on a modified retrospective basis. If we had early adopted this standard, we would have recorded a cumulative-effect adjustment to opening retained earnings of $25 million on our September 30, 2016 consolidated balance sheet.
- An accounting policy will be elected to either estimate forfeitures on awards, as previously required, or to recognize forfeitures as they occur. Upon adoption, we will recognize forfeitures as they occur and will record a cumulative-effect change to retained earnings in accordance with the modified retrospective adoption requirements. If we had early adopted this standard, we would have recorded an immaterial cumulative-effect adjustment to opening retained earnings on our September 30, 2016 consolidated balance sheet.

In February 2016, the FASB issued ASU 2016-02, “Leases,” which supersedes existing lease guidance to require lessees to recognize assets and liabilities on the balance sheet for the rights and obligations created by long-term leases and to disclose additional quantitative and qualitative information about leasing arrangements. The standard will be effective for us in the first quarter of 2019, and we will adopt the new standard using the modified retrospective approach. While we continue to evaluate the impact of the new standard, we believe the standard will require us to implement a new lease accounting system and related processes. Further, we anticipate the adoption of ASU 2016-02 will have a significant impact to our consolidated balance sheets, consolidated statements of income and disclosures.

In January 2016, the FASB issued ASU 2016-01, “Recognition and Measurement of Financial Assets and Financial Liabilities,” which requires that most equity instruments be measured at fair value, with subsequent changes in fair value recognized in net income. The pronouncement also impacts the financial liabilities under the fair value option and the presentation and disclosure requirements for financial instruments. The ASU does not apply to equity method investments or investments in consolidated subsidiaries. The standard will be effective for us in the first quarter of 2018 and will be applied as a cumulative-effect adjustment to the balance sheet in the year of adoption. We do not expect the adoption of ASU 2016-01 will have a significant impact to our consolidated financial statements or disclosures.

In July 2015, the FASB issued ASU 2015-11, "Simplifying the Measurement of Inventory," which changes the measurement principle for inventory from the lower of cost or market to the lower of cost or net realizable value for entities that measure inventory using the first-in, first-out (FIFO) or average cost method. The ASU defines net realizable value as estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. The standard will be effective for us in the first quarter of 2017 and will be applied prospectively. We do not expect the adoption of ASU 2015-11 will have a significant impact to our consolidated financial statements or disclosures.

In May 2015, the FASB issued ASU 2015-07, "Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent)," which updates the disclosure requirements for investments that are measured at net asset value using the practical expedient. These investments are to be removed from the fair value hierarchy and shown as a reconciling item. The standard was effective for us in the first quarter of 2016 and will be applied retrospectively. The update will be reflected in our disclosure for our December 31, 2016 Annual Report on Form 10-K.

In May 2014, the FASB issued ASU 2014-09, “Revenue from Contracts with Customers,” which supersedes the revenue recognition requirements in “Revenue Recognition (Topic 605),” and requires entities to recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. In March 2016, the FASB issued ASU 2016-08, “Revenue from Contracts with Customers - Principal versus Agent Considerations (Reporting revenue gross versus net),” which clarifies gross versus net revenue reporting when another party is involved in the transaction. In April 2016, the FASB issued ASU 2016-10, “Identifying Performance Obligations and Licensing,” and in May 2016, ASU 2016-12, “Revenues from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients” both of which provide supplemental adoption guidance and clarification to ASU 2014-09. The standard will be effective for us in the first quarter of 2018, and we will adopt the new standard using the retrospective approach with practical expedients. We do not expect that the adoption of ASU 2014-09, ASU 2016-08, ASU 2016-10 or ASU 2016-12 will have a significant impact to our consolidated financial statements or disclosures.

2. Discontinued Operations

On August 29, 2016, we announced the signing of a definitive agreement to sell our L&W business to ABC Supply for total cash consideration of $670 million, subject to a working capital adjustment. The sale is expected to close on October 31, 2016.

For the quarter ended September 30, 2016, L&W met the criteria to be classified as held for sale and to be presented as a discontinued operation. Accordingly, we reclassified the results of operations and the cash flows of L&W to discontinued operations in our consolidated statements of income and consolidated statements of cash flows for all periods presented. Additionally, we reclassified the assets and liabilities of L&W to discontinued operations in our consolidated balance sheets.

The summarized financial information related to L&W that has been excluded from continuing operations and reported as a discontinued operation is as follows:

(millions)	Three months ended September 30,		Nine months ended September 30,	
	2016	2015	2016	2015
Net sales	$ 388	$ 378	$ 1,131	$ 1,076
Cost of products sold	370	364	1,080	1,043
Gross profit	18	14	51	33
Selling and administrative expenses (a)	7	6	18	11
Operating profit	11	8	33	22
Income tax expense	(5)	—	(13)	—
Income from discontinued operations	$ 6	$ 8	$ 20	$ 22

(a) The three and nine months ended September 30, 2016 include transaction costs of $3 million and $8 million, respectively. Prior to the third quarter of 2016, these costs were reported in Corporate selling and administrative expenses.

The assets and liabilities related to discontinued operations are as follows:

(millions)	September 30, 2016	December 31, 2015
Cash	$ 2	$ —
Accounts receivable, net	231	207
Inventories	104	95
Other current assets	3	4
Property, plant and equipment, net [a]	17	17
Intangible assets [a]	25	31
Other assets [a]	3	3
Total assets related to discontinued operations	$ 385	$ 357
Accounts payable	$ 71	$ 51
Accrued expenses	29	29
Other liabilities [a]	18	20
Total liabilities related to discontinued operations	$ 118	$ 100

(a) As of December 31, 2015, these balances are reflected as long-term in our consolidated balance sheet.

After the completion of the sale of L&W to ABC Supply, we will retain responsibility for the benefits payable to employees of L&W from the USG pension and postretirement plans for the benefits accrued while employed by USG. As such, these liabilities are not reflected in liabilities related to discontinued operations. See Note 17 for discussion of the liability associated with the pricing lawsuit.

Additionally, upon closing of the sale of L&W, we will enter into a supply agreement with L&W and a transition services agreement with ABC Supply to provide certain transition services.

3. Long-Lived Asset Impairment Charges

In the third quarter of 2016, we indefinitely idled our mining operations in Little Narrows, Nova Scotia, Canada after completing a review of our gypsum sourcing needs. As a result, we recorded impairment charges of $10 million, which are included in our consolidated statements of income in "Long-lived asset impairment charges" for the three and nine months ended September 30, 2016. We recorded severance and other charges of $2 million for the termination of employees at the Little Narrows location, which are included in "Costs of products sold". Both the impairment and severance charges relate to our Gypsum segment.

4. Equity Method Investments

Equity method investments as of September 30, 2016 and December 31, 2015, were as follows:

	September 30, 2016		December 31, 2015	
(dollars in millions)	Carrying Value	Ownership Percentage	Carrying Value	Ownership Percentage
USG Boral Building Products	$ 667	50%	$ 675	50%
Other equity method investments	7	33% - 50%	7	33% - 50%
Total equity method investments	$ 674		$ 682	

Investment in USG Boral Building Products

UBBP is our 50/50 joint ventures with Boral Limited, or Boral, and consists of USG Boral Building Products Pte. Limited, a company organized under the laws of Singapore, and USG Boral Building Products Pty Limited, a company organized under the laws of Australia. It manufactures, distributes and sells certain building products, mines raw gypsum and sells natural and synthetic gypsum throughout Asia, Australasia and the Middle East (the Territory). The products that UBBP manufactures and distributes include products for wall, ceiling, floor lining and exterior systems that utilize gypsum, gypsum wallboard, referred

to as plasterboard in the Territory, mineral fiber ceiling tiles, steel grid and joint compound. We account for our investment in UBBP using the equity method of accounting. Through the first nine months of 2016, UBBP paid cash dividends on earnings through March 2016 of which our 50% share totaled $18 million. We recorded the cash dividend in operating activities on our statements of cash flows. As of September 30, 2016, the amount of our consolidated retained earnings which represents undistributed earnings from UBBP is $60 million.

We formed the joint ventures with Boral on February 27, 2014. In the second quarter of 2016, we received $1 million from Boral for final customary working capital adjustments which resulted in a reduction of our investment. We recorded the working capital payment in investing activities on our statement of cash flows. In the event certain U.S. Dollar denominated performance targets are satisfied by UBBP, we will be obligated to pay Boral scheduled earnout payments in an aggregate amount up to $75 million, comprised first of $25 million based on performance during the first three years after closing and then up to $50 million based on performance during the first five years after closing. Upon inception of the joint ventures, we recorded a liability representing the present value of the first earnout payment which was reversed in the second quarter of 2016 as we concluded that it was no longer probable that the three-year performance target will be achieved. We have not recorded a liability for the second earnout payment as we have concluded that it is currently not probable that the five-year performance target will be achieved. If our conclusion on the probability of achievement was to change, we will record a liability representing the present value of the earnout payments with a corresponding increase to our investment. As of September 30, 2016 and December 31, 2015, our liability for the earnout payments was $0 and $24 million, respectively. As of December 31, 2015, the liability is included in "Other liabilities" on our accompanying consolidated balance sheet.

All of our investments accounted for under the equity method of accounting are initially recorded at cost, and subsequently adjusted for our share of the net income or loss and cash contributions and distributions to or from these entities. Because the underlying net assets in our investments are denominated in a foreign currency, translation gains or losses will impact the recorded value of our investments. Translation gains or losses recorded in other comprehensive income were as follows:

	Three months ended September 30,		Nine months ended September 30,	
(millions)	2016	2015	2016	2015
Translation gain (loss)	$ 13	$ (35)	$ —	$ (54)

Summarized financial information for our equity method investments is as follows:

	Three months ended September 30,		Nine months ended September 30,	
(millions)	2016	2015	2016	2015
USG Boral Building Products:				
Net sales	$ 276	$ 250	$ 778	$ 742
Gross profit [(a)]	90	69	241	200
Operating profit	41	30	105	87
Income from continuing operations before income taxes	42	32	112	94
Net income	29	25	78	71
Net income attributable to USG Boral Building Products	28	24	74	66
USG share of income from investment accounted for using the equity method	14	12	37	33
Other equity method investments:				
USG share of income from investments accounted for using the equity method	—	1	—	2
Total income from equity method investments	$ 14	$ 13	$ 37	$ 35

(a) The results for the three and nine months ended September 30, 2016 include impairment charges of $8 million, net of tax of $0, for certain assets in China.

Transactions with UBBP

Our Gypsum segment sells products to UBBP. Total sales to UBBP for the three and nine months ended September 30, 2016 and September 30, 2015 were immaterial.

In 2014, in connection with the formation of UBBP, we contributed our ownership interest in a joint venture in China to UBBP, but retained our loan receivable from this joint venture. As of September 30, 2016 and December 31, 2015, the loan receivable, including interest, totaled $15 million and $14 million, respectively, and is included in "Other assets" on our accompanying consolidated balance sheets.

5. Segments

Our operations are organized into three reportable segments: Gypsum, Ceilings and UBBP. As discussed in Note 2, the results of our Distribution segment have been reclassified to discontinued operations. Additionally, as a result of the presentation of L&W as a discontinued operation, the results of our Gypsum and Ceilings segments have been revised to reflect only the sales of USG products from Gypsum and Ceilings to L&W that have been sold by L&W outside the consolidated group. See Note 4 for segment results for UBBP. Segment results for our Gypsum and Ceilings segments were as follows:

	Three months ended September 30,		Nine months ended September 30,	
(millions)	2016	2015	2016	2015
Net Sales:				
Gypsum	$ 635	$ 617	$ 1,899	$ 1,818
Ceilings	135	132	391	384
Eliminations	(3)	(2)	(7)	(7)
Total	$ 767	$ 747	$ 2,283	$ 2,195
Operating Profit (Loss):				
Gypsum	$ 89	$ 93	$ 310	$ 262
Ceilings	33	25	93	70
Corporate [(a)]	(25)	(24)	(68)	(71)
Total	$ 97	$ 94	$ 335	$ 261

(a) Transaction costs of $3 million and $8 million associated with the sale of L&W have been reclassified to discontinued operations for the three and nine months ended September 30, 2016, respectively.

6. Earnings Per Share

Basic earnings per share is based on the weighted average number of common shares outstanding. Diluted earnings per share is based on the weighted average number of common shares outstanding plus the dilutive effect, if any, of market share units, or MSUs, performance shares, restricted stock units, or RSUs, stock options, and deferred shares associated with our deferred compensation program for non-employee directors.

The reconciliation of basic earnings per share to diluted earnings per share is shown in the following table.

	Three months ended September 30,		Nine months ended September 30,	
(millions, except per-share data)	2016	2015	2016	2015
Income from continuing operations	$ 56	$ 68	$ 183	$ 157
Income from discontinued operations, net of tax	6	8	20	22
Net income	$ 62	$ 76	$ 203	$ 179
Average common shares	146.0	145.6	145.9	145.4
Dilutive RSUs, MSUs, performance shares and stock options	2.2	1.8	1.6	1.6
Deferred shares associated with a deferred compensation program for non-employee directors	0.2	0.1	—	0.2
Average diluted common shares	148.4	147.5	147.5	147.2
Basic earnings per average common share:				
Income from continuing operations	$ 0.39	$ 0.46	$ 1.26	$ 1.08
Income from discontinued operations	0.04	0.06	0.13	0.15
Net income	$ 0.43	$ 0.52	$ 1.39	$ 1.23
Diluted earnings per average common share:				
Income from continuing operations	$ 0.38	$ 0.46	$ 1.25	$ 1.07
Income from discontinued operations	0.04	0.06	0.13	0.14
Net income	$ 0.42	$ 0.52	$ 1.38	$ 1.21

MSUs, performance shares, RSUs, and stock options and deferred shares associated with our deferred compensation program for non-employee directors that were not included in the computation of diluted earnings per share for those periods because their inclusion would be anti-dilutive were as follows:

	Three months ended September 30,		Nine months ended September 30,	
(millions, common shares)	2016	2015	2016	2015
MSUs, performance shares, RSUs and stock options	1.0	1.8	1.6	1.9
Deferred shares associated with a deferred compensation program for non-employee directors	—	—	0.2	—

7. Marketable Securities

Marketable securities are classified as available-for-sale securities and reported at fair value, with unrealized gains and losses excluded from earnings and reported in "Accumulated other comprehensive loss" on our accompanying consolidated balance sheets. Proceeds received from sales or maturities of marketable securities were as follows:

	Three months ended September 30,		Nine months ended September 30,	
(millions)	2016	2015	2016	2015
Proceeds received	$ 123	$ 29	$ 310	$ 132

Our investments in marketable securities consisted of the following:

	As of September 30, 2016		As of December 31, 2015	
(millions)	Amortized Cost	Fair Value	Amortized Cost	Fair Value
Corporate debt securities	$ 65	$ 65	$ 134	$ 134
U.S. government and agency debt securities	32	32	57	57
Asset-backed debt securities	—	—	21	21
Certificates of deposit	5	5	15	15
Municipal debt securities	—	—	3	3
Total marketable securities	$ 102	$ 102	$ 230	$ 230

The realized and unrealized gains and losses for the three and nine months ended September 30, 2016 and 2015 were immaterial. Cost basis for securities sold are determined on a first-in-first-out basis.

Contractual maturities of marketable securities as of September 30, 2016 were as follows:

(millions)	Amortized Cost	Fair Value
Due in 1 year or less	$ 102	$ 102
Due in 1-5 years	—	—
Total marketable securities	$ 102	$ 102

Actual maturities may differ from the contractual maturities because issuers of the securities may have the right to prepay them.

8. Intangible Assets

Intangible assets are included in "Other assets" on our accompanying consolidated balance sheets. As discussed in Note 2, we signed a definitive agreement to sell our L&W business and reclassified its results to discontinued operations and reclassified assets and liabilities to discontinued operations on our consolidated balance sheets. The intangible assets attributable to L&W are excluded from the tables below.

Intangible assets with definite lives are amortized. These assets are summarized as follows:

	As of September 30, 2016			As of December 31, 2015		
(millions)	Gross Carrying Amount	Accumulated Amortization	Net	Gross Carrying Amount	Accumulated Amortization	Net
Intangible assets with definite lives	$ 7	$ (6)	$ 1	$ 7	$ (6)	$ 1

Total amortization expense was immaterial for all periods presented. Estimated amortization expense for the remainder of 2016 and for future years is as follows:

(millions)	2016	2017	2018 and thereafter
Estimated future amortization expense	$ —	$ —	$ 1

Intangible assets with indefinite lives are not amortized. The gross carrying amount of these assets was $8 million as of both September 30, 2016 and December 31, 2015.

9. Debt

Total debt, including the current portion of long-term debt, consisted of the following:

(millions)	September 30, 2016	December 31, 2015
5.5% senior notes due 2025	$ 350	$ 350
5.875% senior notes due 2021	350	350
6.3% senior notes due 2016	300	500
7.75% senior notes due 2018	500	500
7.875% senior notes due 2020, net of discount	249	249
Industrial revenue bonds (due 2028 through 2034)	239	239
Total	$ 1,988	$ 2,188
Less: Unamortized debt issuance costs	11	13
Total	$ 1,977	$ 2,175

REPURCHASE OF SENIOR NOTES

In the first nine months of 2016, we repurchased $200 million of our 6.3% Senior Notes due in 2016, referred to as the 6.3% Notes, on the open market. The transaction included premiums of $5 million and accrued interest of $4 million for aggregate consideration of $209 million. As a result of the repurchases, we recorded a loss on early extinguishment of debt, before tax, of $5 million including premiums, write-off of deferred financing fees and broker fees, of which $1 million occurred in the third quarter.

In the first quarter of 2015, we repurchased $350 million of our 8.375% Senior Notes due in 2018, referred to as the 8.375% Notes, through both a cash tender offer and a subsequent notice of redemption of the remaining 8.375% Notes. We completed a cash tender offer pursuant to which we repurchased $126 million of the 8.375% Notes for aggregate consideration, including tender offer premium and accrued and unpaid interest, of $135 million. We repurchased the remaining $224 million of the 8.375% Notes for aggregate consideration, including premiums and accrued and unpaid interest, of $242 million. As a result of the repurchases, we recorded a loss on early extinguishment of debt of $19 million including premiums and write-off of deferred financing fees.

Also in the first quarter of 2015, we issued $350 million of 5.5% Senior Notes due March 1, 2025. The net proceeds from the issuance of these notes and cash on hand were used to fund the repurchases of the 8.375% Notes and all related costs and expenses. We deferred approximately $6 million of debt issuance costs that are being amortized to interest expense over the term of the notes. As of September 30, 2016 and December 31, 2015, these notes, net of unamortized debt issuances costs, were recorded on our accompanying consolidated balance sheets at $345 million and $344 million, respectively.

CREDIT FACILITY

Taking into account the most recent borrowing base calculation delivered under the credit facility, which reflects trade receivables and inventory as of September 30, 2016, and outstanding letters of credit, borrowings available under the credit facility were approximately $337 million, including $50 million for CGC. As of September 30, 2016 and during the quarter then-ended, there were no borrowings under the facility. Had there been any borrowings as of that date, the applicable interest rate would have been 2.10% for loans in the US and 2.15% for loans in Canada. Outstanding letters of credit totaled $46 million as of September 30, 2016.

The fair value of our debt was approximately $2.091 billion as of September 30, 2016 and $2.295 billion as of December 31, 2015. The fair values were based on quoted prices for identical or similar liabilities in markets that are not active or valuation models in which all significant inputs are observable and, as a result, are classified as Level 2 inputs. See Note 11 for further discussion on fair value measurements and classifications.

As of September 30, 2016, we were in compliance with the covenants contained in our credit facilities.

10. Derivative Instruments

We use derivative instruments to manage selected commodity price and foreign currency exposures as described below. We do not use derivative instruments for speculative trading purposes, and we typically do not hedge beyond four years. Cash flows from derivative instruments are included in net cash provided by operating activities in the consolidated statements of cash flows.

COMMODITY DERIVATIVE INSTRUMENTS
As of September 30, 2016, we had outstanding natural gas swap contracts to hedge forecasted purchases with an aggregate notional amount of 31 million mmBTUs (millions of British Thermal Units). All of these contracts mature by December 31, 2020. For contracts designated as cash flow hedges, the pre-tax net unrealized loss that remained in accumulated other comprehensive income (loss), or AOCI, as of September 30, 2016 was $7 million and as of December 31, 2015 was $19 million. No ineffectiveness was recorded on contracts designated as cash flow hedges in the first nine months of both 2016 and 2015. Gains and losses on contracts designated as cash flow hedges are reclassified into earnings when the underlying forecasted transactions affect earnings. For contracts designated as cash flow hedges, we reassess the probability of the underlying forecasted transactions occurring on a quarterly basis.

Changes in fair value on contracts not designated as cash flow hedges are recorded to earnings. The fair value of those contracts not designated as cash flow hedges was immaterial as of September 30, 2016 and a $2 million unrealized loss as of December 31, 2015.

FOREIGN EXCHANGE DERIVATIVE INSTRUMENTS
We have foreign exchange forward contracts to hedge forecasted purchases of products and services denominated in foreign currencies. The notional amount of these contracts was $101 million as of September 30, 2016, and they mature by December 31, 2017. These forward contracts are designated as cash flow hedges and no ineffectiveness was recorded in the first nine months of both 2016 and 2015. Gains and losses on the contracts are reclassified into earnings when the underlying forecasted transactions affect earnings. The fair value of these contracts that remained in AOCI was an unrealized net pre-tax loss of $1 million as of September 30, 2016 and an unrealized net pre-tax gain of $8 million as of December 31, 2015.

In the third quarter of 2015, we entered into foreign exchange forward contracts to hedge a portion of our net investment in our Knauf-USG joint venture which we sold in the fourth quarter of 2015. The notional amount of these contracts was $35 million as of September 30, 2015, and they matured on November 16, 2015. These forward contracts were designated as net investment hedges and no ineffectiveness was recorded in the third quarter of 2015. Gains and losses on derivatives designated as net investment hedges, to the extent they are effective as hedges, remain in AOCI until such point when the investment is either sold or liquidated. The fair value of these contracts that remained in AOCI was an immaterial gain as of September 30, 2015.

COUNTERPARTY RISK, MASTER NETTING ARRANGEMENTS AND BALANCE SHEET OFFSETTING
We are exposed to credit losses in the event of nonperformance by the counterparties to our derivative instruments. As of September 30, 2016, our derivatives were in a $8 million net liability position. All of our counterparties have investment grade credit ratings; accordingly, we anticipate that they will be able to fully satisfy their obligations under the contracts.

All of our derivative contracts are governed by master netting agreements negotiated between us and the counterparties that reduce our counterparty credit exposure. The agreements outline the conditions (such as credit ratings and net derivative fair values) upon which we, or the counterparties, are required to post collateral. As required by certain of our agreements, we had $8 million of collateral posted with our counterparties related to our derivatives as of September 30, 2016. Amounts paid as cash collateral are included in "Receivables" on our accompanying consolidated balance sheets.

We have not adopted an accounting policy to offset fair value amounts related to derivative contracts under our master netting arrangements; therefore, individual derivative contracts are reflected on a gross basis, as either assets or liabilities, on our accompanying consolidated balance sheets, based on their fair value as of the balance sheet date.

FINANCIAL STATEMENT INFORMATION

The following are the pretax effects of derivative instruments on the consolidated statements of income for the three months ended September 30, 2016 and 2015.

(millions)	Amount of Gain or (Loss) Recognized in Other Comprehensive Income on Derivatives (Effective Portion) 2016	2015	Location of Gain or (Loss) Reclassified from AOCI into Income (Effective Portion)	Amount of Gain or (Loss) Reclassified from AOCI into Income (Effective Portion) 2016	2015
Derivatives in Cash Flow Hedging Relationships					
Commodity contracts	$ (4)	$ (5)	Cost of products sold	$ (3)	$ (4)
Foreign exchange contracts	1	6	Cost of products sold	—	2
Derivatives in Net Investment Hedging Relationships					
Foreign exchange contracts	—	—	Other income, net	—	—
Total	$ (3)	$ 1		$ (3)	$ (2)

(millions)	Location of Gain or (Loss) Recognized in Income on Derivatives	Amount of Gain or (Loss) Recognized in Income on Derivatives 2016	2015
Derivatives Not Designated as Hedging Instruments			
Commodity contracts	Cost of products sold	$ —	$ (1)
Total		$ —	$ (1)

The following are the pretax effects of derivative instruments on the consolidated statements of income for the nine months ended September 30, 2016 and 2015.

(millions)	Amount of Gain or (Loss) Recognized in Other Comprehensive Income on Derivatives (Effective Portion) 2016	2015	Location of Gain or (Loss) Reclassified from AOCI into Income (Effective Portion)	Amount of Gain or (Loss) Reclassified from AOCI into Income (Effective Portion) 2016	2015
Derivatives in Cash Flow Hedging Relationships					
Commodity contracts	$ (2)	$ (9)	Cost of products sold	$ (13)	$ (11)
Foreign exchange contracts	(5)	9	Cost of products sold	4	4
Derivatives in Net Investment Hedging Relationships					
Foreign exchange contracts	—	—	Other income, net	—	—
Total	$ (7)	$ —		$ (9)	$ (7)

(millions)	Location of Gain or (Loss) Recognized in Income on Derivatives	Amount of Gain or (Loss) Recognized in Income on Derivatives 2016	2015
Derivatives Not Designated as Hedging Instruments			
Commodity contracts	Cost of products sold	$ —	$ (1)
Total		$ —	$ (1)

The following are the fair values of derivative instruments and the location on our accompanying consolidated balance sheets as of September 30, 2016 and December 31, 2015.

(millions)	Balance Sheet Location	Fair Value 9/30/16	Fair Value 12/31/15	Balance Sheet Location	Fair Value 9/30/16	Fair Value 12/31/15
Derivatives in Cash Flow Hedging Relationships						
Commodity contracts	Other current assets	$ 2	$ 1	Accrued expenses	$ 6	$ 15
Commodity contracts	Other assets	2	—	Other liabilities	5	5
Foreign exchange contracts	Other current assets	1	8	Accrued expenses	2	—
Foreign exchange contracts	Other assets	—	—	Other liabilities	—	—
Total derivatives in cash flow hedging relationships		$ 5	$ 9		$ 13	$ 20
Derivatives Not Designated as Hedging Instruments						
Commodity contracts	Other current assets	$ —	$ —	Accrued expenses	$ —	$ 2
Total derivatives not designated as hedging instruments		$ —	$ —		$ —	$ 2
Total derivatives	Total assets	$ 5	$ 9	Total liabilities	$ 13	$ 22

As of September 30, 2016, we had no derivatives designated as fair value hedges or net investment hedges.

11. Fair Value Measurements

Certain assets and liabilities are required to be recorded at fair value. There are three levels of inputs that may be used to measure fair value. Level 1 is defined as observable inputs such as quoted prices (unadjusted) in active markets for identical assets or liabilities that a company has the ability to access. Level 2 is defined as inputs, other than the quoted prices included in Level 1, which are observable for the asset or liability, either directly or indirectly. Level 3 is defined as unobservable inputs for the asset or liability which is typically based on a company's own assumptions where there is little, if any, related market data available.

The cash equivalents and equity mutual funds shown in the table below primarily consist of money market funds that are valued based on quoted prices in active markets and, as a result, are classified as Level 1. We use quoted prices, other readily observable market data and internally developed valuation models when valuing our marketable securities and derivatives and have classified them as Level 2. Marketable securities are valued using income and market value approaches and values are based on quoted prices or other observable market inputs received from data providers. The valuation process may include pricing matrices, or prices based upon yields, credit spreads or prices of securities of comparable quality, coupon, maturity and type. Derivatives are valued using the income approach including discounted-cash-flow models or a Black-Scholes option pricing model and readily observable market data. The inputs for the valuation models are obtained from data providers and include end-of-period spot and forward natural gas prices, foreign currency exchange rates, natural gas price volatility and LIBOR and swap rates for discounting the cash flows implied from the derivative contracts.

Our assets and liabilities measured at fair value on a recurring basis were as follows:

	Quoted Prices in Active Markets for Identical Assets (Level 1)		Significant Other Observable Inputs (Level 2)		Significant Unobservable Inputs (Level 3)		Total	
(millions)	9/30/16	12/31/15	9/30/16	12/31/15	9/30/16	12/31/15	9/30/16	12/31/15
Cash equivalents	$ 153	$ 223	$ 134	$ 25	$ —	$ —	$ 287	$ 248
Equity mutual funds	5	4	—	—	—	—	5	4
Marketable securities:								
Corporate debt securities	—	—	65	134	—	—	65	134
U.S. government and agency debt securities	—	—	32	57	—	—	32	57
Asset-backed debt securities	—	—	—	21	—	—	—	21
Certificates of deposit	—	—	5	15	—	—	5	15
Municipal debt securities	—	—	—	3	—	—	—	3
Derivative assets	—	—	5	9	—	—	5	9
Derivative liabilities	—	—	(13)	(22)	—	—	(13)	(22)

Certain assets and liabilities are measured at fair value on a nonrecurring basis rather than on an ongoing basis, but are subject to fair value adjustments in certain circumstances, such as when there is evidence of impairment or when a new liability is being established that requires fair value measurement. During the third quarter of 2016, we indefinitely idled our mining operations in Little Narrows, Nova Scotia, Canada. We reviewed the property, plant and equipment at Little Narrows for potential impairment by comparing the carrying values of those assets with their fair values as estimated using the future undiscounted cash flows for their remaining useful lives. We measured the fair value of the machinery, equipment and buildings using measurements classified as Level 3, and, as disclosed in Note 3, we recorded long-lived asset impairment charges of $10 million.

12. Employee Retirement Plans

The components of net pension and postretirement benefit costs are summarized in the following table:

	Three months ended September 30,		Nine months ended September 30,	
(millions)	2016	2015	2016	2015
Pension:				
Service cost of benefits earned	$ 11	$ 12	$ 34	$ 37
Interest cost on projected benefit obligation	17	16	51	50
Expected return on plan assets	(22)	(20)	(66)	(62)
Settlement	1	1	3	1
Net amortization	5	10	14	29
Net pension cost	$ 12	$ 19	$ 36	$ 55
Postretirement:				
Service cost of benefits earned	$ 1	$ 1	$ 2	$ 2
Interest cost on projected benefit obligation	1	1	4	4
Net amortization	(7)	(8)	(21)	(24)
Net postretirement benefit\	$ (5)	$ (6)	$ (15)	$ (18)

The amounts in the table above include the costs associated with the employees of L&W that are presented in discontinued operations. After the completion of the sale of L&W to ABC Supply, we will retain responsibility for the benefits payable to employees of L&W for the benefits accrued while employed by USG from the USG pension and postretirement plans.

During the first nine months of 2016, we made cash contributions of $50 million to the USG Corporation Retirement Plan Trust, $6 million to our pension plan in Canada, and $8 million, in aggregate, to certain other domestic pension plans. We expect to make total contributions to our pension plans in 2016 of approximately $65 million. Subsequent to the sale of L&W, we may make an incremental contribution to the USG Corporation Retirement Plan.

In the third quarter of 2016, management approved an amendment to the USG Corporation Retirement Plan to allow retirees and terminated vested participants to take a lump-sum payment at any time without restriction upon departure from USG. The amendment is effective on November 1, 2016 and is expected to reduce the projected benefit obligation and pension costs.

13. Share-Based Compensation

During the first nine months of 2016, we granted share-based compensation in the form of market share units, or MSUs, performance shares, and restricted stock units, or RSUs, to eligible participants under our Long-Term Incentive Plan and 2016 Long-Term Incentive Plan that was approved at our 2016 annual meeting of stockholders. We recognize expense on all share-based grants over the service period, which is the shorter of the period until the employees' retirement eligibility dates and the service period of the award for awards expected to vest. Expense is generally reduced for estimated forfeitures. Awards granted during the first nine months of 2016, weighted average fair value, and assumptions used to determine fair value were as follows:

	MSUs	Performance Shares	RSUs
Awards granted	800,834	213,626	66,000
Weighted average fair value	$ 19.59	$ 21.10	$ 23.47
Expected volatility	34.02%	34.02%	N/A
Risk-free rate (a)	0.86%	0.86%	N/A
Expected term (in years) (b)	2.95	2.95	N/A
Expected dividends	—	—	N/A

(a) The risk-free rate was based on zero coupon U.S. government issues at the time of grant.
(b) The expected term represents the period from the valuation date to the end of the performance period.

MARKET SHARE UNITS

The MSUs granted during the first nine months of 2016 generally vest after a three-year period based on our actual stock price performance during such period. The number of MSUs earned will vary from zero to 150% of the number of MSUs awarded depending on the actual performance of our stock price. In the case of termination of employment due to death, disability or retirement during the performance period, vesting will be pro-rated based on the number of full months employed in 2016. Each MSU earned will be settled in common stock at the end of the three-year period. MSUs may vest earlier in the case of a change in control in most circumstances only if there is also a related loss of employment or diminution of duties.

We estimated the fair value of each MSU granted on the date of grant using a Monte Carlo simulation that used the assumptions noted in the table above. Volatility was based on stock price history immediately prior to grant for a period commensurate with the expected term.

PERFORMANCE SHARES

The performance shares granted during the first nine months of 2016 generally vest after a three-year period based on our total stockholder return relative to the performance of the Dow Jones U.S. Construction and Materials Index, with adjustments to that index in certain circumstances, for the three-year period. The number of performance shares earned will vary from zero to 200% of the number of performance shares granted depending on that relative performance. Generally, vesting will be pro-rated based on the number of full months employed during the performance period in the case of death, disability, or retirement. Each performance share earned will be settled in common stock at the end of the three-year period.

We estimated the fair value of each performance share granted on the date of grant using a Monte Carlo simulation that used the assumptions noted in the table above. Volatility was based on stock price history immediately prior to grant for a period commensurate with the expected term.

RESTRICTED STOCK UNITS

The RSUs granted during the first nine months of 2016 vest after a specified number of years from the date of grant or at a specified date, subject to cliff vesting. Generally, RSUs may vest earlier in the case of death, disability, or a change in control, provided that RSUs will vest upon a change in control in most circumstances only if there is also a related loss of employment or diminution of duties. Each RSU is settled in a share of our common stock after the vesting period. The fair value of each RSU granted is equal to the closing price of our common stock on the date of grant.

OTHER

Expense for share-based arrangements on grants to employees of L&W has been included in discontinued operations. Upon the close of the sale of L&W to ABC Supply, all unvested awards granted to L&W employees will be forfeited.

14. Supplemental Balance Sheet Information

INVENTORIES

Total inventories consisted of the following:

(millions)	September 30, 2016	December 31, 2015
Finished goods	$ 124	$ 115
Work in progress	35	36
Raw materials	69	68
Total	$ 228	$ 219

ASSET RETIREMENT OBLIGATIONS

Changes in the liability for asset retirement obligations consisted of the following:

	Nine months ended September 30,	
(millions)	2016	2015
Balance as of January 1	$ 119	$ 123
Accretion expense	6	6
Liabilities incurred	—	1
Changes in estimated cash flows (a)	(11)	(4)
Liabilities settled (b)	(2)	(2)
Foreign currency translation	1	(4)
Balance as of September 30	$ 113	$ 120

(a) Changes in estimated cash flows for the nine months ended September 30, 2016 includes a $8 million reduction related to one of our quarries.

(b) Liabilities settled for the nine months ended September 30, 2016 includes a $2 million liability that was relieved in conjunction with the sale of a surplus property.

ACCRUED INTEREST

Interest accrued on our debt as of September 30, 2016 and December 31, 2015 was $31 million and $45 million, respectively, and is included in "Accrued expenses" on our accompanying consolidated balance sheets.

ASSET DISPOSITIONS

In the second quarter of 2016, we recorded a gain of $11 million, or $7 million net of tax, on the sale of a surplus property. The sale relieved the Company of an asset retirement obligation, as noted in the above table, and included the sale of raw material inventory on hand at the surplus location. The pre-tax gain was recorded in cost of products sold within our Gypsum segment.

15. Accumulated Other Comprehensive Income (Loss)

Changes in the balances of each component of AOCI for the nine months ended September 30, 2016 and 2015 were as follows:

	Derivatives		Defined Benefit Plans		Foreign Currency Translation		AOCI	
(millions)	2016	2015	2016	2015	2016	2015	2016	2015
Balance as of January 1	$ 20	$ 16	$ (221)	$ (302)	$ (113)	$ (52)	$ (314)	$ (338)
Other comprehensive income (loss) before reclassifications, net of tax	(6)	(1)	(9)	2	(9)	(91)	(24)	(90)
Less: Amounts reclassified from AOCI, net of tax	(6)	(7)	(1)	(6)	—	—	(7)	(13)
Net other comprehensive income (loss)	—	6	(8)	8	(9)	(91)	(17)	(77)
Balance as of September 30	$ 20	$ 22	$ (229)	$ (294)	$ (122)	$ (143)	$ (331)	$ (415)

Amounts reclassified from AOCI, net of tax, for the three and nine months ended September 30, 2016 and 2015, were as follows:

	Three months ended September 30,		Nine months ended September 30,	
(millions)	2016	2015	2016	2015
Derivatives				
Net reclassification from AOCI for cash flow hedges included in cost of products sold	$ (3)	$ (2)	$ (9)	$ (7)
Less: Income tax benefit on reclassification from AOCI included in income tax (expense) benefit	(1)	—	(3)	—
Net amount reclassified from AOCI	$ (2)	$ (2)	$ (6)	$ (7)
Defined Benefit Plans				
Net reclassification from AOCI for amortization of prior service benefit included in cost of products sold [(a)]	$ (2)	$ (1)	$ (5)	$ (3)
Net reclassification from AOCI for amortization of prior service cost included in selling and administrative expenses [(a)]	1	(2)	2	(4)
Less: Income tax benefit on reclassification from AOCI included in income tax (expense) benefit	(1)	—	(2)	(1)
Net amount reclassified from AOCI	$ —	$ (3)	$ (1)	$ (6)

(a) Includes immaterial amounts related to L&W employees that are recorded to "Income from discontinued operations".

We estimate that we will reclassify a net $3 million after-tax loss on derivatives from AOCI to earnings within the next 12 months.

16. Income Taxes

In the third quarter of 2016, we recorded income tax expense of approximately $18 million. The income tax expense for the three months reflects taxes from federal, foreign, state and local jurisdictions. Our effective tax rate was 24.3%. Our effective tax rate was lower than the U.S. statutory rate primarily because of earnings realized in countries that had lower statutory tax rates, because of our equity method income, which is recorded net of tax, and because of our allocation of income taxes to discontinued operations. Our effective tax rate in the future will depend on the portion of our profits earned within and outside the United States.

In the nine months ended September 30, 2016, we recorded income tax expense of $78 million reflecting taxes from federal, foreign, state and local jurisdictions. Our effective tax rate for the first nine months was 29.9%.

As of September 30, 2016, we had federal net operating loss, or NOL, carryforwards of approximately $1.525 billion that are available to offset future federal taxable income and will expire in the years 2026 through 2032, none of which are subject to Internal Revenue Code limitations under Section 382. In addition, as of that date, we had federal AMT credit carryforwards of approximately $40 million that are available to reduce future regular federal income taxes over an indefinite period. In order to fully realize these U.S. federal net deferred tax assets, taxable income of approximately $1.64 billion would need to be generated during the period before their expiration.

As of September 30, 2016, we had a gross deferred tax asset related to our state NOLs and tax credit carryforwards of $220 million, of which $27 million will expire in 2016. The remainder will expire if unused in years 2017 through 2035. We also had NOL and tax credit carryforwards in various foreign jurisdictions in the amount of $1 million as of September 30, 2016, against which we have maintained a valuation allowance.

A reduction of the carrying amounts of deferred tax assets by a valuation allowance is required if, based on all available evidence, it is more likely than not that such assets will not be realized. The need to establish valuation allowances for deferred tax assets is assessed at each reporting date. In assessing the requirement for, and amount of, a valuation allowance in accordance with the more-likely-than-not standard, we give appropriate consideration to all positive and negative evidence related to the realization of the deferred tax assets. This assessment considers, among other matters, the nature, frequency and severity of current and cumulative losses, forecasts of future profitability, the duration of statutory carryforward periods, our experience with operating loss and tax credit carryforwards not expiring unused and tax planning strategies.

Based on our evaluation, during the first nine months of 2016, we made no adjustments to the valuation allowance against our deferred tax assets of $75 million, which relates to certain NOLs that we anticipate will not be used prior to their expiration.

The Internal Revenue Code imposes limitations on a corporation’s ability to utilize NOLs if it experiences an “ownership change” which can result from transactions increasing the ownership of certain stockholders in the stock of a corporation by more than 50 percentage points over a three-year period. If we were to experience an ownership change, utilization of our NOLs would be subject to an annual limitation that may be carried over to later years within the allowed NOL carryforward period. Over the entire carryforward period, we may not be able to use all our NOLs due to the aforementioned annual limitation. If an ownership change had occurred as of September 30, 2016, our annual U.S. federal NOL utilization would have been limited to approximately $79 million per year.

17. Litigation

WALLBOARD PRICING LAWSUITS

In the first quarter of 2015, USG, United States Gypsum Company, L&W Supply Corporation, and seven other wallboard manufacturers were named as defendants in a lawsuit filed in federal court in California by twelve homebuilders alleging that since at least September 2011, U.S. wallboard manufacturers conspired to fix and raise the price of gypsum wallboard sold in the United States and to effectuate the alleged conspiracy by ending the practice of providing job quotes on wallboard. The lawsuit was transferred to the United States District Court for the Eastern District of Pennsylvania under the title In re: Domestic Drywall Antitrust Litigation, MDL No. 2437. In the second quarter of 2016, the Court dismissed with prejudice the portions of the homebuilders' complaint alleging a conspiracy in 2014 and 2015, ruling that there were insufficient factual allegations to allow such a claim to go forward. The homebuilders' claims alleging a conspiracy prior to 2014 have not been dismissed, and the case proceeds as to those claims. USG is retaining the liability with respect to L&W Supply Corporation.

Beginning in the third quarter of 2013, class action lawsuits making similar allegations with regard to Canada were filed in Quebec, Ontario and British Columbia courts on behalf of purchasers of wallboard in Canada and naming USG Corporation, United States Gypsum Company, CGC Inc., and other wallboard manufacturers as defendants.

We believe that the cost, if any, of resolving the homebuilders' lawsuit and Canadian class action litigation will not have a material effect on our results of operations, financial position or cash flows.

ENVIRONMENTAL LITIGATION

We have been notified by state and federal environmental protection agencies of possible involvement as one of numerous "potentially responsible parties" in a number of Superfund sites in the United States. As a potentially responsible party, we may be responsible to pay for some part of the cleanup of hazardous waste at those sites. In most of these sites, our involvement is expected to be minimal. In addition, we are involved in environmental cleanups of other property that we own or owned. As of both September 30, 2016 and December 31, 2015, we had an accrual of $16 million for our probable and reasonably estimable liability in connection with these matters. Our accruals take into account all known or estimated undiscounted costs associated with these sites, including site investigations and feasibility costs, site cleanup and remediation, certain legal costs, and fines and penalties, if any. However, we continue to review these accruals as additional information becomes available and revise them as appropriate. Based on the information known to us, we believe these environmental matters will not have a material effect on our results of operations, financial position or cash flows.

OTHER LITIGATION

We are named as defendants in other claims and lawsuits arising from our operations, including claims and lawsuits arising from the operation of our vehicles, product performance or warranties, personal injury and commercial disputes. We believe that we have properly accrued for our probable liability in connection with these claims and suits, taking into account the probability of liability, whether our exposure can be reasonably estimated and, if so, our estimate of our liability or the range of our liability. We do not expect these or any other litigation matters involving USG to have a material effect on our results of operations, financial position or cash flows.

18. Gypsum Transportation Limited

We exited our shipping operations in the second quarter of 2015. In November 2015, we entered into a release and debt settlement agreement (Settlement Agreement) to recover a portion of our loss incurred when our former trading partner ceased performing under the contract in the fourth quarter of 2014. The Settlement Agreement required payments totaling $14 million beginning in December 2015. The payments received to settle a $9 million loss on the outstanding trade receivable was recorded as a benefit to our consolidated statements of income when we determined the payments to be probable. We recorded a recovery of $6 million in the fourth quarter of 2015 and $8 million in the first quarter of 2016. With the payments received in the first quarter, the total recovery under the Settlement Agreement is complete.

For the nine months ended September 30, 2016, the recovery is presented as $3 million within "Recovery of receivable", $1 million within "Interest income" and $4 million within "Other income, net" on our consolidated statement of income.

GTL recorded operating profit of $0 million and $3 million for the three and nine months ended September 30, 2016, respectively, compared with operating profit of $0 million and $1 million for the three and nine months ended September 30, 2015, respectively.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

In the following Management's Discussion and Analysis of Financial Condition and Results of Operations, "USG," "we," "our" and "us" refer to USG Corporation, a Delaware corporation, and its subsidiaries included in the consolidated financial statements, except as otherwise indicated or as the context otherwise requires.

Overview

We are a leading manufacturer and distributor of building materials. We produce a wide range of products for use in new residential, new nonresidential, and residential and nonresidential repair and remodel construction as well as products used in certain industrial processes. We estimate that during the first nine months of 2016:

- residential and nonresidential repair and remodel activity accounted for approximately 54% of our net sales,
- new residential construction accounted for approximately 29% of our net sales,
- new nonresidential construction accounted for approximately 13% of our net sales, and
- other activities accounted for approximately 4% of our net sales.

RECENT DEVELOPMENTS

On August 29, 2016, we announced the signing of a definitive agreement to sell L&W Supply Corporation, or L&W, to American Builders & Contractors Supply Co., Inc, or ABC Supply, for $670 million, subject to a working capital adjustment. The sale is expected to close on October 31, 2016. In connection with the sale of L&W, we agreed to enter into a supply agreement with L&W that governs sales of wallboard and certain other products from USG to branches within the existing L&W business.

For the quarter ended September 30, 2016, L&W met the criteria to be classified as held for sale and presented as discontinued operations. L&W's results of operations and related cash flows have been reclassified to discontinued operations in our consolidated statements of income and consolidated statements of cash flows, respectively, for all periods presented. The assets and liabilities of L&W have been reclassified to discontinued operations in our consolidated balance sheets.

SEGMENTS

Our operations are organized into three segments: Gypsum, Ceilings and USG Boral Building Products, or UBBP. Upon the signing of a definitive agreement to sell L&W to ABC Supply, we reclassified its results to discontinued operations and reclassified assets and liabilities to discontinued operations on our consolidated balance sheet. The results of L&W, which consisted of all of our Distribution segment, have been excluded from segment results. Additionally, as a result of the presentation of L&W as a discontinued operation, the results of our Gypsum and Ceilings segments have been revised to reflect only the sales of USG products from Gypsum and Ceilings to L&W that have been sold by L&W outside the consolidated group.

Gypsum: Our Gypsum segment manufactures and markets gypsum and related products in the United States, Canada, Mexico and Latin America. It includes United States Gypsum Company, or U.S. Gypsum, in the United States, and the gypsum businesses of CGC Inc., or CGC, in Canada, USG Mexico, S.A. de C.V., or USG Mexico, and Latin America. Gypsum's products are used in a variety of building applications to finish the walls, ceilings and floors in residential, commercial and institutional construction and in certain industrial applications. The major product lines within the Gypsum segment are:

Wallboard	Sheetrock® brand gypsum wallboard portfolio
Surfaces	Sheetrock® brand joint compound, corner bead, joint tape and plaster
Substrates	Durock® brand cement backerboard, Levelrock® brand gypsum underlayment, Fiberock® brand backerboard, Securock® brand glass-mat roofing and commercial roof board, Securock® glass mat sheathing, structural panel concrete roofing and industrial gypsum

Ceilings: Our Ceilings segment manufactures and markets interior systems products in the United States, Canada, Mexico and Latin America. Ceilings includes USG Interiors, LLC, or USG Interiors, and the ceilings businesses of CGC, USG Mexico and Latin America. Ceilings is a leading supplier of interior ceilings products used primarily in commercial applications. Ceilings manufactures ceiling tile in the United States and ceiling grid in the United States and Canada. It markets ceiling tile and ceiling grid in the United States, Canada, Mexico, and Latin America.

USG Boral Building Products: USG Boral Building Products, or UBBP, is our 50/50 joint ventures with Boral Limited, or Boral, and consists of USG Boral Building Products Pte. Limited, a company organized under the laws of Singapore, and USG Boral Building Products Pty Limited, a company organized under the laws of Australia. UBBP manufactures, distributes and sells certain building products, mines raw gypsum and sells natural and synthetic gypsum throughout Asia, Australasia and the Middle East (the Territory). UBBP manufactures and distributes products for wall, ceiling, floor lining and exterior systems that utilize gypsum, wallboard, referred to as plasterboard in the Territory, mineral fiber ceiling tiles, steel grid and joint compound.

Geographic Information: For the first nine months of 2016, we recorded $2.283 billion of net sales in our consolidated statements of income, of which approximately 82% were attributable to the United States, approximately 12% were attributable to Canada and other foreign countries accounted for the remaining 6%. Net sales for UBBP for the first nine months of 2016 were $778 million, of which approximately 36% were attributable to Australia, 20% to South Korea, 14% to Thailand, 10% to China, and 20% to other foreign countries.

MARKET CONDITIONS AND OUTLOOK

Our businesses are cyclical in nature and sensitive to changes in general economic conditions, including conditions in the North American housing and construction-based markets and the markets in Asia and Australasia. Our expansion via UBBP into the markets of Asia, Australasia, and the Middle East has significantly increased our exposure to the economic conditions in those areas. However, the UBBP investment has helped diversify USG's overall exposure to changes in the North American economic conditions.

For the new residential construction market in the United States, housing starts are a very good indicator of demand for our gypsum products. Installation of our gypsum products into a single family home typically follows a housing start by 90 to 120 days. In September 2016, the seasonally-adjusted annualized rate of housing starts reported by the U.S. Census Bureau was 1,047,000 units. This is a decrease from the August 2016 rate of 1,150,000 and the September 2015 rate of 1,206,000. In comparison, housing starts for all of 2015 were 1,111,900 units. Most industry analysts believe that the recovery in new residential construction will continue, although the recovery over the next few years may be modest, and that over the longer term housing starts will begin to reach historical averages. Industry analysts' forecasts for 2016 housing starts in the United States included in the most recent Blue Chip Economic Indicators are 1,160,000 to 1,200,000 units, based on the average of the bottom ten and top ten forecasts included in the report, respectively. We currently estimate that 2016 housing starts in the United States will be slightly under 1,200,000.

Demand for our products from new nonresidential construction is determined by floor space for which contracts are signed. Installation of gypsum and ceilings products typically follows signing of construction contracts by about 12 to 18 months. According to the most recent construction market forecast from Dodge Data & Analytics, total floor space for which new nonresidential construction contracts were signed in the United States decreased 4% in 2015 compared with 2014. This followed a 14% increase in 2014 compared with 2013. Dodge Data & Analytics forecasts that total floor space for which new nonresidential construction contracts in the United States are signed will increase approximately 3% in 2016 from the 2015 level. Dodge Data & Analytics' forecast includes several building types which do not generate significant demand for our products; therefore, we anticipate new nonresidential construction growth in our business sectors in 2016 compared to 2015 will increase low to mid single digits.

The repair and remodel market includes renovation of both residential and nonresidential buildings. As a result of the low levels of new home construction in recent years, this market currently accounts for the largest portion of our sales. Many buyers begin to remodel an existing home within two years of purchase. According to the National Association of Realtors, sales of existing homes in the United States were 5.26 million units in 2015, reflecting a 6% increase from the 2014 level of 4.94 million units. The seasonally adjusted annual rate of existing home sales was 5.47 million units in September 2016, which is 0.6% higher than the revised rate of 5.44 million in September 2015. The generally rising levels of existing home sales and home resale values in recent years have contributed to an increase in demand for our products from the residential repair and remodel market. We currently estimate that overall repair and remodel spending in 2016, compared to 2015, will increase by mid single digits.

The rate of recovery in the new residential construction market, new nonresidential construction market and the repair and remodel market still remains uncertain and will depend on broader economic issues including employment, household formation, home ownership rate, existing home price trends, availability of mortgage financing, interest rates, consumer confidence, job growth and discretionary business investment. An increase in interest rates, high levels of unemployment, restrictive lending practices, a decrease in consumer confidence or other adverse economic conditions could have a material adverse effect on our business, financial condition, operating results and cash flows. Our businesses are also affected by a variety of other factors beyond our control, including the inventory of unsold homes, the level of foreclosures, home resale rates, housing affordability, office and retail vacancy rates and foreign currency exchange rates. Since we operate in a variety of geographic markets, our businesses are subject to the economic conditions in each of these geographic markets. General economic downturns or localized downturns or financial concerns in the regions where we have operations may have a material adverse effect on our business, financial condition, results of operations and cash flows.

We expect modest improvement over the next twelve months in the construction industries of Canada and Mexico. Emerging markets, including those that are within the UBBP territory, provide opportunities for our operations to serve the increasing demand for products in these regions. Several other countries, including South Korea and Australia, are forecast to experience steady growth as well. Although the rate of growth in certain emerging markets has slowed, we expect the growth in these markets to exceed the improvements in North America with demand growth in the mid-single digits. We anticipate that the results from UBBP will enable us to counteract some of the potential cyclicality in our North American business.

Our Gypsum segment has improved with the modest recovery in residential housing over the last three years although it continues to be adversely affected by the low level of residential and other construction activity compared to historical averages. Our Ceilings segment, which primarily serves the commercial markets, has shown some improvements. However, it continues to be adversely affected by the low levels of new commercial construction activity.

Industry shipments of gypsum board in the United States (including gypsum wallboard, other gypsum-related paneling products and imports), as reported by the Gypsum Association, were an estimated 18.6 billion square feet in the first nine months of 2016, up approximately 13% compared with 16.5 billion square feet in the first nine months of 2015. We estimate that industry shipments in the United States for all of 2016 will be in the range of approximately 24.7 billion square feet, up approximately 10% from 22.3 billion square feet in 2015.

There is excess wallboard production capacity industry-wide in the United States. Industry capacity in the United States was approximately 32.8 billion square feet as of January 1, 2016. We estimate that the industry capacity utilization rate was approximately 74% and 67% during the first nine months of 2016 and 2015, respectively. Based on current industry trends and forecasts, demand for gypsum wallboard is expected to increase in 2016, but the magnitude of any increase will depend on the levels of housing starts and repair and remodel activity. We project that the industry capacity utilization rate will experience an increase of low-to-mid single digits in 2016 compared to 2015. We could experience pressure on gypsum wallboard selling prices and our gross margins at these levels of capacity utilization.

U.S. Gypsum implemented a price increase for wallboard on March 28, 2016. However, it is uncertain that we will be able to maintain the increase in our gypsum wallboard selling prices. If we are unable to maintain our price increases, our net sales and operating profit may be materially and adversely impacted.

CURRENCY IMPACT

Currency impacts on consolidated and segment results have been derived by translating current period results at the quarter-to-date and year-to-date average foreign currency rates for the quarter and nine months ended September 30, 2015, respectively.

Consolidated Results of Operations

(dollars in millions, except per-share data)	2016	2015	$ Favorable (Unfavorable)	% Favorable (Unfavorable)
Three months ended September 30:				
Net sales	$ 767	$ 747	$ 20	3 %
Cost of products sold	586	578	(8)	(1)%
Gross profit	181	169	12	7 %
Selling and administrative expenses	74	75	1	1 %
Long-lived asset impairment charges	10	—	(10)	*
Operating profit	97	94	3	3 %
Income from equity method investments	14	13	1	8 %
Interest expense	(37)	(40)	3	8 %
Loss on extinguishment of debt	(1)	—	(1)	*
Other income, net	1	—	1	*
Income from continuing operations before income taxes	74	67	7	10 %
Income tax (expense) benefit	(18)	1	(19)	*
Income from continuing operations	56	68	(12)	(18)%
Income from discontinued operations, net of tax	6	8	(2)	(25)%
Net income	$ 62	$ 76	$ (14)	(18)%
Diluted earnings per share - net income	$ 0.42	$ 0.52	$ (0.10)	(19)%
Nine months ended September 30:				
Net sales	$ 2,283	$ 2,195	$ 88	4 %
Cost of products sold	1,728	1,710	(18)	(1%)
Gross profit	555	485	70	14 %
Selling and administrative expenses	213	225	12	5 %
Long-lived asset impairment charges	10	—	(10)	*
Recovery of receivable	(3)	—	3	*
Gain on disposition of shipping operations, net	—	(1)	(1)	*
Operating profit	335	261	74	28 %
Income from equity method investments	37	35	2	6 %
Interest expense	(115)	(123)	8	7 %
Interest income	3	1	2	*
Loss on extinguishment of debt	(5)	(19)	14	74 %
Other income, net	6	—	6	*
Income before continuing operations income taxes	261	155	106	68%
Income tax (expense) benefit	(78)	2	(80)	*
Income from continuing operations	$ 183	$ 157	26	17%
Income from discontinued operations, net of tax	$ 20	$ 22	(2)	(9%)
Net income	$ 203	$ 179	$ 24	13%
Diluted earnings per share - net income	$ 1.38	$ 1.21	$ 0.17	14%

*not meaningful

NET SALES

Consolidated net sales for the third quarter of 2016 increased $20 million, or 3%, from the third quarter of 2015. This reflected higher net sales for our Gypsum segment due primarily to increased volumes and for our Ceilings segment due primarily to higher average selling price. Sales for our Gypsum segment increased 3% which reflected higher shipments of Sheetrock® brand gypsum wallboard, Sheetrock® brand joint compound, Durock® brand cement backerboard and Levelrock® brand gypsum underlayment. These increases in shipments in Gypsum were offset by a 1% reduction in average selling price for wallboard due primarily to change in mix and regional pricing differences. The increase in net sales of 2% for our Ceilings segment was primarily due to increased average selling price for ceiling grid and ceiling tile. Additionally, on a consolidated basis, we estimate that the net sales were negatively impacted by currency translation of $4 million.

Consolidated net sales for the first nine months of 2016 increased $88 million, or 4%, compared with the first nine months of 2015. The increase reflected higher sales for our Gypsum and Ceilings segments. The increase of 4% in net sales for our Gypsum segment reflected higher volumes for Sheetrock® brand gypsum wallboard, Sheetrock® brand joint compound and Levelrock® brand gypsum underlayment. The increase in our Ceilings net sales of 2% primarily reflected higher shipments of ceiling grid and higher average selling price for ceiling tile. Additionally, on a consolidated basis, we estimate that the sales were negatively impacted by currency translation of $28 million.

GROSS PROFIT

Gross profit for the third quarter of 2016 increased $12 million, or 7%, compared with the third quarter of 2015. Gross profit as a percentage of net sales was 23.6% for the third quarter of 2016, compared with 22.6% for the third quarter of 2015. The increase reflected margin expansion from our Gypsum and Ceilings segments. The increase in gross margin for our Gypsum segment is driven primarily by Sheetrock® brand joint compound and Levelrock® brand gypsum underlayment. Additionally, the increase reflected a favorable incremental adjustment of $3 million for a change in estimate in an asset retirement obligation related to one of our quarries offset by severance and other charges of $2 million related to the decision to indefinitely idle our mining operations in Little Narrows, Nova Scotia, Canada. The increase in gross margin for our Ceilings segment primarily reflected lower per unit costs for ceiling tile.

Gross profit for the first nine months of 2016 increased $70 million, or 14%, compared with the first nine months of 2015. Gross profit as a percentage of net sales was 24.3% for the first nine months of 2016, compared with 22.1% for the first nine months of 2015. The increase reflected higher shipments for our Gypsum and Ceilings segments, lower per unit costs for ceiling tile, an $11 million gain on the sale of a surplus property and a favorable adjustment quarter on quarter of $3 million for a change in estimate in an asset retirement obligation partially offset by $2 million for severance and other charges.

SELLING AND ADMINISTRATIVE EXPENSES

Selling and administrative expenses totaled $74 million in the third quarter of 2016 compared to $75 million in the third quarter of 2015. As a percentage of net sales, selling and administrative expenses decreased to 9.6% for the third quarter of 2016 from 10.0% for the third quarter of 2015. The decrease as a percentage of sales reflected lower net compensation cost and management's continued focus on managing discretionary spend.

Selling and administrative expenses totaled $213 million in the first nine months of 2016 compared to $225 million in the first nine months of 2015. As a percentage of net sales, selling and administrative expenses decreased to 9.3% for the first nine months of 2016 from 10.3% for the first nine months of 2015. The decrease as a percentage of sales reflected lower net compensation cost and management's continued focus on managing discretionary spend.

LONG-LIVED ASSET IMPAIRMENT CHARGES

In the third quarter of 2016, we recorded long-lived asset impairment charges of $10 million associated with the decision to indefinitely idle our mining operations in Little Narrows. See Note 3 to the consolidated financial statements for additional information.

RECOVERY ON RECEIVABLE

In the first quarter of 2016, we received the remaining payments under a settlement agreement with our former trading partner of which $3 million represented a recovery of a previously deemed uncollectible receivable. The remaining payments received under the settlement agreement were recorded in "Interest income" and "Other income, net." See Note 18 to the consolidated financial statements for additional information.

GAIN ON DISPOSAL OF SHIPPING OPERATIONS, NET

During the second quarter of 2015, we recorded a net gain on the disposal of our shipping operations of $1 million. This reflected a gain on sale of our two self-unloading vessels of $7 million and charges to wind down our shipping operations of $6 million.

INCOME FROM EQUITY METHOD INVESTMENTS

Income from equity method investments in the third quarter of 2016 was $14 million, an increase of $1 million, or 8% from the third quarter of 2015. This reflected improved operating results for UBBP due to higher margins in South Korea, Indonesia, Vietnam, and Australia offset by our share of an impairment of long-lived assets of $4 million in China and an increase in selling and administrative expenses. The increase also reflected favorable currency impact of $1 million.

Income from equity method investments in the first nine months of 2016 was $37 million, an increase of $2 million, or 6%, from the first nine months of 2015. This reflected improved operating results for UBBP due to higher margins in South Korea, Vietnam, and Australia offset by an impairment of assets in China, an increase in selling and administrative expenses and an unfavorable impact of foreign currency of $1 million.

INTEREST EXPENSE

Interest expense was $37 million in the third quarter of 2016, down $3 million, or 8%, from the third quarter of 2015, and was $115 million in the first nine months of 2016, down $8 million, or 7%, from the first nine months of 2015. The decrease in interest expense for both comparative periods was driven by the 2016 open market repurchases of our 6.3% Senior Notes due 2016, referred to as the 6.3% Notes; the February 2015 repurchase of our 8.375% Senior Notes due 2018, referred to as the 8.375% Notes; and the second quarter 2015 repayment of our ship mortgage facility offset by the issuance of our 5.5% Senior Notes due 2025 in the first quarter of 2015.

LOSS ON EXTINGUISHMENT OF DEBT

In the third quarter and first nine months of 2016, we recorded a loss of $1 million and $5 million, respectively, on the extinguishment of debt, including premiums, in connection with the open market purchases of the 6.3% Notes and write-off of deferred financing fees. In the first quarter of 2015, we recorded a $19 million loss on the extinguishment of debt in connection with the tender offer and repurchase of our 8.375% Notes. See Note 9 to the consolidated financial statements for additional information.

OTHER INCOME, NET

In the third quarter of 2016, we recorded $1 million of other income, net, which primarily reflected net gains on foreign currency transactions. In the first nine months of 2016, we recorded $6 million of other income, net, which included net gains on foreign currency transactions and the receipt of the remaining payments under a settlement agreement with our former trading partner of which $4 million was recorded as other income. See Note 18 to the consolidated financial statements for additional information.

INCOME TAX (EXPENSE) BENEFIT

We recorded income tax expense of $18 million in the third quarter of 2016 from federal, foreign, state and local jurisdictions. Our effective tax rate was 24.3% for the third quarter of 2016. In the third quarter of 2015, we recorded an income tax benefit of $1 million resulting in an effective tax rate of (1.3)% reflecting the effects of the full valuation allowance against our U.S. deferred tax assets at that time.

We recorded income tax expense of $78 million for the first nine months of 2016 from federal, foreign, state and local jurisdictions. Our effective tax rate was 29.9% for the first nine months of 2016. We recorded an income tax benefit in the first nine months of 2015 of $2 million resulting in an effective tax rate of (1.1)% reflecting the effects of the full valuation allowance against our U.S. deferred tax assets at the time.

INCOME FROM DISCONTINUED OPERATIONS

Income from discontinued operations reflected the results of L&W and was $6 million for the third quarter of 2016 compared to $8 million for the third quarter of 2015. The decrease reflected higher selling and administrative expenses, which included $3 million of transaction costs, and higher taxes. Sales for L&W for the third quarter of 2016 increased by $10 million as compared to the third quarter of 2015. Higher net sales reflected an increase in net sales of gypsum wallboard of $6 million, or 4%, due to a 4% increase in gypsum wallboard volume. Same store net sales for the third quarter of 2016 were up 5% compared with the third quarter of 2015.

Income from discontinued operations was $20 million for the first nine months of 2016 and $22 million for the first nine months of 2015. The decrease reflected higher selling and administrative expenses, which included $8 million of transaction costs, and higher taxes offset by higher margins. See Note 2 to the consolidated financial statements for additional information.

Segment Results of Operations

GYPSUM

Net sales and operating profit (loss) for the businesses comprising our Gypsum segment were as follows:

	Three months ended September 30:				Nine months ended September 30:			
			Favorable (Unfavorable)				Favorable (Unfavorable)	
(millions)	2016	2015	$	%	2016	2015	$	%
Net sales:								
United States	$ 534	$ 524	$ 10	2 %	$ 1,609	$ 1,524	$ 85	6 %
Canada	86	79	7	9 %	254	242	12	5 %
Mexico / Latin America	48	46	2	4 %	141	142	(1)	(1)%
Canadian Mining	—	2	(2)	(100)%	—	4	(4)	(100)%
Gypsum Transportation Limited	—	—	—	— %	—	10	(10)	(100)%
Eliminations	(33)	(34)	1	3 %	(105)	(104)	(1)	(1)%
Total	$ 635	$ 617	$ 18	3 %	$ 1,899	$ 1,818	$ 81	4 %
Operating profit (loss):								
United States	$ 95	$ 88	$ 7	8 %	$ 302	$ 248	$ 54	22 %
Canada	6	3	3	100 %	17	7	10	*
Mexico / Latin America	2	3	(1)	(33)%	8	12	(4)	(33)%
Canadian Mining	(14)	(1)	(13)	*	(20)	(6)	(14)	*
Gypsum Transportation Limited	—	—	—	— %	3	1	2	*
Total	$ 89	$ 93	$ (4)	(4)%	$ 310	$ 262	$ 48	18 %

* Not meaningful

United States: Net sales in the third quarter of 2016 were $534 million, up $10 million, or 2%, compared with the third quarter of 2015. The increase in net sales was due to the following:

			Volume		Price	
(millions)	$	%	$	%	$	%
Change to Q3 2016 from Q3 2015						
Sheetrock® brand gypsum wallboard	$ —	—%	$ 2	1%	$ (2)	(1)%
Sheetrock® brand joint compound	3	3%	3	3%	—	— %
Durock® brand cement board	2	7%	2	7%	—	— %
Levelrock® brand gypsum underlayment	3	23%	3	23%	—	— %
Other	2					
Total increase in net sales	$ 10	2%				

Sales for Sheetrock® brand gypsum wallboard were flat from the third quarter of 2015 to the third quarter of 2016. This reflected an increase in shipments offset by lower average selling price. The increased volumes reflected domestic growth and higher shipments to big box retailers. Our premium Sheetrock® Brand UltraLight Panels accounted for 66% of all of our wallboard shipments during the third quarter of 2016, compared to 65% in the third quarter of 2015. The decrease in average selling prices primarily reflected changes in mix and regional pricing differences.

Sales of Sheetrock® brand joint compound increased $3 million on increased volume driven by increased shipments to big box retailers, specialty dealers, and pro dealers. Sales of Durock® brand cement board increased $2 million which reflected higher volumes of 7% primarily across home improvement and tile and flooring channels. Sales of Levelrock® brand gypsum underlayment increased by $3 million driven by higher volume. The increase in Other reflected higher sales of other surfaces and substrates products of $2 million, including Fiberock® brand backerboard, Durock® brand cement tile backerboard, structural panel concrete roofing, and Securock® brand glass-mat roof boards.

Operating profit of $95 million was recorded in the third quarter of 2016 compared to $88 million recorded in the third quarter of 2015. The increase of $7 million in operating profit reflected the following:

(millions)	$	Volume $	Price $	Cost $
Change to Q3 2016 from Q3 2015				
Sheetrock® brand gypsum wallboard	$ (3)	$ 1	$ (2)	$ (2)
Sheetrock® brand joint compound	2	1	—	1
Durock® brand cement board	—	—	—	—
Levelrock® brand gypsum underlayment	1	1	—	—
Other	7			
Total increase in operating profit	$ 7			

The increase in operating profit reflected gross profit improvement for Sheetrock® brand joint compound and Levelrock® brand gypsum underlayment offset by lower gross profit for Sheetrock® brand gypsum wallboard. The decrease in gross profit for Sheetrock® brand gypsum wallboard reflected lower average selling price and higher cost per unit partially offset by higher volume. The lower average selling price for Sheetrock® brand gypsum wallboard was due to a change in mix and regional pricing differences. The higher per unit cost for Sheetrock® brand gypsum wallboard reflected an increase in per unit cost of 4% for raw materials driven by waste paper and synthetic gypsum and 12% for conversion costs driven partially by higher labor costs. This was offset by a decrease in per unit cost of 7% in energy as result of lower gas prices.

The increased gross profit for Sheetrock® brand joint compound reflected lower per unit cost driven by raw material optimization and lower fixed costs due to increased volumes. The increase in gross profit of Levelrock® brand gypsum underlayment was driven by higher volumes.

The increase in Other reflected the following:

- improved profitability of the portfolio of substrates products of $2 million including Securock® brand glass mat roof boards and Fiberock® brand backerboard,
- a favorable adjustment quarter over quarter of $3 million for our asset retirement obligations, and
- lower selling and administrative costs of $2 million due primarily to lower net compensation costs.

Canada: Net sales in the third quarter of 2016 were $86 million, an increase of $7 million from $79 million in the third quarter of 2015. The change in sales reflected higher sales of gypsum wallboard of $6 million and other products of $1 million. The increase in sales of gypsum wallboard was driven by an increase of 9% in average selling price and an increase of 3% in volume. The increase in average selling price reflected the implementation of a surcharge on wallboard exported from the U.S. to offset the impact of a provisional tariff assessed by the Canada Border Services Agency, which does not impact operating profit. Operating profit in the third quarter of 2016 was $6 million, an increase of $3 million from the third quarter of 2015. The increase was driven primarily by improved gross profit for gypsum wallboard of $3 million and a reduction in other costs of $1 million offset by unfavorable impact of foreign currency of $2 million.

Mexico / Latin America: Net sales for our gypsum businesses in Mexico and Latin America were $48 million for the third quarter of 2016, an increase of $2 million from the third quarter of 2015. The increase reflected higher sales of gypsum wallboard, joint treatment, Durock® brand cement tile backerboard and drywall steel offset by the unfavorable impact due to fluctuations in currency of $4 million. Operating profit decreased to $2 million in the third quarter of 2016 from $3 million in the third quarter of 2015 due to unfavorable impact of foreign currency of $1 million.

Canadian Mining: Net sales for our mining operation in Canada were $0 million for the third quarter of 2016 and $2 million for the third quarter of 2015. Operating loss was $14 million for the third quarter of 2016 and $1 million for the third quarter of 2015. In the third quarter of 2016, we indefinitely idled our mining operations in Little Narrows, Nova Scotia, Canada and recorded an impairment of long-lived assets of $10 million and severance and other charges of $2 million. See Note 3 to the consolidated financial statements for additional information.

Gypsum Transportation Limited: There were no sales for our shipping company, Gypsum Transportation Limited, or GTL, for the third quarter of 2016 or 2015, which reflected the completion of our short-term shipping contract in March 2015. No similar

contract was entered into in 2016 as we sold our vessels in April 2015. GTL recorded no operating profit for both the third quarter of 2016 and 2015.

CEILINGS

Net sales and operating profit for the businesses comprising our Ceilings segment were as follows:

	Three months ended September 30:				Nine months ended September 30:			
			Favorable (Unfavorable)				Favorable (Unfavorable)	
(millions)	2016	2015	$	%	2016	2015	$	%
Net sales:								
United States	$ 126	$ 125	$ 1	1 %	$ 365	$ 359	$ 6	2 %
Canada	13	13	—	— %	40	41	(1)	(2)%
Mexico / Latin America	8	9	(1)	(11)%	24	26	(2)	(8)%
Eliminations	(12)	(15)	3	20 %	(38)	(42)	4	10 %
Total	$ 135	$ 132	$ 3	2 %	$ 391	$ 384	$ 7	2 %
Operating profit:								
United States	$ 31	$ 22	$ 9	41 %	$ 86	$ 63	$ 23	37 %
Canada	1	1	—	— %	4	3	1	33 %
Mexico / Latin America	1	2	(1)	(50)%	3	4	(1)	(25)%
Total	$ 33	$ 25	$ 8	32 %	$ 93	$ 70	$ 23	33 %

United States: Net sales for our domestic ceilings business in the third quarter of 2016 were $126 million, an increase of $1 million, or 1%, from the third quarter of 2015. The increase reflected the following:

			Volume		Price	
(millions)	$	%	$	%	$	%
Change to Q3 2016 from Q3 2015						
Ceiling grid	$ 1	—%	$ —	—%	$ 1	—%
Ceiling tile	1	—%	—	—%	1	—%
Other	(1)					
Total increase in net sales	$ 1	1%				

The increase in sales of $1 million for both ceiling grid and ceiling tile reflected improved average selling price. The unfavorable change in other reflected a decrease in freight of $1 million.

Operating profit was $31 million for the third quarter of 2016, an increase of $9 million, or 41%, from the third quarter of 2015. The increase reflected the following:

		Volume	Price	Cost
(millions)	$	$	$	$
Change to Q3 2016 from Q3 2015				
Ceiling grid	$ 2	$ —	$ 1	$ 1
Ceiling tile	6	—	1	5
Other	1			
Total increase in operating profit	$ 9			

The increase in operating profit reflected an increase in gross profit for both ceiling grid and ceiling tile. Improved gross profit for ceiling grid reflected higher average selling price and decreased per unit costs. The higher gross profit for ceiling tile reflected an increase in per unit average selling price and a decrease in per unit cost which was driven by lower natural gas

prices and lower cost for raw materials. Also driving an increase in operating profit was a decrease in selling and administrative expenses due primarily to lower net compensation costs.

Canada: Net sales of $13 million for the third quarter of 2016 remained unchanged as compared to the third quarter of 2015. Sales of ceiling tile increased $1 million offset by a decrease in sales of ceiling grid. Operating profit was $1 million for the third quarter of 2016 and unchanged from the third quarter of 2015.

Mexico / Latin America: Net sales of $8 million for the third quarter of 2016 decreased $1 million from the third quarter of 2015. Operating profit of $1 million decreased $1 million from the third quarter of 2015.

USG BORAL BUILDING PRODUCTS

The following reflects the net sales and operating profit as recorded by UBBP and the equity income recorded by USG.

	Three months ended September 30:				Nine months ended September 30:			
			Favorable (Unfavorable)				Favorable (Unfavorable)	
(millions)	2016	2015	$	%	2016	2015	$	%
Net sales	$ 276	$ 250	$ 26	10%	$ 778	$ 742	$ 36	5%
Operating profit	41	30	11	37%	105	87	18	21%
Income from equity method investments - UBBP	14	12	2	17%	37	33	4	12%

Net sales for UBBP were $276 million in the third quarter of 2016 compared to $250 million for the third quarter of 2015. The increase of $26 million reflected increased plasterboard shipments in South Korea, Indonesia, Vietnam, India, and Australia and favorable impact of currency translation of $9 million. The increase is offset by weaker economies in China and Thailand. Plasterboard shipments increased 6% to 1.18 billion square feet for the third quarter of 2016 from 1.11 billion square feet for the third quarter of 2015. Additionally, volumes of metal studs increased 14%.

Operating profit of $41 million increased $11 million in the third quarter of 2016 compared to the third quarter of 2015. Operating profit in 2016 reflected improved margins in South Korea, Indonesia, Vietnam, and Australia, realized synergy savings and improved market acceptance of lightweight products offset by an impairment of long-lived assets in China of $8 million and an increase in selling and administrative expenses. The increase also reflected favorable currency impact of $2 million.

Our share of net income of UBBP, which is recorded in income from equity method investment, increased 17% in the third quarter of 2016 as compared to the third quarter of 2015. This increase reflected higher income recorded by UBBP and a favorable impact of foreign currency of $1 million.

Net sales in Asia and Australasia made up approximately 63% and 37%, respectively, of total net sales for UBBP. Net sales in South Korea, China, Thailand and Indonesia represented approximately 75% of Asia's net sales and plasterboard revenue accounted for approximately 70% of Asia's net sales.

CORPORATE

The operating loss for Corporate increased to $25 million in the third quarter of 2016 compared with $24 million in the third quarter of 2015 primarily due to increased costs for incentive compensation.

Liquidity and Capital Resources

As of September 30, 2016, we had $736 million of cash and cash equivalents and marketable securities compared with $672 million as of December 31, 2015. See discussion below under Cash Flows for explanation of the change in cash and cash equivalents. Our total liquidity as of September 30, 2016 was $1.073 billion (including $337 million of borrowing availability under our credit facility) compared to $967 million as of December 31, 2015 (including $295 million of borrowing availability under our credit facility).

We invest in cash equivalents and marketable securities pursuant to an investment policy that has preservation of principal as its primary objective. The policy includes provisions regarding diversification, credit quality and maturity profile that are designed to minimize the overall risk profile of our investment portfolio. The securities in the portfolio are subject to

normal market fluctuations. See Note 7 to the consolidated financial statements for additional information regarding our investments in marketable securities.

Total debt, consisting of senior notes and industrial revenue bonds amounted to $1.977 billion ($1.989 billion in aggregate principal amount less $12 million of unamortized original issue discount and debt issuance costs) as of September 30, 2016 and $2.175 billion ($2.189 billion in aggregate principal amount less $14 million of unamortized original issue discount and debt issuance costs) as of December 31, 2015. During the nine months ended September 30, 2016, there were no borrowings under our revolving credit facility and no borrowings outstanding at period end.

Our senior notes and industrial revenue bonds are rated by the three major credit-rating agencies: Moody's Investors Service (Moody's), Standard & Poor's Financial Services LLC (S&P), and Fitch Ratings, Inc. (Fitch). The ratings are typically monitored by stockholders, creditors, or suppliers as an indicator of the company's viability. Additionally, the ratings of Moody's and S&P impact the interest rate on our 7.75% senior notes maturing in 2018. See Note 6 to the consolidated financial statements in our Annual Report on Form 10-K for additional information regarding the impact of changes to our credit ratings on interest rates. Below is a summary of the ratings published by the three agencies as of the date indicated:

	S&P	Moody's	Fitch
Corporate/Family rating	BB	Ba3	BB
Outlook	Positive	Positive	Stable
Guaranteed senior notes	BB	Ba3	BB+
All other notes and bonds	B+	B2	BB
Report date	July 19, 2016	August 1, 2016	August 29, 2016

The credit agreement allows for the borrowing of revolving loans and issuance of letters of credit (up to a maximum of $200 million at any time outstanding, in aggregate) by USG and its subsidiaries. The maximum principal amount of revolving loans and letters of credit that may be borrowed by USG may not exceed the lesser of (1) $450 million less the amount of outstanding loans and letters of credit owed by CGC and (2) the excess of (a) the domestic borrowing base determined by reference to the trade receivables and inventory of USG and its significant domestic subsidiaries minus (b) the amount, if any, by which the outstanding balance of loans and letters of credit owed by CGC exceeds the CGC borrowing base determined by reference to the trade receivables and inventory of CGC and certain Canadian subsidiaries at such time. The maximum principal amount of revolving loans and letters of credit that may be borrowed by CGC at any time may not exceed the lesser of (1) $50 million and (2) the sum of the CGC borrowing base determined by reference to the trade receivables and inventory of CGC and certain Canadian subsidiaries, plus the domestic borrowing base determined by reference to the trade receivables and inventory of USG and its significant domestic subsidiaries, minus the amount of outstanding loans and letters of credit owed by USG at such time. The borrowing base and, as a result, the borrowing availability, are expected to decrease by over 50% upon the sale of L&W.

Our obligations under our credit facility are guaranteed by USG and its significant domestic subsidiaries and secured by their and USG's trade receivables and inventory. CGC's obligations under the credit facility are secured by trade receivables and inventory of certain subsidiaries. The credit facility matures in October 2019. The credit facility is available to fund working capital needs and for other general corporate purposes.

The credit agreement contains a financial covenant that would require us to maintain a minimum fixed charge coverage ratio of not less than 1.0 to 1.0 if the excess of the availability (as defined in the credit agreement) is less than an amount equal to 10% of the lesser of (a) the aggregate revolving commitment at such time and (b) the aggregate borrowing base at such time. We would be required to continue to comply with such financial covenant until the availability under the credit agreement exceeds such minimum threshold for 30 consecutive calendar days thereafter. As of September 30, 2016, our fixed charge coverage ratio was 1.38-to-1.0. Because we currently satisfy the required fixed charge coverage ratio, we are not required to maintain a minimum borrowing availability under the credit facility. Taking into account the most recent borrowing base calculation, borrowings available under the credit facility as of September 30, 2016 were approximately $337 million.

In the first nine months of 2016, we repurchased $200 million of our 6.3% Notes, in open-market purchases for an aggregate consideration, including premiums and accrued interest, of $209 million. We expect to retire all of the remaining balance of these notes with cash on hand.

Our undistributed foreign earnings as of September 30, 2016 are considered permanently reinvested with the exception of earnings associated with the equity method investment in the Knauf-USG joint venture that was sold in December 2015. The amount of cash and cash equivalents held by our foreign subsidiaries was $152 million as of September 30, 2016 and would be subject to material repatriation tax effects.

CASH FLOWS

The following table presents a summary of our cash flows:

(millions)	Nine months ended September 30, 2016	2015
Net cash provided by (used for):		
Operating activities from continuing operations	$ 285	$ 127
Investing activities from continuing operations	105	3
Financing activities from continuing operations	(204)	(44)
Discontinued operations	9	25
Effect of exchange rate changes on cash	(3)	(7)
Net increase in cash and cash equivalents	$ 192	$ 104

Operating Activities: Net cash provided by operating activities was higher for the first nine months of 2016 compared to the first nine months of 2015 due to improved gross profit and lower selling and administrative expenses. Also driving the increase in operating cash flow was improved working capital. Our net cash outflow for accounts receivable, inventories, accounts payable, and accrued expenses of continuing operations was lower in 2016 compared to 2015. Cash outflows for accrued expenses in 2015 included $39 million pursuant to the settlement agreement with the direct purchaser class in the U.S. wallboard pricing class action lawsuit. Excluding this payment, 2016 still reflected lower net cash outflow driven by initiatives over accounts payable offset by increased outflow from accounts receivables due to organic growth in business.

As of September 30, 2016, working capital (current assets less current liabilities) amounted to $775 million, and the ratio of current assets to current liabilities was 1.95-to-1. As of December 31, 2015, working capital amounted to $408 million, and the ratio of current assets to current liabilities was 1.41-to-1.

Investing Activities: Net cash provided by investing activities was $105 million for the first nine months of 2016 compared to $3 million for the nine months ended September 30, 2015. The first nine months of 2015 included a net deposit of $9 million into a settlement fund escrow account pursuant to settlement agreements with the indirect purchaser classes in the U.S. wallboard pricing class action lawsuits, which were settled in the fourth quarter of 2014.

The cash inflow from the net activity of purchases and sales or maturities of marketable securities increased to $127 million for the nine months ended September 30, 2016 from $36 million for the nine months ended September 30, 2015. This reflected increased sales of marketable securities in the first nine months of 2016 to fund the redemption of our 6.3% Notes. Capital expenditures amounted to $44 million in the first nine months of 2016 compared with $67 million in the first nine months of 2015.

Approved capital expenditures for the replacement, modernization and expansion of operations, including Advanced Manufacturing initiatives, totaled $108 million as of September 30, 2016 compared with $33 million as of December 31, 2015.

Financing Activities: Net cash used for financing activities for the first nine months of 2016 was $204 million compared to $44 million for the first nine months of 2015. The cash used in 2016 reflected $205 million paid to repurchase $200 million of our 6.3% Notes in the open market. The cash used in 2015 included $365 million paid to repurchase $350 million of our 8.375% Notes plus tender premium and $21 million paid to repay our ship mortgage facility offset by the $344 million of proceeds received from the issuance of $350 million of 5.50% Senior Notes, net of debt issuance fees.

Discontinued Operations: Net cash provided by discontinued operations for first nine months of 2016 was $9 million compared to $25 million for the first nine months of 2015. The decrease reflected higher cash outflows for accounts receivable and inventories offset by higher cash inflow for accounts payable.

DEFINED BENEFIT PLANS

During the first nine months of 2016, we made cash contributions of $50 million to the USG Corporation Retirement Plan Trust, $6 million to our pension plan in Canada, and $8 million, in aggregate, to certain other domestic plans. We expect to make total contributions to our pension and postretirement plans in 2016 of approximately $65 million.

After the completion of the sale of L&W to ABC Supply, we will retain responsibility for the benefits payable to employees of L&W for the benefits accrued while employed by USG from the USG pension and postretirement plans. Additionally, after the sale, we may make an incremental contribution to the USG Corporation Retirement Plan.

LIQUIDITY OUTLOOK
In the first nine months of 2016, our investing cash outflows included $44 million of capital expenditures. In total for 2016, we plan to spend approximately $90 million on capital expenditures in the normal course of business. We expect to fund these expenditures with cash from operations or cash on hand, and, if determined to be appropriate and available, borrowings under our revolving credit facility.

Interest payments, based on our current level of outstanding debt, are expected to remain at approximately $151 million in 2016 compared with $158 million in 2015 primarily due to the repurchase of $200 million of our 6.3% Notes in the first nine months of 2016 and through the date of filing, as well as the expected redemption, subject to the closing of the L&W sale, of our $250 million 7.875% Senior Notes due 2020, or 7.875% Notes, and our $350 million 5.875% Senior Notes due 2021, or 5.875% Notes, in the fourth quarter of 2016. Additionally, as a result of the debt upgrade on July 19, 2016 from Standard & Poor's Financial Services LLC, the effective interest rate on our 7.75% Senior Notes due 2018 decreased from 9.75% to 9.5%.

The outstanding balance of $300 million of the 6.3% Notes is classified in the "Current portion of long-term debt" on our accompanying consolidated balance sheets. We expect to retire all of these notes with cash on hand. We expect to continue to evaluate opportunities to retire or repurchase the 6.3% Notes prior to their maturity on November 15, 2016 in open market purchases or privately negotiated transactions.

Upon the receipt of net proceeds from the sale of L&W, we expect to repay $250 million of our 7.875% Notes and $350 million of our 5.875% Notes. Additionally, we expect to pay $25 million in associated premiums as a result of early redemptions. Additionally, we may make an incremental contribution to our retirement plan, above the $65 million already planned and disclosed in Note 12 to the consolidated financial statements.

Since formation, UBBP was funded from its net cash flow from operations and third-party financing, and it is our intent that as an ongoing operation, UBBP will continue to self-fund. UBBP is targeting the distribution of 50% of combined after tax profits to USG and Boral; however, this dividend may be adjusted by the UBBP Board with unanimous resolution. During the second quarter of 2016, UBBP paid cash dividends on earnings through March 2016, of which our 50% share totaled $18 million.

In the event certain U.S. Dollar denominated performance targets are satisfied by UBBP, we will be obligated to pay Boral scheduled earnout payments in an aggregate amount up to $75 million, comprised first of $25 million based on performance during the first three years and then up to $50 million based on performance during the first five years. Upon inception of the joint ventures, we recorded a liability representing the present value of the first earnout payment. During the second quarter of 2016, we concluded that it was no longer probable that the three-year performance target will be achieved and, consequently, we reversed the liability with a corresponding reduction to our investment. We have not recorded a liability for the second earnout payment as we have concluded that it is currently not probable that the five-year performance target will be achieved. See Note 4 to the consolidated financial statements for additional information.

We believe that cash on hand, cash equivalents, marketable securities, cash available from future operations and our credit facility will provide sufficient liquidity to fund our operations for at least the next 12 months. Cash requirements include, among other things, capital expenditures, working capital needs, employee retirement plans funding, debt repayment, including the 6.3% Notes, and other contractual obligations.

Realization of Deferred Tax Asset

As of September 30, 2016, we had federal NOL carryforwards of approximately $1.525 billion that are available to offset future federal taxable income and will expire in the years 2026 through 2032. In addition, as of that date, we had federal AMT credit carryforwards of approximately $40 million that are available to reduce future regular federal income taxes over an indefinite period.

As of September 30, 2016, we had a deferred tax asset related to our state NOLs and tax credit carryforwards of $220 million, of which $27 million will expire in 2016. The remainder will expire if unused in years 2017 through 2035. We also had NOL and tax credit carryforwards in various foreign jurisdictions in the amount of $1 million as of September 30, 2016, against which we have maintained a valuation allowance.

A reduction of the carrying amounts of deferred tax assets by a valuation allowance is required if, based on all available evidence, it is more likely than not that such assets will not be realized. The need to establish valuation allowances for deferred tax assets is assessed at each reporting date. In assessing the requirement for, and amount of, a valuation allowance in accordance with the more-likely-than-not standard, we give appropriate consideration to all positive and negative evidence related to the realization of the deferred tax assets. This assessment considers, among other matters, the nature, frequency and severity of current and cumulative losses, forecasts of future profitability, the duration of statutory carryforward periods, our experience with operating loss and tax credit carryforwards not expiring unused and tax planning strategies.

As of December 31, 2015, our net deferred tax assets of $723 million were offset by a valuation allowance of $75 million. The remaining valuation allowance primarily related to certain state net operating losses that we anticipate will not be used prior to their expiration. During the first nine months of 2016, consistent with the above process, we made no adjustments to the valuation allowance against our deferred tax assets of $75 million.

See Note 16 to the consolidated financial statements for additional information regarding income tax matters.

Recently Issued Accounting Pronouncements

See Part 1, Item 1, Note 1 to the consolidated financial statements for information related to new accounting standards.

Legal Contingencies

We are named as defendants in litigation arising from our operations, including lawsuits arising from the operation of our vehicles and lawsuits arising from product performance or warranties, personal injury, and commercial disputes.

In 2015, USG, United States Gypsum Company, L&W Supply Corporation, and seven other wallboard manufacturers were named as defendants in a lawsuit filed by twelve homebuilders alleging that the defendants conspired to fix the price of wallboard sold in the United States. Earlier, in 2013, class action lawsuits making similar allegations were filed in Canada on behalf of a class of purchasers of wallboard in Canada. We believe that the cost, if any, of resolving the homebuilders' lawsuit and Canadian class action litigation will not have a material effect on our results of operations, financial position or cash flows.

In the third quarter of 2015 United States Gypsum Company was served with a federal grand jury subpoena requesting the production of company records in connection with a federal investigation of the gypsum drywall industry. Two former employees of USG have also been served with subpoenas. We believe the investigation, although a separate proceeding, is related to the same events at issue in the litigation discussed above. We are fully cooperating with the grand jury investigation. We believe we acted in full compliance with the law, and we do not expect the resolution of this matter to result in any material effect on our business, financial position, liquidity or results of operations; however, we can provide no assurances as to the scope, timing, or outcome of any such investigation.

See Note 17 to the consolidated financial statements for further information regarding the foregoing lawsuits and other legal matters.

Critical Accounting Policies

The preparation of our financial statements requires us to make estimates, judgments and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses during the periods presented. Our Annual Report on Form 10-K for the fiscal year ended December 31, 2015, which we filed with the Securities and Exchange Commission on February 10, 2016, includes a summary of the critical accounting policies we believe are the most important to aid in understanding our financial results. There have been no changes to those critical accounting policies that have had a material impact on our reported amounts of assets, liabilities, revenues or expenses during the first nine months of 2016.

Forward-Looking Statements

This report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 related to management's expectations about future conditions. Any forward-looking statements represent our views only as of the date of this report and should not be relied upon as representing our views as of any subsequent date. We assume no obligation to update any forward-looking information contained in this report. Forward-looking statements include, but are not limited to, statements under the following headings:

- "Management's Discussion and Analysis" about: (a) recent developments, including the expected closing of the sale of L&W to ABC Supply and use of proceeds, (b) market conditions and outlook, including (i) anticipated growth in new residential and nonresidential construction, repair and remodel spending, and the construction industries in Canada, Mexico and the UBBP territory, (ii) industry shipments of gypsum, demand for gypsum wallboard and industry capacity utilization rate and (iii) our gypsum wallboard selling prices and margins; (c) expected contributions to our pension plans; (d) our liquidity outlook, including our capital expenditure plans, expected interest payments, our intention and ability to retire outstanding debt, UBBP's dividend policy and our intended use of dividend funds received, including UBBP's ability to self-fund, and cash requirements and adequacy of resources to fund them; and (e) the outcome and effect of ongoing and future legal and governmental proceedings;
- "Legal Proceedings" about the outcome and effect of ongoing and future legal and governmental proceedings; and
- "Risk Factors" about: (a) the diversification of L&W's supplier base following the sale of L&W and our efforts to address the potential loss of sales to L&W; and (b) the expected timeline and ability to close on the sale of L&W, and impact if the sale is not completed.

Some of the risk factors that affect our business and financial results are discussed under "Risk Factors" in this report and in our most recent Annual Report on Form 10-K. We wish to caution the reader that actual business, market or other conditions, including the "Risk Factors" discussed in our most recent Annual Report on Form 10-K and those described elsewhere in this report or in our other Securities and Exchange Commission filings, could cause our actual results to differ materially from those stated in the forward-looking statements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

There have been no significant changes to our market risk since December 31, 2015.

ITEM 4. CONTROLS AND PROCEDURES

(a) Evaluation of disclosure controls and procedures.

Our Chief Executive Officer and Chief Financial Officer, after evaluating the effectiveness of our "disclosure controls and procedures" (as defined in Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, or the Act), have concluded that, as of the end of the quarter covered by this report, our disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by an issuer in the reports that it files or submits under the Act is accumulated and communicated to the issuer's management, including its principal executive officer or officers and principal financial officer or officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

(b) Changes in internal control over financial reporting.

There were no changes in our "internal control over financial reporting" (as defined in Rule 13a-15(f) promulgated under the Act) identified in connection with the evaluation required by Rule 13a-15(d) promulgated under the Act that occurred during the fiscal quarter ended September 30, 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

See Part I, Item 1, Note 17 to the consolidated financial statements for additional information regarding legal proceedings.

ITEM 1A. RISK FACTORS

There is no material change in the information reported under "Part I-Item 1A-Risk Factors" contained in our Annual Report on Form 10-K for the fiscal year ended December 31, 2015 except for the additional Risk Factors below:

Our future operating results could be negatively impacted by any significant decrease of product sales in the gypsum specialty dealer channel following the sale of L&W.

L&W Supply Corporation, or L&W, is currently our largest customer in the gypsum specialty dealer channel, purchasing approximately 25% of U.S. Gypsum's wallboard production in fiscal 2015, among other products we manufacture. Specialty dealers often have multiple suppliers for product categories. Following the sale of L&W to American Builders & Contractors Supply Co., Inc, or ABC Supply, we believe L&W will diversify its supplier base, resulting in a reduction in our sales to L&W which we may not be able to replace with sales to other customers. In connection with the closing of the sale of L&W, we will enter into a supply agreement that provides for L&W to purchase minimum volumes of our wallboard and certain other products over the near term, with volume minimums stepping down for those products over time. We intend to address any potential loss of sales to L&W both during and after the term of the supply agreement by growing our business with current customers and serving new customers. However, our efforts to replace any potential loss of sales to L&W may not be successful, and we may experience market share loss or unfavorable pricing, in which case our net sales, operating results and cash flows may be materially and adversely impacted.

We are at risk that the sale of L&W Supply is delayed or does not close.

Although we expect to close on the sale of L&W to ABC Supply on October 31, 2016, we face risks and uncertainties related to the sale, which include: (i) satisfaction of the remaining conditions to closing, including the absence of a material adverse effect on the business of L&W and its subsidiaries; and (ii) each party having the ability to consummate the transaction, including ABC Supply obtaining financing from its lenders. There can be no assurance that the sale of L&W will be completed as contemplated or at all. If the sale is not completed as currently contemplated it may impact our operating results and our ability to execute on our long-term strategic plan, including our debt reduction plans.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

(a) Pursuant to our Deferred Compensation Program for Non-Employee Directors, two of our non-employee directors deferred all or a portion of their quarterly retainer for service as a director that was payable on September 30, 2016 into a total of approximately 1,637 deferred stock units. These units will increase or decrease in value in direct proportion to the market value of our common stock and will be paid in cash or shares of common stock, at the director's option, following termination of service as a director. The issuance of these deferred stock units was effected through a private placement under Section 4(2) of the Securities Act of 1933, as amended, and was exempt from registration under Section 5 of that Act.

ITEM 4. MINE SAFETY DISCLOSURES

The information concerning mine safety violations or regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K promulgated by the SEC is included in Exhibit 95 to this report.

ITEM 6. EXHIBITS

2.1	Sale and Purchase Agreement, by and between USG Corporation and American Builders & Contractors Supply Co., Inc., dated August 27, 2016 (incorporated by reference to Exhibit 2.1 to USG Corporation's Amendment No. 1 to Current Report on Form 8-K dated August 29, 2016)**
31.1	Rule 13a-14(a) Certifications of USG Corporation’s Chief Executive Officer *
31.2	Rule 13a-14(a) Certifications of USG Corporation’s Chief Financial Officer *
32.1	Section 1350 Certifications of USG Corporation’s Chief Executive Officer *
32.2	Section 1350 Certifications of USG Corporation’s Chief Financial Officer *
95	Mine Safety Disclosures *
101	The following financial information from USG Corporation’s Quarterly Report on Form 10-Q for the three and nine months ended September 30, 2016, formatted in XBRL (Extensible Business Reporting Language): (1) the consolidated statements of income for the three and nine months ended September 30, 2016 and 2015, (2) the consolidated statements of comprehensive income (loss) for the three and nine months ended September 30, 2016 and 2015, (3) the consolidated balance sheets as of September 30, 2016 and December 31, 2015, (4) the consolidated statements of cash flows for the nine months ended September 30, 2016 and 2015 and (5) notes to the consolidated financial statements. *

* Filed or furnished herewith

** Schedules and other similar attachments have been omitted pursuant to Item 601(b)(2) of Regulation S-K. The registrant hereby undertakes to furnish supplementally copies of any of the omitted schedules and other similar attachments upon request by the Securities and Exchange Commission, provided that the registrant may request confidential treatment for any schedule or other similar attachment so furnished.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

USG CORPORATION

By /s/ James S. Metcalf

James S. Metcalf,
Chairman, President and Chief Executive Officer

By /s/ Matthew F. Hilzinger

Matthew F. Hilzinger,
Executive Vice President and Chief Financial Officer

By /s/ Jeanette A. Press

Jeanette A. Press,
Vice President, Controller and Principal Accounting Officer

October 25, 2016

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EXHIBIT INDEX

Exhibit Number	Exhibit
2.1	Sale and Purchase Agreement, by and between USG Corporation and American Builders & Contractors Supply Co., Inc., dated August 27, 2016 (incorporated by reference to Exhibit 2.1 to USG Corporation's Amendment No. 1 to Current Report on Form 8-K dated August 29, 2016)**
31.1	Rule 13a-14(a) Certifications of USG Corporation's Chief Executive Officer *
31.2	Rule 13a-14(a) Certifications of USG Corporation's Chief Financial Officer *
32.1	Section 1350 Certifications of USG Corporation's Chief Executive Officer *
32.2	Section 1350 Certifications of USG Corporation's Chief Financial Officer *
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2016

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to

Commission File Number 1-8864

USG CORPORATION
(Exact name of Registrant as Specified in its Charter)

Delaware	**36-3329400**
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)
550 W. Adams Street, Chicago, Illinois	**60661-3676**
(Address of Principal Executive Offices)	(Zip Code)

Registrant's Telephone Number, Including Area Code: **(312) 436-4000**

Securities Registered Pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Exchange on Which Registered
Common Stock, $0.10 par value	New York Stock Exchange Chicago Stock Exchange
Preferred Stock Purchase Rights (subject to Rights Agreement dated December 21, 2006, as amended)	New York Stock Exchange Chicago Stock Exchange

Securities Registered Pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Exchange Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐

Indicate by check mark whether the registrant is a shell company (as defined in Exchange Act Rule 12b-2). Yes ☐ No ☒

The aggregate market value of the registrant's common stock held by non-affiliates computed by reference to the New York Stock Exchange closing price on June 30, 2016 (the last business day of the registrant's most recently completed second fiscal quarter) was approximately $2,346,467,078. Solely for this purpose, directors, executive officers and greater than 10% record shareholders are considered the affiliates of the registrant.

The number of shares of the registrant's common stock outstanding as of January 31, 2017 was 146,182,904.

Documents Incorporated By Reference: Certain sections of USG Corporation's definitive Proxy Statement for use in connection with its 2016 annual meeting of stockholders, to be filed subsequently, are incorporated by reference into Part III of this Form 10-K Report where indicated.

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TABLE OF CONTENTS

PART I

Item 1. BUSINESS

In this annual report on Form 10-K, "USG," "we," "our" and "us" refer to USG Corporation, a Delaware corporation, and its subsidiaries included in the consolidated financial statements, except as otherwise indicated or as the context otherwise requires.

General

USG, through its subsidiaries, is a leading manufacturer of building materials and innovative solutions. We produce a wide range of products for use in new residential, new nonresidential, and residential and nonresidential repair and remodel construction as well as products used in certain industrial processes. Our businesses are cyclical in nature and sensitive to changes in general economic conditions, including, in particular, conditions in the North American housing and construction-based markets and the markets in Asia and Australasia. Our expansion via two 50/50 joint ventures we formed in 2014 with Boral Limited, referred to as USG Boral Building Products, or UBBP, into the markets of Asia, Australasia, and the Middle East has significantly increased our exposure to the economic conditions in those areas.

The effects of market conditions on our operations are discussed in Part II, Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations.

Recent Developments

On October 31, 2016, we completed the sale of L&W Supply Corporation, or L&W, to American Builders & Contractors Supply Co., Inc., or ABC Supply, for $675 million inclusive of the final working capital adjustment. We recognized a gain of $279 million on the transaction. Additionally, we entered into a supply agreement with L&W that governs sales of wallboard and certain other products from USG to L&W.

During 2016, we retired $1.1 billion of outstanding debt consisting of our 6.3% Senior Notes due 2016, our 7.875% Senior Notes due 2020 and our 5.875% Senior Notes due 2021, and recorded a pre-tax loss on the early extinguishment of debt of $37 million.

Segments

Our operations are organized into three reportable segments: Gypsum, Ceilings and UBBP. As a result of the presentation of L&W as a discontinued operation, the results of L&W, which consisted of all of our Distribution segment, have been excluded from segment results. Additionally, the results of our Gypsum and Ceilings segments have been revised to reflect only the sales of USG products from Gypsum and Ceilings to L&W that have been sold by L&W outside the consolidated group prior to October 31, 2016. All sales to L&W subsequent to the close of the transaction are included in net sales.

The net sales of Gypsum and Ceilings accounted for approximately 83% and 17%, respectively, of our 2016 consolidated net sales. UBBP is accounted for as equity method investments, and thus, net sales of UBBP are not included in consolidated net sales.

Gypsum

BUSINESS

Our Gypsum segment manufactures and markets gypsum and related products in the United States, Canada and Mexico. It includes United States Gypsum Company, or U.S. Gypsum, in the United States, CGC Inc., or CGC, in Canada, USG Mexico, S.A. de C.V., or USG Mexico, and subsidiaries in Latin America. U.S. Gypsum is the largest manufacturer of gypsum wallboard in the United States and accounted for approximately 25% of total industry shipments of gypsum board (which includes gypsum wallboard, other gypsum-related paneling products and imports) in the United States in 2016. CGC accounted for approximately 42% of Canadian domestic shipments and is the largest manufacturer of gypsum wallboard in eastern Canada. USG Mexico is the largest manufacturer of gypsum wallboard in Mexico with more than 50% market share in 2016.

PRODUCTS

Gypsum's products are used in a variety of building applications to construct walls, ceilings, roofs and floors of residential, commercial and institutional buildings, as well as in certain industrial applications. We also produce gypsum-based products for agricultural and industrial customers to use in a wide variety of applications, including soil conditioning, road repair, fireproofing and ceramics. The major product lines within the Gypsum segment are:

WALLBOARD	
Sheetrock® brand gypsum wallboard and Securock® brand glass mat sheathing portfolios	Gypsum panels that provide aesthetic as well as sound-dampening, fire-retarding, abuse-resistance and moisture-control value
SURFACES	
Sheetrock® brand joint compound portfolio, as well as corner bead, joint tape, and plaster	Used for finishing wallboard joints
SUBSTRATES	
Durock® brand cement board	Provides water and fire-resistant assemblies for both interior and exterior applications
Fiberock® brand backerboard	Includes abuse-resistant interior wall panels, tile backer boards, and flooring underlayments
Levelrock® brand systems of poured gypsum flooring	Provides surface leveling and enhanced sound-dampening performance for residential and commercial flooring applications
Securock® brand roof board, ExoAir® 430 brand air-water barrier system and industrial gypsum	Engineered gypsum panels, designed for high performance building envelope solutions, providing structural performance, fire-resistance, and moisture and air control
Construction plaster products, sold under the brand names Red Top®, Imperial®, Diamond® and Supremo®	Used to provide a custom finish for residential and commercial interiors and provide aesthetic, sound-dampening, fire-retarding and abuse-resistance value

As the leader in lightweight innovation, we offer the industry's broadest portfolio of lightweight gypsum panels. In 2010, we introduced USG Sheetrock® Brand UltraLight Panels, the industry's first lightweight gypsum wallboard panel for use in interior wall and ceiling applications and have continued to extend our lightweight portfolio with the introductions of:

- USG Sheetrock® Brand UltraLight Panels Firecode 30® and Firecode X® for fire rated assemblies;
- USG Sheetrock® Brand UltraLight Panels Mold Tough®, the industry's first lighweight moisture- and mold-resistant wallboard; and,
- USG Sheetrock® Brand MH UltraLight Gypsum Panels for manufactured housing and Gypsum Base Imperial® for veneer plaster systems.

USG Sheetrock® Brand UltraLight Panels accounted for 66% of all of our wallboard shipments in the United States in 2016, 65% in 2015 and 63% in 2014.

MANUFACTURING

Gypsum manufactures products at 41 plants located throughout the United States, Canada, Mexico, and Latin America.

Gypsum rock is mined or quarried at 12 company-owned locations in North America. Our mines and quarries provided approximately 49% of the gypsum used by our plants in North America in 2016.

Some of our manufacturing plants purchase or acquire synthetic gypsum and natural gypsum rock from outside sources. In 2016, outside sources of synthetic gypsum and natural gypsum rock accounted for approximately 42% and 9%, respectively, of the gypsum used in our plants.

Synthetic gypsum is a byproduct of flue gas desulphurization carried out by electric generation or industrial plants that burn coal as a fuel. The suppliers of this kind of gypsum are primarily power companies, which are required to operate scrubbing equipment for their coal-fired generating plants under federal environmental regulations. We have entered into a number of long-term supply agreements to acquire synthetic gypsum. Six of our 21 gypsum wallboard plants in operation use synthetic gypsum for all of their needs, while another six use it for a portion of their needs. Certain power companies have switched to using natural gas instead of coal for their electric generation needs. In the event more power companies switch to using natural gas instead of coal, the availability of synthetic gypsum may decrease which could result in an increase to our cost. See Item 1A, Risk Factors.

We produce wallboard paper at four company-owned production facilities located in the United States. Vertical integration in paper helps to ensure a continuous supply of high-quality paper that is tailored to the specific needs of our production processes. We augment our paper needs through purchases from outside suppliers when necessary. We did not make any material purchases of paper from outside suppliers in 2016.

MARKETING AND DISTRIBUTION

Our gypsum products are marketed and distributed through specialty wallboard distributors, building materials dealers, home improvement centers and other retailers and contractors. Sales of gypsum products are seasonal in the sense that sales are generally greater from spring through the middle of autumn than during the remaining part of the year.

Based on our estimates using publicly available data, internal surveys and industry shipment data for gypsum board, as reported by the Gypsum Association, we estimate that during 2016 volume demand for gypsum board was generated by:

- residential and nonresidential repair and remodel activity of about 50%,
- new residential construction of about 39%,
- new nonresidential construction of about 6%, and
- other activities, such as exports and temporary construction of about 5%.

COMPETITION

Industry shipments of gypsum board in the United States (including gypsum wallboard, other gypsum-related paneling products and imports), as reported by the Gypsum Association, were an estimated 25.0 billion square feet in 2016, up approximately 12% from 22.3 billion square feet in 2015. U.S. Gypsum's share of the gypsum board market in the United States, which includes for comparability its shipments of USG Sheetrock® brand gypsum wallboard, Fiberock® brand gypsum fiber panels and Securock® brand glass mat sheathing, was approximately 25% in 2016, down 1.3% from 2015.

The principal methods of competition are quality and range of products, including introduction of new products, location, pricing, compatibility of systems and product design features. Our principal competitors are as follows:

	United States	Canada	Mexico
National Gypsum Company	x		
CertainTeed Corporation (a subsidiary of Compagnie de Saint-Gobain SA)	x	x	
Georgia-Pacific (a subsidiary of Koch Industries, Inc.)	x	x	
American Gypsum Company LLC (a unit of Eagle Materials Inc.)	x		
Continental Building Products, Inc.	x		
PABCO Gypsum (a division of PABCO Building Products)	x		
Cabot Gypsum Company		x	
Panel Rey, S.A. (a Grupo Promax Company)	x		x
Plaka (a unit of Comex)			x

Ceilings

BUSINESS

Our Ceilings segment manufactures and markets interior systems products in the United States, Canada, Mexico, and Latin America. Ceilings includes USG Interiors, LLC, or USG Interiors, in the United States, CGC in Canada, USG Mexico and subsidiaries in Latin America. Ceilings is a leading supplier of interior ceilings products used primarily in commercial applications. We estimate that we are the second-largest manufacturer of ceiling grid and acoustical ceiling tile.

As discussed below under USG Boral Building Products, or UBBP, on February 27, 2014, we invested with Boral Limited in UBBP and, in connection therewith, contributed to UBBP our operations in the Asia-Pacific region. As such, our Ceilings reportable segment included the results and activities of our subsidiaries in the Asia-Pacific region through February 27, 2014 within USG International.

PRODUCTS

Ceilings manufactures ceiling tile in the United States and ceiling grid in the United States, Canada and, through February 27, 2014, the Asia-Pacific region. It markets ceiling tile and ceiling grid in the United States, Canada, Mexico, Latin America, and through February 27, 2014, the Asia-Pacific region. Our integrated line of ceilings products provides qualities such as sound absorption, fire retardation and convenient access to the space above the ceiling for electrical and mechanical systems, air distribution and maintenance. Ceilings' significant brand names include the Radar™, Eclipse™, Mars™, and Halcyon™ brands of ceiling tile and the Donn®, DX®, Fineline®, Centricitee™, Identitee® DXI™, Curvatura™ and Compasso® brands of ceiling grid.

MANUFACTURING

Ceilings manufactures products at 8 plants located in the United States and Canada. Principal raw materials used to produce Ceilings' products include mineral fiber, steel, perlite and starch. We produce some of these raw materials and obtain others from outside suppliers.

MARKETING AND DISTRIBUTION

Ceilings sells products primarily in markets related to the construction and renovation of nonresidential buildings. During 2016, approximately:

- 71% of Ceilings' net sales were from repair and remodel activity, primarily nonresidential,
- 27% of its net sales were from new nonresidential construction, and
- 2% of its net sales were from new residential construction.

Products are marketed and distributed through a network of distributors, installation contractors and home improvement centers. Sales of Ceilings' products are seasonal in nature and are generally weaker in the fourth quarter of the calendar year as compared to the preceding three quarters.

COMPETITION

Principal methods of competition are quality of products, service, pricing, compatibility of systems and product design features. Our principal competitors in our Ceilings business are:

	United States	Canada	Mexico
Ceiling Tile			
Armstrong World Industries, Inc.,	x	x	x
Rockfon (a subsidiary of Rockwool International A/S)	x	x	
CertainTeed Corporation (a subsidiary of Compagnie de Saint-Gobain SA)	x	x	x
Odenwald Faserplattenwerk GmbH (OWA)	x	x	
Ceiling Grid			
WAVE (a joint venture between Armstrong World Industries, Inc. and Worthington Industries)	x	x	
Chicago Metallic Corporation (a subsidiary of Rockwool International A/S)	x	x	
CertainTeed Corporation (a subsidiary of Compagnie de Saint-Gobain SA)	x	x	x

USG Boral Building Products

BUSINESS

On February 27, 2014, we and certain of our subsidiaries formed 50/50 joint ventures, USG Boral Building Products Pte. Limited, a company organized under the laws of Singapore, and USG Boral Building Products Pty Limited, a company organized under the laws of Australia, with Boral Limited, or Boral. These joint ventures are referred to as USG Boral Building Products, or UBBP. UBBP manufactures, distributes and sells certain building products, mines raw gypsum and sells natural and synthetic gypsum throughout Asia, Australasia and the Middle East. UBBP is a leader in most of the markets it serves. As part of the consideration for our 50% ownership in UBBP, we contributed to UBBP our subsidiaries and joint venture investments in Asia-Pacific, India and Oman. Our investments in UBBP are accounted for as equity method investments. Our existing wholly owned subsidiaries and consolidated variable interest entities that were contributed into the joint venture were deconsolidated as of February 27, 2014. See Note 4 to the consolidated financial statements in Part II, Item 8 of this report for additional information related to our equity method investments.

PRODUCTS

UBBP manufactures and distributes products for wall, ceiling, floor lining and exterior systems that utilize gypsum wallboard, referred to as plasterboard in the region in which UBBP operates, mineral fiber ceiling tiles, steel grid and joint compound. UBBP's significant brand names include USG Boral Sheetrock® premium plasterboard, USG Boral NextGen®, Elephant®, Jayaboard®, Durock® and Donn® DX®, the world's most widely specified and installed ceiling suspension system. UBBP launched USG Boral Sheetrock® products, which leverages the technology in USG Sheetrock®, in Australia, South Korea, Indonesia, Vietnam, China and Thailand. UBBP is able to sell USG Boral Sheetrock® at a premium price in some markets and conversion rates continue to increase, which is led by Australia with a conversion rate above 75%.

MANUFACTURING
UBBP has 23 plasterboard lines, 3 gypsum mines and 36 other non-board lines for metal products, metal ceiling grid, ceiling tile, joint compound, and cornice throughout twelve countries in Asia, Australasia and the Middle East.

Executive Officers of the Registrant

See Part III, Item 10, Directors, Executive Officers and Corporate Governance - Executive Officers of the Registrant (as of February 8, 2017).

Other Information

RESEARCH AND DEVELOPMENT
To contribute to our high standards and our leadership in the building materials industry, we perform extensive research and development at the USG Corporate Innovation Center in Libertyville, Illinois, using open innovation models and outside partnerships. Research team members collaborate with suppliers, universities and national research laboratories to provide product support and to develop new products and technologies for our operating units. With fire, acoustical, structural and environmental testing capabilities, the research center allows us to conduct our own on-site evaluation of products and systems. Chemical analysis and materials characterization support product development and safety/quality assessment programs. Development activities can be taken to an on-site pilot plant before being transferred to a full-size plant. Research and development activities have been focused on customer preferred system solutions. We expense research and development expenditures as incurred. These expenditures amounted to $24 million, $23 million and $23 million in 2016, 2015 and 2014, respectively. UBBP also operates a research and development center in Thailand.

SUSTAINABILITY
The adoption of green building codes and standards such as the Leadership in Energy and Environmental Design, or LEED, rating system established by the U.S. Green Building Council to encourage the design and construction of buildings that are environmentally friendly, combined with an increase in customer preference for products that can assist in obtaining LEED credit or are otherwise environmentally preferable, has increased demand for products, systems and services that contribute to building sustainable spaces. Many of our products meet the requirements for the awarding of LEED credits, and we continue to develop new products and systems to address market demand for products that enable construction of buildings that require fewer natural resources to build, operate and maintain. Our competitors also have developed and introduced to the market more environmentally responsible products.

We expect that there will be increased demand over time for products, systems and services that meet regulatory and customer sustainability standards and preferences and decreased demand for products that produce significant greenhouse gas emissions. We also believe that our ability to continue to provide these products and systems to our customers will be necessary to maintain our competitive position in the marketplace.

ENERGY
Our primary supplies of energy have been adequate, and we have not been required to curtail operations as a result of insufficient supplies. Supplies are likely to remain sufficient for our projected requirements. Currently, we are using swap contracts to hedge a significant portion of our anticipated purchases of natural gas to be used in our manufacturing operations over the next 12 months and beyond. We review our positions regularly and make adjustments as market conditions warrant.

SIGNIFICANT CUSTOMERS
On a worldwide basis, for each of the years ended December 31, 2016, 2015, and 2014, The Home Depot accounted for 23%, 23% and 22% of our net consolidated sales, respectively, and L&W accounted for 19%, 18% and 18% of our consolidated net sales, respectively. Both our Gypsum and Ceilings segments had net sales to these customers in each of those years.

INTELLECTUAL PROPERTY
We consider patents, copyrights, trademarks, trade secrets, proprietary technology and similar intellectual property as critical to our success. We hold numerous patents and have registered numerous trademarks of varying duration in multiple legal jurisdictions. Further, we have filed patent applications and applications for the registration of trademarks in the United States and internationally. Although we consider our patents, licenses and trade secrets to constitute valuable assets, we do not regard any of our businesses as being materially dependent upon individual patents, trade secrets, or licenses.

OTHER
Because we fill orders upon receipt, no segment has any significant order backlog.

None of our segments has any special working capital requirements.

No material part of our business is subject to renegotiation of profits or termination of contracts or subcontracts at the election of any government.

As of December 31, 2016, we had approximately 6,600 employees worldwide in our wholly-owned subsidiaries.

See Note 14 to the consolidated financial statements in Part II, Item 8 of this report for financial information pertaining to net sales and long-lived assets by geographic region and net sales, operating profit and total assets by our segments, and Item 1A, Risk Factors, for information regarding the risks associated with conducting business in international locations, as well as the possible effects that compliance with environmental laws and regulations may have on our businesses and operating results.

Available Information

We maintain a website at www.usg.com and make available at this website our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and all amendments to those reports as soon as reasonably practicable after they are electronically filed with or furnished to the Securities and Exchange Commission, or SEC. The information on our website is not, and will not be deemed to be, a part of this Annual Report on Form 10-K, or incorporated into any of our other filings with the SEC, except where we expressly incorporated such information. If you wish to receive a paper copy of any exhibit to our reports filed with or furnished to the SEC, the exhibit may be obtained, upon payment of reasonable expenses, by writing to: Corporate Secretary, USG Corporation, 550 West Adams Street, Chicago, Illinois 60661-3676.

Item 1A. RISK FACTORS

Our business, financial condition, operating results and cash flows are subject to various risks and uncertainties. We have described below significant factors that may adversely affect us and our industry. You should carefully consider these factors, together with all of the other information in this annual report on Form 10-K and in other documents that we file with the SEC, before making any investment decision about our securities.

Our businesses are cyclical, regional and seasonal in nature and subject to industry downturns.

Our businesses are cyclical and sensitive to changes in general economic conditions, including, in particular, conditions in the North American housing and construction-based markets. Housing starts and new nonresidential construction in the United States continued to recover but remained relatively flat in 2016 and still remain low by historical standards and the residential and nonresidential repair and remodel market experienced only modest increases over the past several years. Moreover, we operate in a variety of regional markets so our businesses are subject not only to general economic conditions but also to localized economic conditions in each of those regional markets. Housing and construction-based markets are impacted by broader economic circumstances, including employment, household formation, home ownership rate, existing home price trends, availability of mortgage financing, interest rates, consumer confidence, job growth and discretionary business investment, and these markets may not continue to recover or may experience a downturn. Adverse conditions in the markets or regions where we operate, or the failure of these markets or regions to return to historical levels, may have a material adverse effect on our business, financial condition, operating results and cash flows.

In addition, our businesses are seasonal, which has caused in the past, and will likely cause in the future, our quarterly results to vary significantly. Unfavorable weather conditions, such as snow or heavy rainfall, will likely reduce construction activity and adversely affect demand for our products. In particular, unfavorable weather conditions during peak construction periods, which may become more common due to the impact of climate change, could have a negative impact on our operating results.

We may not be able to maintain current price levels, or achieve price increases, for our products.

Prices for our products are affected by overall supply and demand in the markets for our products and differ by region. Market prices of building products historically have been volatile and cyclical. Currently, there is excess wallboard production capacity industry wide in the United States. Increases in the production capacity of any of our competitors, the entry of new competitors in our markets, or reductions in demand could lead to a reduction in prices and adversely affect our business, financial condition, operating results and cash flows. We implemented a price increase for wallboard effective in January 2017, however it is uncertain whether we will be able to maintain any increase in our selling prices or implement additional increases in 2017. If we are unable to maintain or implement price increases, our net sales, operating results and cash flows may be materially and adversely impacted.

We are dependent on sales to our major customers.

We face strong competition for our major customers. As is customary in our industry, we generally do not enter into long-term contracts with our customers, who may choose to reduce, delay or cancel purchases of our products at any time. If one or more of our major customers reduces, delays or cancels substantial orders, our business, financial condition, operating results and cash flows may be materially and adversely affected, particularly for the period in which the reduction, delay or cancellation occurs and also possibly for subsequent periods.

L&W is currently our largest customer in the gypsum specialty dealer channel, purchasing approximately 25% of our wallboard production in 2016, among other products we manufacture. Specialty dealers often have multiple suppliers for product categories. Following the sale of L&W, we believe L&W will diversify its supplier base, resulting in a reduction in our sales to L&W which we may not be able to replace with sales to other customers or may only be able to replace at lower prices. In connection with the closing of the sale of L&W, we entered into a supply agreement that provides for L&W to purchase minimum volumes of our wallboard and certain other products over the near term, with volume minimums generally stepping down for those products over time. We intend to address any potential loss of sales to L&W both during and after the term of the supply agreement by growing our business with current customers and serving new customers. However, our efforts to replace any potential loss of sales to L&W may not be successful, and we may experience market share loss or unfavorable pricing, in which case our net sales, operating results and cash flows may be materially and adversely impacted.

The number of our customers with significant buying power is increasing.

Certain of our important customers are large companies with significant buying power. In addition, consolidation currently taking place in the specialty gypsum dealer market will likely further enhance the ability of certain of our customers to seek more favorable terms, including pricing, for the products that they purchase from us. Accordingly, our ability to maintain or raise prices in the future may be limited, including during periods of raw material and other cost increases. If we are forced to reduce prices or to maintain prices during periods of increased costs, or if we lose customers because of pricing or other methods of competition, our revenues, financial condition, operating results and cash flows may be materially and adversely affected.

We operate in highly competitive markets.

The markets for our products are very competitive. Principal methods of competition include quality and range of products, including introduction of new products, location, pricing, compatibility of systems and product design features. Further, our ability to effectively compete varies by region. Actions of our competitors, or the entry of new competitors in our markets, could lead to lower pricing by us in an effort to maintain or grow our sales, negatively affect our product sales mix or lead to lower demand for our products. To achieve and/or maintain leadership positions in key product categories, we must continue to develop brand recognition and loyalty, enhance product quality and performance, introduce new products and improve our manufacturing capabilities. In addition, a number of our competitors are privately-held companies who do not incur the additional costs and reporting obligations of being a public company, which may enable those companies to compete more effectively than us.

Our facilities may experience unexpected operational difficulties or catastrophic events.

Our facilities may be forced to cease operations unexpectedly due to equipment failures or events beyond our control, such as fires, floods, earthquakes or other environmental catastrophes. Any downtime or facility damage may hinder our ability to meet customer demand and reduce our sales and could require that we make significant capital expenditures. Several of our plants, and production lines within our plants, are dedicated to specific products. If any of those plants or lines is unable to operate for a prolonged period, it would reduce our ability to effectively compete in the markets for those products, which could materially and adversely affect our business, financial condition, operating results and cash flows.

Increased costs, or decreased availability, of key raw materials or energy will increase our cost of products sold.

The cost and availability of raw materials and energy are critical to our operations. For example, we use substantial quantities of gypsum, synthetic gypsum, wastepaper, mineral fiber, steel, perlite and starch. The cost of certain of these items has been volatile, and availability has sometimes been limited. We obtain some of these materials from a limited number of suppliers or sole source suppliers, which increases the risk of unavailability. We may not be able to pass increased raw material or energy prices on to our customers in the future if the market or existing agreements with our customers do not allow us to raise the prices of our finished products. If price adjustments for our finished products significantly trail the increase in raw material or energy prices, or if we cannot effectively hedge against price increases, our operating results and cash flows may be materially and adversely affected.

Approximately 42% of the gypsum used in our wallboard plants is synthetic gypsum. Six of our 21 gypsum wallboard plants in operation use synthetic gypsum for all of their needs, while another six use it for some of their needs. The suppliers of synthetic gypsum are primarily power companies, and certain power companies have switched to using natural gas instead of coal for their electric generation needs. In addition, existing or future changes in environmental regulations may make it more difficult or costly for power companies to burn coal, which may result in a further shift away from coal-based sources of energy. In the event more power companies switch to using natural gas instead of coal, the availability of synthetic gypsum may decrease. We could incur substantial costs in connection with any significant reduction in the availability of synthetic gypsum, including costs to convert our plants to use natural gypsum, which may materially and adversely affect our business, financial condition, operating results and cash flows.

We use natural gas extensively in the production of gypsum and ceilings products in the United States, Canada and Mexico. The price of natural gas can fluctuate significantly because of fundamentals, weather, environmental or other regulatory changes, which can materially impact our hedge portfolio and our results of operations for a particular period. In an attempt to reduce our price risk related to fluctuations in natural gas prices, we enter into hedging agreements using swaps for natural gas purchases in the United States and Canada. Any substantial or extended decline in prices of, or demand for, natural gas that has been hedged could cause our production costs to be greater than those of our competitors. A significant production cost differential could have a material adverse effect on our business, financial condition, operating results and cash flows.

We do not have majority control over UBBP, which involves risks not otherwise present when we operate our business through wholly-owned entities.

A substantial portion of our international operations are conducted through 50/50 joint ventures with Boral Limited, or Boral. These joint ventures are referred to as UBBP. UBBP involves risks not otherwise present when we operate our business through wholly-owned entities, including:

- Certain major decisions with respect to UBBP require the majority or unanimous approval of the joint ventures' boards or shareholders. Boral may have economic or other business interests or goals that are or become inconsistent with ours, and we may not be able to obtain approval of certain matters that would be in our best interests. In addition, we may be required to spend additional resources to resolve any dispute with Boral, which could have an adverse impact on the operations and profitability of UBBP.
- A deadlock with respect to certain fundamental decisions may result in the triggering of a sale process of UBBP. In such a case, the terms of the sale may be less attractive than if we had held onto our investment.
- UBBP is operated in accordance with the terms of a Shareholders Agreement that limits our ability to transfer our interest in UBBP. As a result, we may be unable to sell our interest in UBBP when we would otherwise like.
- UBBP may not pay dividends if such payments are, among other things, restricted pursuant to the terms of the credit facilities maintained by UBBP, inconsistent with the then-applicable strategic plan, or illegal. Accordingly, we may not receive dividend payments from UBBP in the amounts that we currently anticipate or at all, which may adversely impact our ability to receive any economic benefit from UBBP.
- If we or Boral, or certain of our respective affiliates, are subject to a change of control, or if certain other events of default under the Shareholders Agreement occur with respect to us or Boral, we or Boral, as applicable, may be required to sell our or Boral's, as applicable, entire interest in UBBP at fair market value, as determined in accordance with the Shareholders Agreement. In the event we are forced to sell our interest in UBBP, it may be under terms that are not advantageous to us. In the event Boral is forced to sell its interest in UBBP, and we are unable to acquire Boral's interest due to lack of funding or otherwise, we would not have the right to select the third party to which Boral would sell its interest.
- In certain circumstances, a capital call may be issued to the shareholders of UBBP in order to obtain additional funding for the joint ventures' operations. If we do not provide capital and Boral does, Boral may receive additional shares in UBBP, thereby diluting our interest and diminishing our rights under the Shareholders Agreement. Further, although we intend for UBBP to be self-funding, we may nonetheless determine in the future that we need to provide additional capital in order for UBBP to continue operating.
- Boral may become insolvent, refuse to make additional capital contributions or fail to meet its obligations under the Shareholders Agreement or the two share sale and subscription agreements entered into with Boral, which may result in certain liabilities to us.
- In the event we exit UBBP, we may be restricted from competing in certain markets, many of which we anticipate to be high-growth markets, until the later of the third anniversary of our exit and ten years from the commencement of UBBP.
- UBBP relies in part on new products and technology we develop. UBBP is contractually entitled to some, but not all, of our new products. If UBBP is unable to successfully implement new products to which it has a license, or if we are unable to agree on the terms for the contribution of new technology to UBBP, the joint ventures may not be able to effectively compete or grow their businesses.
- UBBP is required to protect our licensed trade secrets and confidential intellectual property in its territory, which includes countries where there is a high risk of intellectual property loss. If UBBP is not diligent with its protections and competitors acquire our trade secrets and confidential intellectual property, then there may be a material adverse impact on our business both inside and outside of UBBP's territory.

If any of these risks were to materialize, our business, financial condition, operating results and cash flows could be materially and adversely impacted.

Our international operations expose us to risks that would not otherwise be present in our U.S. operations.

International business operations, including through UBBP, and our operations in Canada and Mexico, are becoming increasingly important to our future operations, growth and prospects. Further, it is a strategic priority of ours to continue to grow and diversify our earnings by expanding in select emerging markets. Our foreign operations and our international expansion strategy subject us to a number of risks, including:

- sensitivity to general economic conditions in each of the countries in which we or UBBP operate, including, in particular, the housing and construction-based markets;
- compliance with United States laws affecting operations outside of the United States, such as the Foreign Corrupt Practices Act or similar anti-bribery laws and regulations;
- compliance with a variety of local laws and regulations, including environmental and safety laws and regulations
- changes in tax laws and the interpretation of those laws;
- imposition of more or new tariffs, quotas, trade barriers, and similar restrictions on our sales outside the United States, including cross-border intercompany sales;
- fluctuations in currency values and the impact on our consolidated and segment results;
- changes in foreign currency exchange controls;
- discriminatory or conflicting fiscal policies;
- difficulties enforcing intellectual property and contractual rights, and securing information and infrastructure, in certain jurisdictions;
- greater risk of uncollectible accounts and longer collection cycles; and
- nationalization of properties by foreign governments.

Moreover, political and economic changes or volatility, geopolitical regional conflicts, terrorist activity, political unrest, civil strife, acts of war, epidemics, public corruption and other economic or political uncertainties could interrupt and negatively affect our business operations. All of these factors could result in increased costs or decreased revenues, and could materially and adversely affect our business, financial condition, operating results and cash flows.

Our success is dependent on our ability to innovate and protect our intellectual property and other proprietary rights.

We maintain a leadership position and price premium in part because of our innovation and introduction of new products. As a result, our success also depends, in part, upon securing and enforcing our intellectual property rights. We rely on a combination of contractual rights, patent, copyright, trademark and trade secret laws to establish and protect our intellectual property. Despite our efforts to safeguard and maintain our intellectual property, the steps we have taken may be inadequate. Existing trade secret, patent, trademark and copyright laws offer only limited protection, and our patents could be invalidated or circumvented. In addition, others may develop substantially equivalent or superseding proprietary technology, or competitors may offer similar competing products that do not infringe on our intellectual property rights, thereby substantially reducing the value of our proprietary rights. Moreover, the laws of some foreign countries in which our products are or may be manufactured or sold may not protect our products or intellectual property rights to the same extent as do the laws of the United States. This risk may be heightened in connection with our investments in UBBP, because it results in the use of our intellectual property in additional foreign jurisdictions, some of which lack robust or accessible intellectual property protection enforcement mechanisms.

We intend to continue making investments in research and development to develop new and improved products and more efficient production methods in order to maintain our market leadership position. If we do not make these investments, or our investments are not successful, our revenues, operating results and market share may be materially and adversely affected.

Capital expenditures to maintain our market leadership position and expand our businesses may not achieve their intended results.

In order to standardize and automate production across our Gypsum and Ceilings businesses, we are investing in capital improvement projects, including an anticipated $300 million investment in advanced manufacturing over four years, which we believe will materially improve our operating results. In addition, many of our facilities have been in operation for many years and require capital expenditures to maintain optimal efficiency. Future downturns in our industry or businesses may prevent us from having the funds necessary to make anticipated capital expenditures, and there may be delays or cost increases in completing these projects. Further, our return on investment from our advanced manufacturing investments or other capital expenditures may not be sufficient to recover the expenses associated with these initiatives and we may not achieve the expected economic and competitive advantages.

A disruption in our information technology systems due to a catastrophic event or security breach could interrupt or damage our operations.

In the conduct of our business we collect, use, transmit and store data on information systems, which are vulnerable to an increasing threat of continually evolving cyber security risks. Any security breach or compromise of our information systems could significantly damage our reputation, cause the disclosure of confidential customer, employee, supplier or company information, including our intellectual property, and result in significant losses, litigation, fines and costs. The security measures we have implemented to protect against unauthorized access to our information systems and data may not be sufficient to prevent breaches. The regulatory environment related to information security, data collection and privacy is evolving, with new and constantly changing requirements applicable to our business, and compliance with those requirements could result in additional costs.

We also compete through our use and improvement of information technology. In order to remain competitive, we need to provide customers with timely, accurate, easy-to-access information about product availability, orders and delivery status using state-of-the-art systems. While we have provided manual processes for short-term failures and disaster recovery capability, a prolonged disruption of systems or other failure to meet customers' expectations regarding the capabilities and reliability of our systems may materially and adversely affect our operating results.

Significant changes in factors and assumptions used to measure our defined benefit plan obligations, actual investment returns on pension assets and other factors could negatively impact our operating results and cash flows.

We maintain pension and postretirement plans throughout the world, with the most significant plans located in the U.S. The recognition of costs and liabilities associated with these plans for financial reporting purposes is affected by assumptions made by management and used by actuaries engaged by us to calculate the benefit obligations and the expenses recognized for these plans. The inputs used in developing the required estimates are calculated using a number of assumptions, which represent management's best estimate of the future. The assumptions that have the most significant impact on reported results are the discount rate, the estimated long-term return on plan assets for the funded plans, retirement rates, and mortality rates and, for postretirement plans, the estimated inflation in health care costs. These assumptions are generally updated annually.

Our pension plans were underfunded by $175 million as of December 31, 2016. Our unfunded postretirement plan liabilities were approximately $135 million as of December 31, 2016. In recent years, the declining interest rates and changes to mortality assumptions have negatively impacted the funded status of our pension and postretirement plans. In addition, volatile asset performance, most notably since 2008, has also negatively impacted the funded status of our pension plans. Funding requirements for our pension plans may become more significant. If our cash flows and capital resources are insufficient to fund our pension and postretirement plans obligations, we could be forced to reduce or delay investments and capital expenditures, seek additional capital, or restructure or refinance our indebtedness.

Compliance with environmental and safety laws and regulations could cause us to make modifications to how we manufacture our products, and could also require that we make significant capital investments or otherwise increase our costs.

We operate 49 plants in the United States, Canada, Mexico, and Latin America and 12 mines and quarries in North America. As a result, we are subject to numerous federal, state, local and foreign laws and regulations governing the protection of the environment and occupational health and safety, including laws regulating air emissions, wastewater discharges, the management and disposal of hazardous materials and wastes, and the health and safety of our employees. We are also required to obtain permits from governmental authorities for certain operations. If we were to fail to comply with these laws, regulations or permits, we could incur fines, penalties or other sanctions and be subject to private litigation. In addition, in the past we have been, and in the future could be, held responsible for costs and damages arising from any contamination at our past or present facilities or at third-party waste disposal sites. Further, new environmental and safety laws and regulations may cause us to incur material expenses relating to compliance, impact the availability and cost of raw materials and have a material and adverse impact on our operations and results.

The U.S. Congress, several states and the international community are considering measures to reduce emission of greenhouse gases, or GHGs, including carbon dioxide and methane. Some states and provinces have already adopted GHG regulation or legislation. In 2015, following a finding by the U.S. EPA that certain GHGs represent an endangerment to human health, the U.S. EPA issued its final Clean Power Plan, under which the U.S. EPA will set state-specific goals for GHG emissions reductions. If the rules regulating GHG emissions remain in place and withstand legal challenge, they could affect future expansions or modifications at all of our U.S. wallboard and ceiling tile plants and paper mills and may require that we incur significant costs to satisfy permitting requirements. In addition, enactment of new climate control legislation, regulatory initiatives or treaties impacting the locations where we conduct business could have a material adverse effect on our operations. For example, any new legislation, such as a "carbon tax" on energy use or establishing a "cap and trade", could materially and adversely increase the cost of energy used in our manufacturing processes. Further, stricter regulation of emissions might require us to install emissions controls or other equipment at some or all of our manufacturing facilities, requiring significant additional capital investments.

Legal challenges to the U.S. EPA's final rule regarding the use of synthetic gypsum, or subsequent state legislation, could also result in laws or regulations that adversely affect the classification, use, storage and disposal of synthetic gypsum. Such laws or regulations may require significant capital investments to convert those plants and lines that use synthetic gypsum to natural gypsum.

Legal and governmental proceedings, including those involving antitrust, tax, environmental, intellectual property or other matters, may result in significant costs.

We are subject to litigation and governmental proceedings in the normal course of business, including, but not limited to, a federal grand jury investigation of the gypsum drywall industry, and could become subject to additional claims in the future, some of which could become material. It may also be necessary to initiate legal proceedings in order to defend and enforce our proprietary rights. The outcome of existing legal and governmental proceedings may differ from our expectations because the outcomes of litigation and governmental proceedings are often difficult to reliably predict. Various developments can lead to changes in management's estimates of liabilities. Those developments include judicial rulings or judgments, settlements, or regulatory developments or changes in applicable law. A future adverse ruling, settlement or unfavorable development could result in charges that could have a material adverse effect on our results of operations in any particular period, or we could be unsuccessful in protecting our intellectual property. For a more detailed discussion of certain of the legal proceedings in which we are involved, see Item 3, Legal Proceedings, below.

A small number of our stockholders could significantly influence our business, affairs and stock price.

Based on filings made with the SEC, we believe that, as of January 31, 2017, two stockholders collectively controlled approximately 40% of our common stock. Accordingly, a small number of our stockholders could affect matters requiring approval by stockholders, including the election of directors and the approval of potential business combination transactions. One or more of these stockholders may have interests that differ from other stockholders and may vote on such matters in a way that is adverse to the interests of those other stockholders. In addition, if one or more of these stockholders sell our shares, our share price may decline.

We may pursue acquisitions, joint ventures and other transactions to complement or expand our businesses, which even if completed, may involve a number of risks.

We may pursue opportunities to acquire businesses or technologies and to form joint ventures that we believe could complement, enhance or expand our current businesses or product lines or that might otherwise offer us growth opportunities. Such pursuits may be costly and unsuccessful. Even if completed, potential issues associated with these activities could include, among other things, our ability to realize the full extent of the expected returns, benefits, cost savings or synergies as a result of a transaction within the anticipated time frame, or at all, and diversion of management's attention from day-to-day operations.

We may not be able to fully execute our stock repurchase program and may not otherwise return capital to our stockholders in the foreseeable future.

On February 1, 2017 we announced approval of a stock repurchase program in which we may repurchase up to $250 million of our common stock. There is no guarantee as to the exact number of shares or value that will be repurchased under the stock repurchase program and we may discontinue purchases at any time. Whether we make any further repurchases will depend on many factors, including but not limited to our business and financial performance, the business and market conditions at the time, including the price of our shares, and other factors that management considers relevant. Additionally, we expect to fund repurchases under our stock repurchase program through cash on hand, which may impact our ability to pursue potential strategic opportunities. Although our stock repurchase program is intended to enhance long-term stockholder value, short-term stock price fluctuations could reduce the program's effectiveness and there can be no assurance that any stock repurchases will enhance stockholder value.

Our credit agreement limits our ability to pay a dividend or repurchase our stock unless specified borrowing availability and fixed charge coverage ratio tests are met, and it prohibits payment of a dividend or repurchase of our stock if a default exists under the agreement. Accordingly, we may be required to cease repurchasing stock for periods of time in order to maintain compliance with our credit agreement terms. In addition, we have not paid a dividend on our common stock since the first quarter of 2001 and there can be no assurance that we will do so in the foreseeable future. If we do not pay dividends or execute on our announced stock repurchase program, investors will have to rely on the possibility of stock appreciation and sell their shares to realize a return on their investment.

If we experience an "ownership change" within the meaning of the Internal Revenue Code, utilization of our net operating loss, or NOL, carryforwards would be subject to an annual limitation.

The Internal Revenue Code imposes limitations on a corporation's ability to utilize NOLs if it experiences an "ownership change," which may result from transactions increasing the ownership of certain stockholders in the stock of a corporation by more than 50 percentage points over a rolling three-year period. If we were to experience an ownership change, utilization of our NOLs would be subject to an annual limitation that may be carried over to later years within the allowed NOL carryforward period. Notwithstanding, over the entire carryforward period, we may not be able to use all our NOLs due to the aforementioned annual limitation. If an ownership change had occurred as of December 31, 2016, our annual U.S. federal NOL utilization would have been limited to approximately $71 million per year.

These NOL carryforwards are a substantial asset for us. Although we have our stockholder rights plan and transfer restrictions in our Restated Certificate of Incorporation, which are intended to reduce the likelihood of an "ownership change" that could adversely affect our NOLs, we cannot provide assurance that these restrictions on transferability will prevent all transfers that could result in such an "ownership change." There also can be no assurance that the transfer restrictions in our Restated Certificate of Incorporation will be enforceable against all of our stockholders absent a court determination confirming such enforceability. The transfer restrictions may be subject to challenge on legal or equitable grounds.

Our level of indebtedness requires us to dedicate a portion of our cash flow to debt payments and limits our ability to engage in certain business activities. If we are unable to fund our business activities, meet our obligations under our debt agreements or are contractually restricted from pursuing activities or transactions that we believe are in our long-term best interests, our business, financial condition, results of operations and cash flows could be adversely affected.

As of December 31, 2016, we had $1.1 billion of outstanding debt, consisting of senior notes and industrial revenue bonds. Our debt service obligations require us to dedicate a portion of our cash flow from operating activities to payments on our indebtedness, which reduces the availability to use our cash flow for other purposes, including capital expenditures, research and development efforts, potential acquisitions or investments. Our indebtedness also may increase our vulnerability to economic and industry downturns and changing market conditions and place us at a competitive disadvantage relative to competitors that have less debt. We are required to post letters of credit or cash as collateral primarily in connection with our hedging transactions, insurance programs and bonding activities. The amounts of collateral we are required to post may vary based on our financial position and credit ratings. Use of letters of credit as collateral reduces our borrowing availability under our domestic revolving credit agreement and, therefore, like the use of cash as collateral, reduces our overall liquidity and our ability to fund other business activities.

The terms of our debt agreements, including our credit facility, may also limit our ability to engage in certain activities and transactions that may be in our long-term interest. Among other things, unless we obtain approval the covenants contained in our debt agreements may restrict or limit our ability to incur additional indebtedness, pay dividends or repurchase our common stock, make guarantees, sell our assets or make other fundamental changes, engage in mergers, acquisitions and dispositions, make investments, change our business purpose, and enter into certain transactions with affiliates. We may also be required to maintain specified financial ratios, which may require that we take action to reduce our debt or to act in a manner contrary to our current business plans. Our ability to comply with these covenants and financial ratios may be affected by events beyond our control, and we may not be able to continue to meet those covenants and ratios. Breach of any of the covenants or ratios contained in the agreements governing our debt, or our inability to pay interest on, or principal of, our outstanding debt as it becomes due, could result in an event of default, in which case, our lenders could declare all amounts outstanding to be immediately due and payable. If this occurs, we may not be able to refinance the accelerated debt on favorable terms, or at all, or repay the accelerated debt, and our liquidity may be adversely impacted.

Item 1B. UNRESOLVED STAFF COMMENTS

None

NON-CONFIDENTIAL

Item 2. PROPERTIES

We operate plants, mines, quarries, and other facilities in North America. U.S. Gypsum's Sheetrock® brand gypsum wallboard plants operated at approximately 61% of capacity during 2016. USG Interiors' ceiling tile plants operated at approximately 70% of capacity during 2016. The locations of our production properties in operation as of December 31, 2016, grouped by reportable segment, are as follows (plants are owned unless otherwise indicated):

Gypsum

	Gypsum wallboard and other gypsum products	Joint compound (surface preparation and joint treatment products)	Cement board	Gypsum rock (mines and quarries)	Paper for gypsum wallboard
Alabaster (Tawas City), Michigan				x	
Aliquippa, Pennsylvania*	x				
Auburn, Washington		x			
Baltimore, Maryland**	x	x	x		
Bridgeport, Alabama*	x	x			
Calgary, Alberta, Canada***		x			
Chamblee, Georgia		x			
Dallas, Texas		x			
Detroit (River Rouge), Michigan			x		
East Chicago, Indiana*	x	x			
Fort Dodge, Iowa		x		x	
Galena Park, Texas*	x	x			x
Gypsum, Ohio		x			
Hagersville, Ontario, Canada**	x	x		x	
Jacksonville, Florida**	x	x			
Monterrey, Nuevo Leon, Mexico	x	x	x	x	
Montreal, Quebec, Canada **	x	x			
New Orleans, Louisiana			x		
Norfolk, Virginia*	x				
North Kansas City, Missouri					x
Oakfield, New York					x
Otsego, Michigan					x
Phoenix (Glendale), Arizona***		x			
Plaster City, California	x			x	
Port Reading, New Jersey		x			
Puebla, Puebla, Mexico	x	x			
Rainier, Oregon	x				
Saltillo, Coahuila, Mexico	x				
San Luis Potosi, San Luis Potosi, Mexico	x			x	
Shoals, Indiana**	x			x	
Sigurd, Utah	x	x		x	
Southard, Oklahoma				x	
Sperry, Iowa**	x			x	
Surrey, British Columbia, Canada***		x			

Sweetwater, Texas	x	x

	Gypsum wallboard and other gypsum products	Joint compound (surface preparation and joint treatment products)	Cement board	Gypsum rock (mines and quarries)	Paper for gypsum wallboard
Tecoman, Colima, Mexico	x			x	
Torrance, California		x			
Washingtonville, Pennsylvania*	x				

* Plants supplied fully by synthetic gypsum
** Plants supplied partially by synthetic gypsum
*** Leased

OTHER PRODUCTS
We operate a mica-processing plant at Spruce Pine, North Carolina. We manufacture metal lath, plaster and drywall accessories and light gauge steel framing products at Monterrey, Nuevo Leon, Mexico, and Puebla, Puebla, Mexico. We produce plaster products at Southard, Oklahoma; Puebla, Puebla, Mexico; Saltillo, Coahuila, Mexico; and San Luis Potosi, San Luis Potosi, Mexico. We manufacture paper-faced metal corner bead at Auburn, Washington and at a leased facility in Weirton, West Virginia. We also manufacture cement panels at a leased manufacturing facility in Delavan, Wisconsin .

Ceilings

	Ceiling Grid	Ceiling Tile
Cartersville, Georgia	x	
Cloquet, Minnesota		x
Greenville, Mississippi		x
Oakville, Ontario, Canada	x	
Stockton, California	x	
Walworth, Wisconsin		x
Westlake, Ohio	x	

A coil coater and slitter plant used in the production of ceiling grid is located in Westlake, Ohio. A leased slitter plant is located in Stockton, California.

OTHER PRODUCTS
We manufacture mineral fiber products at Red Wing, Minnesota, and Walworth, Wisconsin, and metal specialty systems at Oakville, Ontario, Canada.

Item 3. LEGAL PROCEEDINGS

See Part II, Item 8, Financial Statements and Supplementary Data - Notes to Consolidated Financial Statements, Note 19, Litigation, for information on legal proceedings, which information is incorporated herein by reference.

Item 4. MINE SAFETY DISCLOSURES

The information concerning mine safety violations or other regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K promulgated by the SEC is included in Exhibit 95 to this report.

PART II

Item 5. MARKET FOR THE REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Our common stock trades on the New York Stock Exchange, or NYSE, and the Chicago Stock Exchange under the symbol USG. The NYSE is the principal market for our common stock. As of January 31, 2017, there were 2,202 record holders of our common stock. We currently do not pay dividends on our common stock. Our credit facility limits our ability to pay cash dividends on or repurchase our common stock unless specified borrowing availability and fixed charge ratios are met. See Item 8, Financial Statements and Supplementary Data, Note 6, Debt, for more information regarding these restrictions.

We did not purchase any of our equity securities during the fourth quarter of 2016.

See Part III, Item 12, Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters, for information regarding common stock authorized for issuance under equity compensation plans.

Pursuant to our Deferred Compensation Program for Non-Employee Directors, five of our non-employee directors deferred the $120,000 annual grant, and two of our non-employee directors deferred all or a portion of the quarterly retainer, they were entitled to receive on December 31, 2016 under our Non-Employee Director Compensation Program, into a total of 22,013 deferred stock units. These units will increase or decrease in value in direct proportion to the market value of our common stock and will be paid in cash or shares of common stock, at each director's option, following termination of service as a director. The issuance of these deferred stock units was effected through a private placement under Section 4(a)(2) of the Securities Act and was exempt from registration under Section 5 of the Securities Act.

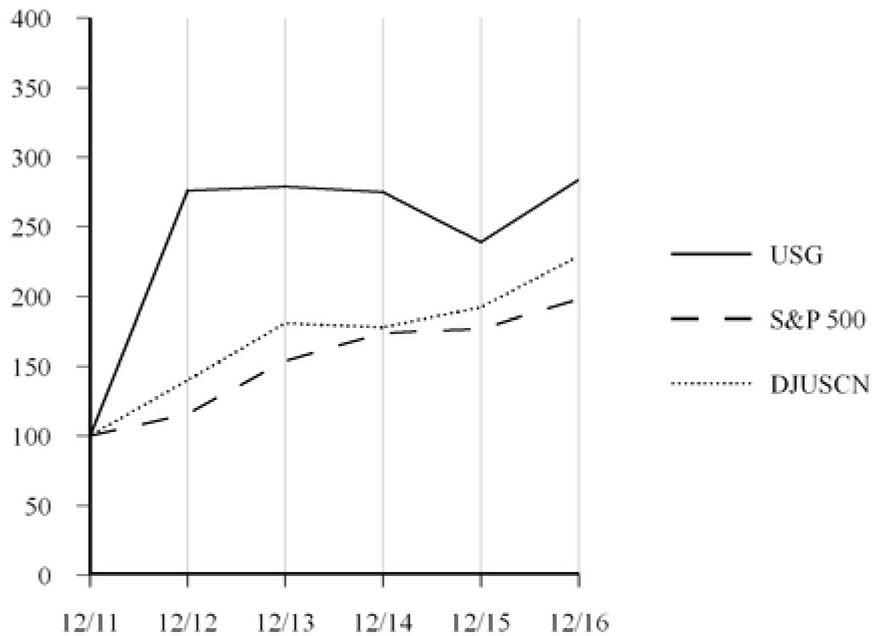
COMMON STOCK PRICES

The high and low sales prices of our common stock in 2016 and 2015 were as follows:

	2016		2015	
	High	Low	High	Low
First quarter	$ 24.81	$ 16.48	$ 30.99	$ 25.39
Second quarter	29.52	24.91	29.08	26.00
Third quarter	30.58	25.62	32.73	25.89
Fourth quarter	32.19	23.92	28.00	22.91

PERFORMANCE GRAPH

The following graph and table compare the cumulative total stockholder return on our common stock with the Standard and Poor's 500 Index, or S&P 500, and the Dow Jones U.S. Construction and Materials Index, or DJUSCN, in each case assuming an initial investment of $100 and full dividend reinvestment, for the five-year period ended December 31, 2016.



	Value of Investment as of December 31,					
	2011	2012	2013	2014	2015	2016
USG	$ 100	$ 276	$ 279	$ 275	$ 239	$ 284
S&P 500	100	116	154	174	177	198
DJUSCN	100	140	181	178	192	229

All amounts are rounded to the nearest dollar.

Item 6. SELECTED FINANCIAL DATA

(millions, except per-share and employee data)	Years Ended December 31,				
	2016	2015 (a)	2014 (a)	2013 (a)	2012 (a)
Statement of Income Data:					
Net sales	$ 3,017	$ 2,913	$ 2,904	$ 2,792	$ 2,494
Cost of products sold	2,312	2,263	2,279	2,232	2,085
Gross profit	705	650	625	560	409
Selling and administrative expenses	304	302	323	302	282
Litigation settlement charge (b)	—	—	48	—	—
Long-lived asset impairment charges (c)	10	—	90	—	8
Shipping operations (d)	(3)	(7)	15	—	—
Restructuring charges	—	—	—	4	10
Operating profit	394	355	149	254	109
Income (loss) from equity method investments	49	48	33	(1)	(3)
Interest expense, net	(141)	(161)	(178)	(200)	(202)
Income and gain from sale of equity method investment to related party (e)	—	13	2	2	3
Gain on deconsolidation of subsidiaries and consolidated joint ventures (f)	—	—	27	—	—
Loss on extinguishment of debt	(37)	(19)	—	—	(41)
Other income, net	9	—	—	—	—
Income (loss) from continuing operations before income taxes	274	236	33	55	(134)
Income tax (expense) benefit (g)	(63)	740	(7)	(11)	(12)
Income (loss) from continuing operations	211	976	26	44	(146)
Income (loss) from discontinued operations, net of tax	20	15	12	2	(34)
Gain on sale of discontinued operations, net of tax (a)	279	—	—	—	55
Net income (loss)	510	991	38	46	(125)
Less: Net income (loss) attributable to noncontrolling interest	—	—	1	(1)	1
Net income (loss) attributable to USG	$ 510	$ 991	$ 37	$ 47	$ (126)
Income (loss) from continuing operations per average common share:					
Basic	1.45	6.70	0.18	0.40	(1.38)
Diluted	1.44	6.62	0.17	0.39	(1.38)
Balance Sheet Data (as of the end of the year)**:**					
Working capital	$ 527	$ 408	$ 546	$ 1,080	$ 796
Current ratio	2.25	1.41	1.97	2.90	2.50
Cash and cash equivalents (a)	427	442	231	815	550
Property, plant and equipment, net (a)	1,707	1,771	1,891	2,088	2,082
Total assets	3,869	4,736	3,936	4,051	3,691
Long-term debt (h)	1,083	1,675	2,191	2,275	2,284
Total stockholders' equity	1,886	1,436	408	662	19

(a) Results have been adjusted from the originally reported amounts to reflect L&W, which was sold on October 31, 2016, as a discontinued operation. We recorded a gain of $279 million on the sale of the business. See Note 3 to our consolidated financial statements in Part II, Item 8 of this report.
(b) Reflects a charge related to the settlement of the U.S. wallboard pricing class action lawsuits.
(c) Reflects long-lived asset impairment charges on mining operations in 2016 and on certain manufacturing facilities, capitalized costs for the construction of future facilities and ocean vessels in 2014. See Note 12 and Note 13 to our consolidated financial statements in Part II, Item 8 of this report.
(d) Item relates to our shipping operations. See Note 13 to our consolidated financial statements in Part II, Item 8 of this report.
(e) Reflects the gain recorded on the sale of our equity method investment in our Knauf-USG joint venture to our 50/50 joint venture partner in 2015 and our share of the net income from the equity method investment for all periods presented. See Note 4 to our consolidated financial statements in Part II, Item 8 of this report.
(f) Reflects the gain recorded on the deconsolidation and contribution to UBBP of our wholly-owned subsidiaries in Singapore, Malaysia, New Zealand, and Australia and our consolidated joint ventures in Oman. See Note 4 to our consolidated financial statements in Part II, Item 8 of this report.
(g) Income tax (expense) benefit for 2015 includes the reversal of a tax valuation allowance of $731 million. See Note 15 to our consolidated financial statements in

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Part II, Item 8 of this report.

(h) Amounts reflected exclude currently maturing portion of long-term debt.

Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

OVERVIEW

USG, through its subsidiaries, is a leading manufacturer of innovative, high-performance building systems. We produce a wide range of products under recognized brand names including Sheetrock®, Durock®, Fiberock®, and Securock® serving the new residential, new nonresidential, and repair and remodel construction markets for both residential and nonresidential, enabling our customers to build the outstanding spaces where people live, work and play.

KEY STRATEGIES

We continue to focus on the following strategic priorities:

- strengthen our core businesses,
- diversify our earnings by expanding in select markets and growing our adjacent product lines, and
- differentiate USG from our competitors through innovation.

RECENT DEVELOPMENTS

On October 31, 2016, we completed the sale of L&W Supply Corporation, or L&W, to American Builders & Contractors Supply Co., Inc., or ABC Supply, for $675 million inclusive of the final working capital adjustment. We recognized a gain of $279 million on the transaction. Additionally, we entered into a supply agreement with L&W that governs sales of wallboard and certain other products from USG to L&W.

For the year ended December, 31, 2016, L&W met the criteria to be presented as discontinued operations. L&W's results of operations and related cash flows have been reclassified to discontinued operations in our consolidated statements of income and consolidated statements of cash flows, respectively, for all periods presented. The assets and liabilities of L&W as of December 31, 2015 have been reclassified to discontinued operations in our consolidated balance sheets. See Note 3 to the consolidated financial statements in Part II, Item 8 of this report for additional information related to discontinued operations.

During 2016, we retired $1.1 billion of outstanding debt consisting of our 6.3% Senior Notes due 2016, our 7.875% Senior Notes due 2020 and our 5.875% Senior Notes due 2021, and recorded a pre-tax loss on the early extinguishment of debt of $37 million.

MARKET CONDITIONS AND OUTLOOK

Our businesses are cyclical in nature and sensitive to changes in general economic conditions, including, in particular, conditions in the North American housing and construction-based markets and the markets in Asia and Australasia. Our expansion via two 50/50 joint ventures we formed with Boral Limited, referred to as USG Boral Building Products, or UBBP, into the markets of Asia, Australasia, and the Middle East has significantly increased our exposure to the economic conditions in those areas. However, the UBBP investment has helped diversify USG's overall exposure to changes in the North American economic conditions. The markets we serve can be broadly categorized as new residential construction, new nonresidential construction and repair and remodel activity, which includes both residential and nonresidential construction.

For the new residential construction market, housing starts are a very good indicator of demand for our gypsum products. Installation of our gypsum products into a single family home typically follows a housing start by 90 to 120 days. Based on preliminary data reported by the U.S. Census Bureau, housing starts in the United States increased 5% in 2016 to 1,166,300 compared with an adjusted 1,111,900 in 2015. This followed an 11% increase in 2015 compared with 2014. For December 2016, the seasonally-adjusted annualized rate of housing starts was reported by the U.S. Census Bureau to be 1,226,000 units. While housing starts continue to increase year over year, they are still low by historical standards. Most industry analysts believe that the recovery in new residential construction will continue, although the recovery over the next few years may be modest, and that over the longer term housing starts will reach historical averages. Industry analysts' forecasts for 2017 housing starts in the United States included in the most recent Blue Chip Economic Indicators are 1,190,000 to 1,350,000 units, based upon the average of the bottom ten and top ten forecasts included in the report, respectively. We currently estimate that 2017 housing starts in the United States will be approximately 1,250,000.

Demand for our products from new nonresidential construction is determined by floor space for which contracts are signed. Installation of gypsum and ceilings products typically follows signing of construction contracts by about 12 to 18 months. According to the most recent construction market forecast from Dodge Data & Analytics, total floor space for which new nonresidential construction contracts were signed in the United States decreased 1% in 2016 compared with 2015. This followed a 2% decrease in 2015 compared with 2014 and a 14% increase in 2014 compared with 2013. Dodge Data & Analytics forecasts that total floor space for which new nonresidential construction contracts in the United States are signed will increase approximately 6% in 2017 from the 2016 level. Dodge Data & Analytics' forecast includes several building types which do not generate significant demand for our products; therefore, we anticipate new nonresidential construction growth in our business sectors in 2017 compared to 2016 will increase low to mid single digits.

The repair and remodel market includes renovation of both residential and nonresidential buildings. As a result of the low levels of new home construction in recent years, this market currently accounts for the largest portion of our sales. Many buyers begin to remodel an existing home within two years of purchase. According to the National Association of Realtors, sales of existing homes in the United States increased to 5.45 million units in 2016, reflecting a 4% increase from the 2015 level of 5.25 million units, which was a 6% increase from 2014. The generally rising levels of existing home sales and home resale values in recent years have contributed to an increase in demand for our products from the residential repair and remodel market. We currently estimate that overall repair and remodel spending in 2016 increased approximately 6% over the 2015 level and that overall repair and remodel spending growth in 2017, compared to 2016, will increase by mid single digits.

The rate of recovery in the new residential construction market, new nonresidential construction market and the repair and remodel market still remains uncertain and will depend on broader economic circumstances, including employment, household formation, the home ownership rate, existing home price trends, availability of mortgage financing, interest rates, consumer confidence, job growth and discretionary business investment. An increase in interest rates, high levels of unemployment, restrictive lending practices, a decrease in consumer confidence or other adverse economic conditions could have a material adverse effect on our business, financial condition, operating results and cash flows. Our businesses are also affected by a variety of other factors beyond our control, including the inventory of unsold homes, the level of foreclosures, home resale rates, housing affordability, office and retail vacancy rates and foreign currency exchange rates. Since we operate in a variety of geographic markets, our businesses are subject to the economic conditions in each of these geographic markets. General economic downturns or localized downturns or financial concerns in the regions where we have operations may have a material adverse effect on our business, financial condition, results of operations and cash flows.

We expect modest improvement over the next twelve months in the construction industries of Canada and Mexico. Other international markets, including those that are within the UBBP territory, provide opportunities for our operations to serve these regions. Australia is expected to experience a decline in housing starts; however, these housing starts are expected to remain above the long-term average. South Korea is expecting continued growth in its residential sector although the overall construction industry is expected to slow. Several emerging markets which are within the UBBP territory are forecast to experience steady growth. We anticipate that the results from UBBP will enable us to counteract some of the potential cyclicality in our North American business.

Our Gypsum segment has improved with the modest recovery in residential housing over the last three years, although it continues to be adversely affected by the low level of residential and other construction activity compared to historical averages. Our Ceilings segment, which primarily serves the commercial markets, has shown some improvement. However, it continues to be adversely affected by the low levels of new commercial construction activity as compared to historical averages.

Industry shipments of gypsum board in the United States (including gypsum wallboard, other gypsum-related paneling products and imports), as reported by the Gypsum Association, were an estimated 25.0 billion square feet in 2016, up approximately 12% from 22.3 billion square feet in 2015.

U.S. Gypsum shipped 5.76 billion square feet of Sheetrock® brand gypsum wallboard in 2016, a 6% increase from 5.44 billion square feet in 2015. USG Sheetrock® Brand UltraLight Panels accounted for approximately 66% and 65% of that volume in 2016 and 2015, respectively. U.S. Gypsum’s share of the gypsum board market in the United States, which includes, for comparability, its shipments of Sheetrock® brand gypsum wallboard, Fiberock® brand gypsum fiber panels and Securock® brand glass mat sheathing, was approximately 25% in 2016, down 1% from 2015.

There is excess wallboard production capacity industry-wide in the United States. Industry capacity in the United States was approximately 33.4 billion square feet as of January 1, 2017. We estimate that the industry capacity utilization rate was approximately 77% and 70% during the fourth quarters of 2016 and 2015, respectively and approximately 75% and 68% during the full years 2016 and 2015, respectively. Based on current industry trends and forecasts, demand for gypsum wallboard is expected to increase in 2017, but the magnitude of any increase will depend on the levels of housing starts and repair and remodel activity, among other factors. We project that the industry capacity utilization rate will experience a modest growth in 2017 compared to 2016.

We could experience pressure on gypsum wallboard selling prices and our gross margins at these levels of capacity utilization. U.S. Gypsum implemented a price increase for wallboard effective in January 2017. However, it is uncertain that we will be able to maintain the increase or obtain additional price increases in our selling prices. If we are unable to maintain or implement price increases, our net sales, operating results and cash flows may be materially and adversely impacted.

SEGMENTS

Our operations are organized into three segments: Gypsum, Ceilings and UBBP. As a result of the presentation of L&W as a discontinued operation, the results of L&W, which consisted of all of our Distribution segment, have been excluded from segment results. Additionally, the results of our Gypsum and Ceilings segments have been revised to reflect only the sales of USG products from Gypsum and Ceilings to L&W that have been sold by L&W outside the consolidated group prior to October 31, 2016. All sales subsequent to the close of the transaction are included in net sales.

Gypsum: Our Gypsum segment manufactures and markets gypsum and related products in the United States, Canada, Mexico and Latin America. Gypsum's products are used in a variety of building applications to construct walls, ceilings, roofs and floors of residential, commercial and institutional buildings, as well as in certain industrial applications.

Ceilings: Our Ceilings segment manufactures and markets interior systems products in the United States, Canada, Mexico and Latin America. In addition, through February 27, 2014, it also included our businesses in the Asia-Pacific region (see paragraph below regarding UBBP), which were included in USG International. Ceilings is a leading supplier of interior ceilings products used primarily in commercial applications. Ceilings manufactures ceiling tile in the United States and ceiling grid in the United States, Canada and, through February 27, 2014, in the Asia-Pacific region. It markets ceiling tile and ceiling grid in the United States, Canada, Mexico, Latin America and, through February 27, 2014, in the Asia-Pacific region.

As discussed below under USG Boral Building Products, on February 27, 2014, we contributed our Asia-Pacific operations to the joint ventures.

USG Boral Building Products (UBBP): On February 27, 2014, we formed two 50/50 joint ventures with Boral Limited, or Boral, herein referred to as UBBP. UBBP manufactures, distributes and sells certain building products, mine raw gypsum and sell natural and synthetic gypsum throughout Asia, Australasia and the Middle East (the Territory). The joint ventures also manufacture and distribute products for wall, ceiling, floor lining and exterior systems that utilize gypsum wallboard, referred to as plasterboard in the Territory, mineral fiber ceiling tiles, steel grid and joint compound.

As consideration of our 50% ownership in the joint ventures, we made total net cash payments of $514 million, contributed our operations in the Asia-Pacific region and granted UBBP a license to use certain of our intellectual property rights in the Territory. As a result of the contribution of our operations in the Asia-Pacific region, the net sales and operating profit attributable to these entities are no longer included in those corresponding line items on our consolidated statement of income subsequent to February 27, 2014. Instead, our share of the equity income from UBBP is shown within income from equity method investments. See Note 4 to our consolidated financial statements in Part II, Item 8 of this report for further discussion.

Geographic Information: In 2016, 82% of our consolidated net sales were attributable to the United States. Canada accounted for 12% of our net sales, and other foreign countries accounted for the remaining 6%.

In 2016, 35% of UBBP's net sales were attributable to Australia, 20% to South Korea, 13% to Thailand, 9% to China, and other foreign countries accounted for the remaining 23%.

CURRENCY IMPACT

The impact of currency on consolidated and segment results for 2016 and 2015 has been derived by translating current period results at the year-to-date average foreign currency rates for the period ending December 31, 2015 and December 31, 2014, respectively.

Consolidated Results of Operations

				Favorable (Unfavorable)			
				2016 vs. 2015		2015 vs. 2014	
(millions, except per-share data)	2016	2015	2014	$	%	$	%
Net sales	$ 3,017	$ 2,913	$ 2,904	$ 104	4 %	$ 9	— %
Cost of products sold	2,312	2,263	2,279	(49)	(2)%	16	1 %
Gross profit	705	650	625	55	8 %	25	4 %
Selling and administrative expenses	304	302	323	(2)	(1)%	21	7 %
Litigation settlement charge	—	—	48	—	*	48	100 %
Long-lived asset impairment charges	10	—	90	(10)	*	90	100 %
(Recovery) loss on receivable and contract termination charge	(3)	(6)	15	(3)	(50)%	21	*
Gain on disposal of shipping operations, net	—	(1)	—	(1)	(100)%	1	*
Operating profit	394	355	149	39	11 %	206	*
Income from equity method investments	49	48	33	1	2 %	15	45 %
Interest expense	(145)	(163)	(179)	18	11 %	16	9 %
Interest income	4	2	1	2	100 %	1	100 %
Income and gain on sale from equity method investment to related party	—	13	2	(13)	(100)%	11	*
Gain on deconsolidation of subsidiaries and consolidated joint ventures	—	—	27	—	*	(27)	(100)%
Loss on extinguishment of debt	(37)	(19)	—	(18)	(95)%	(19)	*
Other income, net	9	—	—	9	*	—	*
Income from continuing operations before income taxes	274	236	33	38	16 %	203	*
Income tax benefit (expense)	(63)	740	(7)	(803)	*	747	*
Income from continuing operations	211	976	26	(765)	(78)%	950	*
Income from discontinued operations, net of tax	20	15	12	5	33 %	3	25 %
Gain on sale of discontinued operations, net of tax	279	—	—	279	*	—	*
Net income	510	991	38	(481)	(49)%	953	*
Less: Net income attributable to noncontrolling interest	—	—	1	—	*	(1)	(100)%
Net income attributable to USG	$ 510	$ 991	$ 37	$ (481)	(49)%	$ 954	*
Diluted earnings per share - net income	$ 3.46	$ 6.73	$ 0.25	$ (3.27)		$ 6.48	

* not meaningful

NET SALES

Consolidated net sales in 2016 increased $104 million, or 4%, compared with 2015 driven by higher net sales by both our Gypsum and Ceiling segments of $100 million and $4 million, respectively. The increase in Gypsum net sales primarily reflected higher domestic sales as a result of increased volumes of Sheetrock® brand gypsum wallboard, Sheetrock® brand joint compound, Durock® brand cement board, Levelrock® brand gypsum underlayment offset by lower prices of Sheetrock® brand gypsum wallboard. The increase in Ceilings net sales was primarily driven by higher domestic net sales due to price improvement on ceiling tile and ceiling grid volume improvement. On a consolidated basis, foreign currency exchange rate fluctuations negatively impacted our net sales by $34 million.

Consolidated net sales in 2015 increased $9 million compared with 2014. The increase reflected an increase in sales of the Gypsum segment offset by a decrease in sales of the Ceiling segment. The higher Gypsum segment sales reflected increases in volume and average selling prices for nearly all wallboard, surfaces and substrates products offset by the elimination of shipping revenues of $71 million due to the exit of our shipping business in the second quarter of 2015. The lower Ceilings revenues in 2014 reflected the inclusion of only two months of revenue for USG International, or $7 million, prior to its contribution into the UBBP joint venture on February 27, 2014, with further declines in sales driven by the strengthening of the U.S. Dollar, offset by higher selling prices for ceiling tile. On a consolidated basis, we estimate that the strengthening of the U.S. Dollar negatively impacted our net sales by approximately $65 million compared with 2014.

GROSS PROFIT

Gross profit was $705 million in 2016 compared to $650 million in 2015. The increase was primarily due to higher volume and lower cost for nearly all wallboard, surfaces and substrates products and ceiling grid and lower cost for ceiling tile. As a percentage of net sales, gross profit was 23.4% in 2016 and 22.3% in 2015. The increase for 2016 compared with 2015 was primarily driven by higher volumes and lower cost.

As a percentage of net sales, gross profit was 22.3% in 2015 and 21.5% in 2014. The increase was primarily due to increases in volume and average selling prices for nearly all wallboard, surfaces and substrates products.

SELLING AND ADMINISTRATIVE EXPENSES
Selling and administrative expenses totaled $304 million in 2016, $302 million in 2015 and $323 million in 2014. As a percentage of net sales, selling and administrative expenses decreased to 10.1% in 2016 compared to 10.4% in 2015 and 11.1% in 2014. The increase of $2 million in selling and administrative expenses for 2016 included $13 million in pension settlement charges and $4 million for the remaining lease term and accelerated depreciation associated with the exit of commercial office space. Offsetting these charges are lower net compensation costs and lower marketing expenses.

The reduction in selling and administrative expenses from 2014 to 2015 was driven by management's focus on reducing discretionary spending, partially offset by higher salary, pension and incentive compensation, the absence of a $13 million pension settlement charge recorded in 2014 for our previously frozen U.K. pension plan and lower stock compensation expense driven by lower grant date fair values.

LITIGATION SETTLEMENT CHARGE
In the third quarter of 2014, we recorded a litigation settlement charge of $48 million related to the settlement of the U.S. wallboard pricing class action lawsuits.

LONG-LIVED ASSET IMPAIRMENT CHARGES
We recorded long-lived asset impairment charges of $10 million in 2016 and $90 million in 2014. There were no impairment charges on long-lived assets in 2015. The charges in 2016 resulted from the decision to indefinitely idle our mining operations in Little Narrows, Nova Scotia, Canada, after completing a review of our gypsum sourcing needs. The charges in 2014 reflected the impairment of $30 million on certain manufacturing facilities and capitalized costs for the construction of future facilities, which we do not anticipate will be built within our planning horizon, and of $60 million on two vessels owned by Gypsum Transportation Limited, or GTL. See Notes 12 and 13 to our consolidated financial statements in Part II, Item 8 of this report for additional information related to long-lived asset impairment charges.

(RECOVERY) LOSS ON RECEIVABLE AND CONTRACT TERMINATION CHARGE
In the fourth quarter of 2014, we recorded a charge of $15 million for contract costs related to a lease of an ocean vessel that were to be incurred over the remaining term without economic benefit to us and for a loss on an uncollectible receivable owed to our shipping operations by its trading partner.

In 2016 and 2015, we recovered $3 million and $6 million, respectively, of the previously deemed uncollectible receivable through a settlement agreement. See Note 13 to the consolidated financial statements in Part II, Item 8 of this report for additional information.

GAIN ON DISPOSAL OF SHIPPING OPERATIONS, NET
During the second quarter of 2015, we recorded a net gain on the disposal of our shipping operations of $1 million. This reflected a gain on sale of our two self-unloading vessels of $7 million and charges to wind down our shipping operations of $6 million.

INCOME FROM EQUITY METHOD INVESTMENTS
Income from equity method investments was $49 million in 2016, $48 million in 2015, and $33 million in 2014. The increase from 2015 to 2016 was primarily driven by an increase in our share of the net income of UBBP, which reflected higher sales and operating profit year over year offset by $8 million of long-lived asset impairment charges in China and Oman. Foreign currency exchange rate fluctuations due to the strengthening of the U.S. dollar negatively impacted our share of equity earnings by $1 million in 2016.

The increase from 2014 to 2015 primarily reflected an increase in our share of the net income of UBBP driven by both growth in the business year-over-year and twelve months of equity method income in 2015 and only ten months in 2014. Our share of equity earnings in 2015 was negatively impacted by approximately $8 million due to the strengthening of the U.S. dollar.

INTEREST EXPENSE
Interest expense was $145 million in 2016, $163 million in 2015 and $179 million in 2014. The decrease in interest expense in 2016 from 2015 primarily reflected lower debt levels and lower interest rates on our outstanding debt. The decline was driven by repayments of $1.1 billion of debt in 2016 and $21 million in 2015.

Lower interest expense in 2015 as compared to 2014 primarily reflected lower debt levels and lower interest rates on our outstanding debt. The decline was driven by the April 2014 conversion of $75 million of our 10% convertible senior notes into common stock, the August 2014 repayment of $59 million of our 9.75% Senior Notes, the February 2015 repurchase of our

8.375% Senior Notes due 2018, the repayment of our ship mortgage facility and lower amortization of deferred financing fees and debt discounts, offset by the issuance of our 5.5% Senior Notes due 2025.

INCOME AND GAIN ON SALE FROM EQUITY METHOD INVESTMENT TO RELATED PARTY

On December 22, 2015, we completed the disposition of our 50% share of the Knauf-USG joint venture to Knauf for a total price of €48 million in cash, or approximately $52 million. We recorded a gain of $11 million, or $6 million net of tax, on the disposition of the equity method investment. Our share of the income from the equity method investment from January 1, 2015 through December 22, 2015 amounted to $2 million, which was flat with 2014. See Note 4 to our consolidated financial statements in Part II, Item 8 of this report for additional information.

GAIN ON DECONSOLIDATION OF SUBSIDIARIES

In the first quarter of 2014, we recognized a gain of $27 million on the deconsolidation of subsidiaries as a result of our contribution of our wholly-owned subsidiaries in Singapore, India, Malaysia, New Zealand and Australia and our consolidated joint ventures in Oman into UBBP.

LOSS ON EXTINGUISHMENT OF DEBT

We recorded a loss on extinguishment of debt of $37 million in 2016 and $19 million in 2015 including premiums and write-off of unamortized debt issuance costs. The loss in 2016 was a result of the early redemption of our 6.3% Senior Notes throughout 2016 and repayment in December of our 7.875% Senior Notes and 5.875% Senior Notes. The loss in 2015 resulted from the tender offer and repurchase of our 8.375% Senior Notes due 2018.

OTHER INCOME, NET

We recorded $9 million of net other income in 2016 which included net gains on foreign currency transactions and the receipt of the remaining payments under a settlement agreement with our former trading partner of which $4 million was recorded as other income. See Note 13 to the consolidated financial statements in Part II, Item 8 of this report for additional information.

INCOME TAX EXPENSE

Income tax expense was $63 million in 2016 compared with income tax benefit of $740 million in 2015. The income tax expense in 2016 is related to tax expense from domestic, foreign, state and local jurisdictions. This expense was partially offset by foreign tax credits attributable to tax planning strategies to optimize foreign tax credit utilization and management's intention to amend its tax returns for the tax years 2012-2014 in order to claim credits for previously deducted foreign tax.

Income tax benefit was $740 million in 2015 compared with income tax expense of $7 million in 2014. The income tax benefit in 2015 primarily resulted from the reversal of a substantial portion of our deferred tax asset valuation allowance of $731 million. In addition, tax benefits of $5 million were recorded for recently enacted Federal law changes related to alternative minimum tax credit monetization, or AMT credits. These benefits recorded were offset slightly by tax expense for certain foreign, state and local jurisdictions of $7 million. Due to the effects of reversing our deferred tax asset valuation allowance, our effective tax rate for 2015 was abnormally low.

INCOME FROM DISCONTINUED OPERATIONS, NET OF TAX

Income from discontinued operations was $20 million for 2016, $15 million for 2015 and $12 million for 2014 and primarily reflected the income recorded by L&W prior to the sale to ABC Supply on October 31, 2016. The income in 2016 and 2014 also included a loss of $2 million and $1 million, respectively, associated with our European operations which were sold in December 2012. See Note 3 to our consolidated financial statements in Part II, Item 8 of this report for additional information.

GAIN ON SALE OF DISCONTINUED OPERATIONS, NET OF TAX

On October 31, 2016, we completed the sale of L&W to ABC Supply and received proceeds of $675 million inclusive of a $6 million final working capital adjustment that was received subsequent to year end resulting in a gain on sale, net of tax, of $279 million. See Note 3 to our consolidated financial statements in Part II, Item 8 of this report for additional information.

Segment Results of Operations

GYPSUM

Net sales and operating profit (loss) for the businesses comprising our Gypsum segment were as follows:

				Favorable (Unfavorable)			
				2016 vs. 2015		2015 vs. 2014	
(millions)	2016 (a)	2015 (b)	2014 (c)	$	%	$	%
Net Sales:							
United States	$ 2,135	$ 2,041	$ 1,913	$ 94	5 %	$ 128	7 %
Canada	339	321	344	18	6 %	(23)	(7)%
Mexico / Latin America	188	187	195	1	1 %	(8)	(4)%
Canadian Mining	—	6	5	(6)	(100)%	1	20 %
Gypsum Transportation Limited	—	10	81	(10)	(100)%	(71)	(88)%
Eliminations	(136)	(139)	(142)	3	2 %	3	2 %
Total	$ 2,526	$ 2,426	$ 2,396	$ 100	4 %	$ 30	1 %
Operating Profit (Loss):							
United States	$ 375	$ 329	$ 188	$ 46	14 %	$ 141	75 %
Canada	22	7	13	15	*	(6)	(46)%
Mexico / Latin America	10	24	19	(14)	(58)%	5	26 %
Canadian Mining	(21)	(6)	(3)	(15)	*	(3)	(100)%
Gypsum Transportation Limited	3	7	(52)	(4)	(57)%	59	*
Total	$ 389	$ 361	$ 165	$ 28	8 %	$ 196	*

* Not meaningful

(a) Operating profit in 2016 included long-lived asset impairment charges of $10 million and $2 million of severance related to Canadian Mining, pension settlement expense of $8 million related to the United States, a gain of $11 million recorded on the sale of surplus property and recovery of loss on receivable of $3 million related to GTL

(b) Operating profit in 2015 included $1 million for the net gain on sale of the ships and costs to wind-up the GTL business, a $6 million recovery of a portion of the receivable deemed uncollectible in 2014 and a pre-tax gain on the sale of assets in Mexico of $10 million.

(c) Operating profit in 2014 included a litigation charge of $48 million, which related to the United States, long-lived asset impairment charges of $90 million, of which $30 million related to United States and $60 million relates to GTL, and contract termination and loss on receivable of $15 million, which related to GTL.

UNITED STATES

As a result of the presentation of L&W as a discontinued operation, the results of our United States Gypsum business through the transaction close of October 31, 2016 were revised to reflect the sales of USG products from our United States Gypsum business to L&W that were sold by L&W outside the consolidated group through that date. All sales to L&W subsequent to that date are reflected in sales and operating profit. The year over year impact of this presentation is highlighted in the sales and operating profit (loss) tables below.

2016 COMPARED WITH 2015

Net sales in 2016 increased $94 million, or 5%, compared with 2015. The net sales increase was due to the following:

	Sales		Volume		Price	
(millions)	$	%	$	%	$	%
Change to 2016 from 2015						
Sheetrock® brand gypsum wallboard	46	5%	54	6%	(8)	(1)%
Sheetrock® brand joint compound	16	4%	18	5%	(2)	(1)%
Durock® brand cement board	10	8%	8	6%	2	2 %
Levelrock® brand gypsum underlayment	11	22%	11	22%	—	— %
Other	11					

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Total increase in net sales	$ 94	5%

Net sales of USG Sheetrock® brand gypsum wallboard increased $46 million, or 5%, reflecting a 6% increase in volume offset by a 1% decrease in average gypsum wallboard selling prices. The increase in volume was driven by higher shipments to the core channels of distribution which includes big box retailers, specialty dealers and pro dealers. The decrease in average selling prices reflected changes in mix and regional pricing differences.

Sales of Sheetrock® brand joint compound increased $16 million driven largely by increased shipments to specialty dealers, pro dealers and big box retailers offset by a 1% decrease in average selling prices due to product mix. Durock® brand cement board sales increased $10 million which reflected both higher volumes due to an improvement in the repair and remodel market and increased shipments to big box retailers and specialty dealers and higher average selling price of 2%. Sales of Levelrock® brand gypsum underlayment increased by $11 million driven by higher volume which reflected an improvement in the multi-family housing construction market as well as sales of accessory products.

The increase in Other of $11 million reflected higher sales of other products of $31 million, including Fiberock® brand backerboard, Durock® brand glass-mat tile backerboard, structural panel concrete roofing and Securock® brand glass-mat roof boards and an increase in freight as a result of higher sales. Offsetting this increase in Other was a $29 million reduction in sales for inventory sold by Gypsum to L&W that was included in L&W's inventory as of October 31, 2016.

Operating profit was $375 million in 2016 and $329 million in 2015, or a $46 million increase, and reflected the following:

	Operating Profit	Volume	Price	Cost
(millions)	$	$	$	$
Change to 2016 from 2015				
Sheetrock® brand gypsum wallboard	$ 23	$ 24	$ (8)	$ 7
Sheetrock® brand joint compound	11	4	(2)	9
Durock® brand cement board	4	2	2	—
Levelrock® brand gypsum underlayment	3	10	—	(7)
Other gypsum products	11			
Other	(6)			
Total increase in operating profit	$ 46			

The increase in operating profit in 2016 reflected gross profit improvement for Sheetrock® brand gypsum wallboard, Sheetrock® brand joint compound, Durock® brand cement board and Levelrock® brand gypsum underlayment due to the following:

- USG Sheetrock® brand gypsum wallboard experienced higher volume of 6%, driven by shipments to big box retailers and specialty dealers, and lower per unit costs offset by 1% lower selling prices;
- The increase in gross profit of USG Sheetrock® brand joint compound reflected higher volume of 5%, driven by shipments to specialty dealers, lower per unit costs offset by 1% lower selling prices;
- Increased volumes and price for Durock® brand cement board;
- Higher volumes of 22% for Levelrock® brand gypsum underlayment which was offset by higher costs.

Manufacturing costs per unit improved for USG Sheetrock® brand gypsum wallboard which was reflected in $7 million of increased operating profit. The lower cost was driven by a reduction in per unit cost of 11% for energy costs as a result of lower natural gas prices and of 8% for fixed costs due to higher volumes. Offsetting some of these cost savings was a 4% increase in raw material costs driven by waste paper and synthetic gypsum and a 4% increase in conversion costs driven partially by higher labor costs. Manufacturing costs per unit for Sheetrock® brand joint compound decreased due to lower raw material costs driven primarily by pails, latex, and thickener and lower fixed costs due to improved volumes.

Also driving the increase in operating profit were higher gross profits on other gypsum products of $11 million as a result of product mix offset by a decrease in Other of $6 million. Included in Other was a $13 million reduction in gross profit for inventory sold by Gypsum to L&W that was included in L&W's inventory as of October 31, 2016. Also reducing operating profit was an adjustment to customer reserves of $2 million and a pension settlement of $8 million. Offsetting this reduction in Other was higher operating profit due to a gain of $11 million recorded on the sale of surplus property, a favorable adjustment of $3 million for our asset retirement obligations and improved selling and administrative expenses of $3 million. As a percentage of net sales, selling and administrative expenses declined by 40 basis points driven primarily by lower net compensation costs.

New housing construction increased in 2016, resulting in increased demand for gypsum wallboard, as discussed above. U.S. Gypsum shipped 5.76 billion square feet of USG Sheetrock® brand gypsum wallboard in 2016, a 6% increase from 5.44 billion square feet in 2015. During 2016, USG Sheetrock® Brand UltraLight Panels accounted for 66% of all of our wallboard shipments in the United States. We estimate that industry capacity utilization rates averaged approximately 75% during 2016, while U.S. Gypsum's capacity utilization rate averaged 61%.

2015 COMPARED WITH 2014

Net sales in 2015 increased $128 million, or 7%, compared with 2014. The net sales increase was due to the following:

	Sales		Volume		Price	
(millions)	$	%	$	%	$	%
Change to 2015 from 2014						
Sheetrock® brand gypsum wallboard	33	4%	19	2%	14	2%
Sheetrock® brand joint compound	19	6%	14	5%	5	1%
Durock® brand cement board	10	9%	4	4%	6	5%
Securock® brand roof board	8	18%	8	18%	—	—
Levelrock® brand poured flooring	8	18%	8	18%	—	—
Other	50					
Total increase in net sales	$ 128	7%				

Net sales of USG Sheetrock® brand gypsum wallboard increased $33 million, or 4%, reflecting 2% increases in both volume and average gypsum wallboard selling prices. The increase in volume was driven by higher demand in nearly all channels, with the increase in average selling prices driven by the price increase put in place on January 1, 2015.

Sales of Sheetrock® brand joint compound increased $19 million driven largely by increased volume to specialty dealers and big box retailers and a 1% increase in average selling prices due to the price increase that was effective in the first quarter of 2015. Durock® brand cement board sales increased $10 million which reflected both higher volumes through big box retailers, flooring customers and specialty dealers and higher average selling prices due to the price increase that was effective in the first quarter of 2015. Sales of Securock® brand roof board and Levelrock® increased by $16 million primarily driven by higher volume for Gyp-Fiber roof boards, Glass-Mat roof boards and Levelrock® poured flooring.

Included in the increase in Other were higher sales of other products of $14 million, which was due to product mix and other surfaces and substrates products, none of which were individually significant. The remaining increase in Other was $36 million of sales by Gypsum to L&W that were included in L&W's inventory at the end of 2014 that were sold through to third party customers in 2015.

Operating profit was $329 million in 2015 and $188 million in 2014, or a $141 million increase, which reflected the following:

	Operating Profit	Volume	Price	Cost
(millions)	$	$	$	$
Change to 2015 from 2014				
Sheetrock® brand gypsum wallboard	$ 37	$ 8	$ 14	$ 15
Sheetrock® brand joint compound	11	3	5	3
Durock® brand cement board	2	1	5	(4)
Securock® brand roof board	4	2	—	2
Other gypsum products	4			
Other	83			
Total increase in operating profit	$ 141			

The increase in operating profit in 2015 reflected a $58 million gross profit improvement of the products reflected above, with:

- Higher volume of 2%, driven by big box retailers and specialty dealers, higher selling prices for USG Sheetrock® brand gypsum wallboard, and lower per unit costs;
- Higher volume of 5%, driven by specialty dealers and big box retailers, and higher selling prices for USG Sheetrock® brand joint compound and lower per unit costs of 1%;

- 4% higher volumes for Durock® brand cement board through big box retailers, flooring customers and specialty dealers and higher selling prices, including freight, largely offset by an increase of per unit costs of 5%;
- Securock® brand Gyp-Fiber and Glass-Mat roof board higher volumes and per unit cost improvement.

Manufacturing costs per unit improved for USG Sheetrock® brand gypsum wallboard driving $15 million of increased operating profit. The improved operating profit was largely driven by a reduction in energy costs led by the decline in per dekatherm cost of natural gas. The reduction in energy costs was also driven by lower usage as a result of operational initiatives. Higher conversion and fixed costs, largely attributable to increased employee costs offset some of these energy savings. Durock® cost per unit was up from 2014 driven by increases in prices of raw materials and increased transportation costs. Per unit manufacturing costs for joint compound were lower driven by a decrease in costs of raw materials, primarily in packaging where the cost of resin declined due to the continued decrease in the price of oil, and an increase in volumes, offset by increased employee costs.

The increase in Other of $83 million reflected the absence of charges recorded in 2014 of $66 million and the revision to gross profit to reflect the presentation of L&W as discontinued operations of $17 million. The $66 million was driven by the absence in 2015 of a litigation charge of $48 million due to the settlement of the U.S. wallboard pricing class action lawsuits, long-lived asset impairment charges of $30 million related to certain manufacturing facilities and capitalized costs for the construction of future facilities, which we do not anticipate will be built within our planning horizon, and a gain of $12 million on the sale of surplus property. The $17 million was due to gross profit recorded on sales by Gypsum to L&W that were included in L&W's inventory at the end of 2014 that were sold through to third party customers during 2015.

As a percentage of net sales, selling and administrative expenses declined by 30 basis points, with management's continued focus to reduce spending which offset higher employee salary and incentive compensation expense compared to 2014.

New housing construction increased in 2015, resulting in increased demand for gypsum wallboard, as discussed above. U.S. Gypsum shipped 5.44 billion square feet of USG Sheetrock® brand gypsum wallboard in 2015, a 2% increase from 5.33 billion square feet in 2014. During 2015, USG Sheetrock® Brand UltraLight Panels accounted for 65% of all of our wallboard shipments in the United States. We estimated that industry capacity utilization rates averaged approximately 68% during 2015, while U.S. Gypsum's capacity utilization rate averaged 57%.

CANADA

2016 COMPARED WITH 2015

Net sales in 2016 were $339 million compared to net sales in 2015 of $321 million. This increase in net sales was driven primarily by a $21 million increase in net sales of gypsum wallboard, a $4 million increase in net sales of joint treatment and an adjustment of an accrual for volume rebate incentives of $4 million. The higher wallboard sales reflected higher average selling prices of 11%, largely resulting from the impact of a tariff imposed by the Canadian government on wallboard exported from the U.S., which does not impact operating profit, and unchanged volumes. Offsetting the higher sales was a $12 million negative impact due to the strengthening of the U.S. Dollar.

Operating profit was $22 million in 2016 compared with $7 million in 2015. This $15 million increase was driven by higher gross profit on gypsum wallboard of $9 million and on joint treatment of $1 million, an adjustment of an accrual for volume rebate incentives of $4 million and lower miscellaneous and selling and administrative costs of $7 million. Gross profit of gypsum wallboard improved due to higher average selling prices of 11% offset by higher per unit costs of 7% due to increased employee costs. Offsetting these increases is a $9 million unfavorable impact of foreign currency.

2015 COMPARED WITH 2014

Net sales in 2015 were $321 million compared to net sales in 2014 of $344 million. This reduction in net sales was driven by a $41 million negative impact due to the strengthening of the U.S. Dollar. The foreign currency impact was partially offset by an increase in net sales of wallboard of $26 million driven by increases in volume and selling prices of 6%.

Operating profit was $7 million in 2015 compared with $13 million in 2014. This $6 million decline is driven by a $13 million unfavorable impact of foreign currency, $3 million lower joint treatment profit driven by a reduction in volume and 13% higher cost offset by an improvement in wallboard volume and selling prices as noted above. Also contributing to the decline in operating profit is the increase in miscellaneous costs driven by higher employee costs. Selling and administrative expenses remained flat as a percentage of sales.

MEXICO / LATIN AMERICA

2016 COMPARED WITH 2015

Net sales in Mexico and Latin America were $188 million in 2016 compared with $187 million in 2015. The increase of $1 million in sales was driven primarily by higher sales of gypsum wallboard and drywall steel in Mexico offset by a $18 million unfavorable impact of foreign currency due to the strengthening of the U.S. Dollar.

Operating profit was $10 million in 2016 compared with $24 million in 2015. The decrease of $14 million was driven by the realization of a pre-tax gain of $10 million on the disposition of surplus property in 2015 and an unfavorable impact of foreign currency of approximately $5 million.

2015 COMPARED WITH 2014

Net sales in Mexico and Latin America were $187 million in 2015 compared with $195 million in 2014. The decrease of $8 million in sales was driven by the strengthening of the U.S. Dollar, which negatively impacted net sales by approximately $16 million, which was offset by an increase in both wallboard volume and price.

Operating profit was $24 million in 2015 compared with $19 million in 2014. The increase of $5 million was driven by the realization of a pre-tax gain of $10 million on the disposition of surplus property in Mexico in December 2015, improvement in energy pricing and operational efficiencies derived from Lean Six Sigma projects. Offsetting this increase was the unfavorable impact of foreign currency of approximately $6 million.

CANADIAN MINING

Net sales for our mining operation in Little Narrows, Nova Scotia, Canada, were $0 million in 2016, $6 million in 2015, and $5 million in 2014. Operating loss was $21 million in 2016, $6 million in 2015, and $3 million in 2014. In 2016, we indefinitely idled our mining operations in Little Narrows, Nova Scotia, Canada and recorded an impairment charge of long-lived assets of $10 million and severance and other charges of $2 million. 2014 included a reduction to the estimates of reclamation activities required for our mining operations in Canada that did not recur in the later years. See Note 12 to the consolidated financial statements in Part II, Item 8 of this report for additional information.

GYPSUM TRANSPORTATION LIMITED

Net sales for our shipping company GTL were $0 million in 2016, $10 million in 2015 and $81 million in 2014. The decrease of $10 million from 2015 to 2016 and the decrease of $71 million from 2014 to 2015 reflected the cancellation of a contract of affreightment in the fourth quarter of 2014 when our trading partner ceased performing under the contract. In 2015, we were party to a short term shipping contract prior to the sale of our two self-unloading vessels in April 2015. We exited our shipping operations in 2015.

We recorded operating profit of $3 million in 2016 and $7 million in 2015 and an operating loss of $52 million in 2014. The profit in 2016 reflected a recovery of a receivable of $3 million owed to GTL by its trading partner that was fully reserved for in 2014. The profit in 2015 included $1 million reflecting the gain on the sale of our ships offset by charges incurred to wind down our shipping operations and a $6 million recovery of a receivable. The operating loss in 2014 included a long-lived asset impairment charge of $60 million on two shipping vessels owned by GTL and a $15 million charge for contract costs and loss on receivable. See Note 13 to the consolidated financial statements in Part II, Item 8 of this report for additional information.

CEILINGS

Net sales and operating profit for the businesses comprising our Ceilings segment were as follows:

				Favorable (Unfavorable)			
				2016 vs. 2015		2015 vs. 2014	
(millions)	2016(a)	2015	2014	$	%	$	%
Net Sales:							
United States	$ 467	$ 464	$ 469	$ 3	1 %	$ (5)	(1)%
USG International (b)	—	—	7	—	*	(7)	(100)%
Canada	50	51	57	(1)	(2)%	(6)	(11)%
Mexico / Latin America	32	36	39	(4)	(11)%	(3)	(8)%
Eliminations	(49)	(55)	(54)	6	11 %	(1)	(2)%
Total	$ 500	$ 496	$ 518	$ 4	1 %	$ (22)	(4)%
Operating Profit:							
United States	$ 101	$ 80	$ 76	$ 21	26 %	$ 4	5 %
USG International (b)	—	—	—	—	*	—	*
Canada	4	3	6	1	33 %	(3)	(50)%
Mexico / Latin America	4	5	7	(1)	(20)%	(2)	(29)%
Total	$ 109	$ 88	$ 89	$ 21	24 %	$ (1)	(1)%

* not meaningful

(a) Operating profit in 2016 included pension settlement expense of $2 million related to the United States.

(b) USG International's net sales and operating profit for the year ended December 31, 2014 include the results through February 27, 2014 of our wholly-owned subsidiaries and consolidated joint ventures that were contributed to UBBP .

UNITED STATES

As a result of the presentation of L&W as a discontinued operation, the results of our United States Ceilings business through the transaction close of October 31, 2016 were revised to reflect the sales of USG products from our United States Ceilings business to L&W that were sold by L&W outside the consolidated group through that date. All sales to L&W subsequent to that date are reflected in sales and operating profit. The year over year impact of this presentation is highlighted in the sales and operating profit (loss) tables below.

2016 COMPARED WITH 2015

Net sales for our U.S. ceilings business increased to $467 million in 2016, a $3 million, or 1%, increase from $464 million in 2015. The increase reflected the following:

	Sales		**Volume**		**Price**	
(millions)	**$**	**%**	**$**	**%**	**$**	**%**
Change to 2016 from 2015						
Ceiling grid	$ 3	3%	$ 5	4%	$ (2)	(1)%
Ceiling tile	1	1%	(1)	—%	2	1 %
Other	(1)					
Total increase in net sales	$ 3	1%				

The increase in sales for ceiling grid was driven by a higher volumes of 4% offset by lower prices. The increase in volume for ceiling grid reflected improved market conditions and product mix. The increase in ceiling tile reflected higher prices offset by lower volumes. The decrease in Other included a $3 million increase in sales for inventory sold by Ceilings to L&W that was included in L&W's inventory as of October 31, 2016.

Operating profit of $101 million in 2016 increased $21 million, or 26%, from $80 million in 2015. The increase reflected the following:

(millions)	Operating Profit $	Volume $	Price $	Cost $
Change to 2016 from 2015				
Ceiling grid	$ 7	$ 3	$ (1)	$ 5
Ceiling tile	10	—	3	7
Other	4			
Total increase in operating profit	$ 21			

The increase in operating profit reflected the improvement in volume and cost for ceiling grid and in price and cost for ceiling tile. The increase in volume for ceiling grid reflected improved market conditions and product mix. The reduction in cost of ceiling grid was largely driven by lower per unit cost for ceiling grid which reflected lower raw material costs led by lower steel prices, lower conversion reflective of improved efficiencies and fixed costs driven by increased volumes. The higher price for ceiling tile was primarily due to product mix. The lower cost for ceiling tile was due to lower costs per unit for raw materials, energy and conversion costs due to improved efficiencies. Per unit energy costs also declined as a result of favorable energy prices. Included in the increase in Other was $1 million of gross profit on sales by Ceilings to L&W that were included in L&W's inventory as of October 31, 2016. Also driving the increase in Other was a decrease in selling and administrative expenses due to lower net compensation costs offset by a pension settlement of $2 million. As a percentage of sales, selling and administrative expenses declined by 40 basis points.

2015 COMPARED WITH 2014

Net sales for our domestic ceilings business was $464 million in 2015 as compared to $469 million in 2014. The decrease of $5 million reflected the following:

(millions)	Sales $	Sales %	Volume $	Volume %	Price $	Price %
Change to 2015 from 2014						
Ceiling grid	$ 1	1 %	$ 1	1%	$ —	—%
Ceiling tile	2	1 %	(1)	—%	3	1%
Other	(8)					
Total decrease in net sales	$ (5)	(1)%				

The increase in sales for ceiling tile was driven by a price increase implemented in the first quarter of 2015 which was partially offset by a reduction in volume. The decrease in sales due to Other reflected a $8 million reduction in sales for inventory sold by Ceilings to L&W that was included in L&W's inventory at the end of 2015.

Operating profit increased $4 million from $76 million in 2014 to $80 million in 2015. The increase reflected the following:

(millions)	Operating Profit $	Volume $	Price $	Cost $
Change to 2015 from 2014				
Ceiling grid	$ 1	$ 1	$ —	$ —
Ceiling tile	5	(1)	3	3
Other	(2)			
Total increase in operating profit	$ 4			

The increase in operating profit reflected the improvement in price and cost for ceiling tile with the price contribution driven primarily by the implementation of an increase in average selling price during the first quarter of 2015. The reduction in cost was largely driven by lower per unit cost for ceiling tile reflecting lower energy costs, raw material and fixed costs led by decreases in natural gas prices and mineral wool costs, partially offset by increases in employee costs. Included in Other was $3 million of lower gross profit on sales for inventory sold by Ceilings to L&W that was included in L&W's inventory as of

December 31, 2015. Other includes savings from lower selling and administrative expenses, which as a percentage of sales declined by 40 basis points, driven by management's continued focus to reduce spending which offset higher employee salary and incentive compensation expense compared to 2014.

USG INTERNATIONAL

Net sales and operating profit in 2014 for USG International, which consists only of the results of our wholly-owned subsidiaries in the Asia-Pacific region and India and our consolidated joint ventures in Oman, were $7 million and zero, respectively. We contributed these entities as part of our investments in UBBP in February 2014.

CANADA

2016 COMPARED WITH 2015

Net sales in 2016 were $50 million, a decrease of $1 million, or 2%, compared with 2015. The decrease includes an unfavorable currency impact of $2 million due to the strengthening of the U.S. Dollar and a decrease of $1 million for freight offset by improved net sales on ceiling tile.

Operating profit was $4 million in 2016 and $3 million in 2015, an increase of $1 million, which primarily reflected improved gross margin for ceiling tile of $2 million. Selling and administrative expenses as a percentage of sales remained flat from 2016 as compared to 2015.

2015 COMPARED WITH 2014

Net sales in 2015 were $51 million, a decrease of $6 million, or 11%, compared with 2014. The decrease includes an unfavorable currency impact of $6 million due to the strengthening of the U.S. Dollar. Net sales also included a decrease in ceiling grid sales of approximately $2 million offset by an increase of $3 million in sales of ceiling tile and outbound freight.

Operating profit was $3 million in 2015 and $6 million in 2014, a decrease of $3 million, which primarily reflected declines in operating profit of $1 million for ceiling grid due to a decline in grid volumes and an increase in grid cost and $1 million for ceiling tile driven by foreign currency which was partially offset by a 2% increase in tile volume. Selling and administrative expenses as a percentage of sales remained flat from 2015 as compared to 2014.

MEXICO / LATIN AMERICA

2016 COMPARED WITH 2015

Net sales in 2016 declined $4 million from 2015 to $32 million which primarily reflects a negative impact of foreign currency due to the strengthening of the U.S. Dollar. Operating profit in 2016 decreased $1 million from $5 million in 2015.

2015 COMPARED WITH 2014

Net sales in 2015 declined $3 million from 2014 to $36 million which primarily reflected a negative impact of foreign currency due to the strengthening of the U.S. Dollar. Operating profit in 2015 decreased $2 million from $7 million in 2014. This decrease reflected a negative impact of foreign currency due to the strengthening of the U.S. Dollar, partially offset by improvement in energy pricing and operational efficiencies derived from Lean Six Sigma projects. Selling and administrative expenses remained unchanged as a percentage of sales.

USG BORAL BUILDING PRODUCTS

The following reflects the net sales and operating profit as recorded by UBBP and the equity income recorded by USG:

				Favorable (Unfavorable)			
				2016 vs. 2015		2015 vs. 2014	
(millions)	2016	2015	2014 (a)	$	%	$	%
Net sales	$ 1,052	$ 1,003	$ 927	$ 49	5%	$ 76	8%
Operating profit (b)	133	124	95	9	7%	$ 29	31%
Income from equity method investments - UBBP (c)	49	48	33	1	2%	$ 15	45%

(a) Operating results are presented for UBBP for the ten months ended December 31, 2014.
(b) Operating profit in 2016 included long-lived asset impairment charges of $14 million for Oman and $8 million for China.
(c) Income from equity method investments - UBBP in 2016 included long-lived asset impairment charges of $4 million for Oman and $4 million for China.

2016 COMPARED WITH 2015

Net sales for UBBP in 2016 increased $49 million from $1.003 billion in 2015 to $1.052 billion in 2016. The increase reflected higher plasterboard shipments in South Korea, Australia, Vietnam and India offset by lower shipments in China and

unfavorable impact of currency translation of $17 million. Plasterboard shipments increased 4% in 2016 to 4.6 billion square feet from from 4.4 billion square feet in 2015.

Operating profit increased to $133 million in 2016 from $124 million in 2015. The increase reflected improved margins in Australia, South Korea, Vietnam and India, realized synergy savings and improved market acceptance of lightweight products offset by an impairment of long-lived assets in China of $8 million and in Oman of $14 million and an increase in selling and administrative expenses. Operating profit was negatively impacted by $2 million by the strengthening of the U.S. Dollar.

In 2015, UBBP sold USG Boral Sheetrock® at a premium price in certain markets and experienced an increase in conversion rates, which was led by Australia with a conversion rate above 75%. Net sales in 2015 in Asia and Australasia made up approximately 64% and 36%, respectively, of total net sales for UBBP. Net sales in 2015 in South Korea, China, and Thailand represented approximately 69% of Asia's net sales. Net sales in 2015 in Australia represented almost all of Australasia's net sales.

Our share of equity income from USG Boral was $49 million in 2016 compared to $48 million in 2015. The increase from 2015 to 2016 primarily is driven by growth in the business year over year offset by impairment of long-lived asset in China of $4 million and in Oman of $4 million and unfavorable impact of foreign currency of $1 million due to the strengthening of the U.S. Dollar.

2015 COMPARED WITH 2014

Net sales for UBBP in 2015 were $1 billion, plasterboard shipments were 4.4 billion square feet, operating profit was $124 million and net income attributable to UBBP was $96 million, compared to 2014 where sales, shipments, operating profit and net income attributable to UBBP were $927 million, 3.83 billion square feet, $95 million and $67 million, respectively. The strengthening of the U.S. Dollar from 2014 to 2015 negatively impacted UBBP's net sales and net income by $105 million and $16 million, respectively.

UBBP's results included sales of USG Boral Sheetrock®, which leverages the technology in USG Sheetrock®, in Australia, South Korea, Indonesia, Vietnam, China and Thailand. UBBP is able to sell USG Boral Sheetrock® at a premium price and, in some markets, conversion rates have surpassed 10%, while in Australia the conversion rate is above 30%. Net sales in Asia and Australasia made up approximately 66% and 34%, respectively, of total net sales for UBBP. Net sales in China, Indonesia, South Korea and Thailand represented approximately 81% of Asia's net sales. Net sales in Australia represented almost all of Australasia's net sales.

Our share of equity income from USG Boral was $48 million in 2015 compared to $33 million in 2014. The increase from 2014 to 2015 primarily is driven by both growth in the business year over year and twelve months of equity method income in 2015 compared to ten months in 2014. The increase from 2014 was negatively impacted by approximately $8 million due to the strengthening of the U.S. Dollar.

CORPORATE

Operating expenses for Corporate were $104 million in 2016, $94 million in 2015 and $105 million in 2014. The increase in 2016 compared to 2015 was due primarily to pension settlement charges of $10 million, $4 million in charges for the remaining lease term and accelerated depreciation associated with the exit of commercial office space and increased costs for incentive compensation offset by lower information technology spend.

The decrease in 2015 compared to 2014 reflected the absence of a pension settlement charge of $13 million for our previously frozen U.K. pension plan recorded in 2014 with further reductions driven by management’s continued focus to reduce spending, lower stock compensation expense due to lower grant date fair value offset by higher employee salary, benefit and incentive compensation expense compared to 2014.

Liquidity and Capital Resources

LIQUIDITY

As of December 31, 2016, we had $518 million of cash and cash equivalents and marketable securities compared with $672 million as of December 31, 2015. Our total liquidity was $603 million as of December 31, 2016 (including $85 million of borrowing availability under our credit facility) compared to $967 million as of December 31, 2015 (including $295 million of borrowing availability under our credit facility). The decrease in liquidity reflected the retirement of $1.1 billion in debt and an additional $100 million contribution to our pension plans, both of which were partially funded by the proceeds of $669 million received in 2016 from the sale of L&W. The lower borrowing base and borrowing availability under the credit facility is primarily a result of our lower receivables and inventory due to the sale of L&W in the fourth quarter of 2016.

We invest in cash equivalents and marketable securities pursuant to an investment policy that has preservation of principal as its primary objective. The policy includes provisions regarding diversification, credit quality and maturity profile that are designed to minimize the overall risk profile of our investment portfolio. The securities in the portfolio are subject to normal market fluctuations. See Note 5 to the consolidated financial statements in Part II, Item 8 of this report for additional information regarding our investments in marketable securities.

Total debt as of December 31, 2016 and 2015 consisted of senior notes and industrial revenue bonds. Total debt amounted to $1.083 billion ($1.089 billion in aggregate principal amount less $6 million of unamortized debt issuance costs) as of December 31, 2016 and $2.175 billion ($2.189 billion in aggregate principal amount less $14 million of unamortized original issue discount and debt issuance costs) as of December 31, 2015. As of December 31, 2016 and during the year then ended, there were no borrowings under our revolving credit facility. See Note 6 to the consolidated financial statements in Part II, Item 8 of this report for additional information about our debt.

Our senior notes and industrial revenue bonds are rated by the three major credit-rating agencies: Moody’s Investors Service (Moody’s), Standard & Poor’s Global Ratings (S&P), and Fitch Ratings, Inc. (Fitch). The ratings are typically monitored by stockholders, creditors, or suppliers as an indicator of the company's viability. Additionally, the ratings of Moody’s and S&P impact the interest rate on our 7.75% senior notes maturing in 2018. See Note 6 to the consolidated financial statements in Part II, Item 8, of this report for additional information regarding the impact of changes to our credit ratings on interest rates. Below is a summary of the ratings published by the three agencies as of the date indicated:

	S&P	Moody's	Fitch
Corporate/Family rating	BB+	Ba2	BB
Outlook	Stable	Positive	Stable
Guaranteed senior notes	BB+	Ba2	BB+
All other notes and bonds	BB+	Ba3	BB
Report date	November 10, 2016	November 22, 2016	August 29, 2016

We maintain a credit facility with a maximum borrowing limit of $180 million (including a $50 million borrowing sublimit for CGC) that is available to fund working capital needs and other general corporate purposes and matures on October 22, 2019. The facility is guaranteed by certain of our significant subsidiaries and secured by such parties’ eligible trade receivables and inventory. The maximum borrowing limit under the credit agreement may be increased up to $650 million at our request and with our lenders’ approval. In December 2016, we reduced the facility size from $450 million to $180 million due to the L&W sale and in January 2017, we amended the credit agreement to reduce payment condition threshold amounts in conjunction with the lower facility size. The credit agreement contains other covenants and events of default that are customary for similar agreements and may limit our ability to take various actions including our ability to pay a dividend or repurchase our stock.

Although the maximum borrowing limit under the credit agreement is $180 million, the credit agreement specifies the maximum principal that may be borrowed by USG and CGC is impacted by any amounts outstanding under the credit agreement, outstanding letters of credit, a borrowing base comprised of eligible trade receivables and inventory, and the minimum excess availability that may be required due to the Covenant Trigger Threshold, described below, being applicable. As of December 31, 2016, the maximum principal we could borrow after taking into account the foregoing factors was approximately $85 million.

The credit agreement contains a covenant that would require us to maintain a minimum fixed charge coverage ratio of not less than 1.0-to-1.0 in the event that excess availability falls below the "Covenant Trigger Threshold" equal to 10% of the lesser of (a) the aggregate revolving commitment and (b) the aggregate of the USG and CGC borrowing base. As of December 31, 2016, our fixed charge coverage ratio was 0.39-to-1.0 and; therefore, we are required to maintain minimum excess availability of no less than the Covenant Trigger Threshold so that the financial covenant will remain inapplicable. Currently, that amount would be approximately $14 million.

As of December 31, 2016 and during the year then ended, there were no borrowings under the facility. Had there been any borrowings as of that date, the applicable interest rate would have been 2.00% for loans in the U.S. and 1.95% for loans in Canada. Outstanding letters of credit as of December 31, 2016 totaled $38 million.

CASH FLOWS

The following table presents a summary of our cash flows:

(millions)	2016	2015	2014
Net cash provided by (used for):			
Operating activities from continuing operations	$ 314	$ 279	$ 160
Investing activities from continuing operations	79	(61)	(679)
Financing activities from continuing operations	(1,129)	(44)	(66)
Discontinued operations	726	47	6
Effect of exchange rate changes on cash	(5)	(10)	(5)
Net increase (decrease) in cash and cash equivalents	$ (15)	$ 211	$ (584)

Operating Activities: Higher cash flows from operating activities in 2016 compared to 2015 primarily reflected improved gross profit. Also driving the increase in operating cash flow was improved working capital. Our net cash outflow for accounts receivable, inventories, accounts payable and accrued expenses of continuing operations was lower in 2016 compared to 2015. Cash outflows for accrued expenses in 2015 included $39 million pursuant to the settlement agreement with the direct purchaser class in the U.S. wallboard pricing class action lawsuit. Excluding this payment, 2016 still reflected lower net cash outflow driven by initiatives over accounts payable offset by lower inflow from accounts receivable.

As of December 31, 2016, working capital (current assets less current liabilities) amounted to $527 million, and the ratio of current assets to current liabilities was 2.25-to-1. As of December 31, 2015, working capital amounted to $408 million, and the ratio of current assets to current liabilities was 1.41-to-1.

Higher cash flows from operating activities of $130 million in 2015 compared to 2014 primarily reflected improved gross profit in 2015, lower selling and administrative expenses and cash dividends from UBBP of $38 million. As of December 31, 2015, working capital (current assets less current liabilities) amounted to $408 million, and the ratio of current assets to current liabilities was 1.41-to-1. As of December 31, 2014, working capital amounted to $546 million, and the ratio of current assets to current liabilities was 1.97-to-1.

Investing Activities: Investing cash flows provided $79 million of net cash in 2016 and used $61 million of net cash during 2015. Net sales of marketable securities was $139 million in 2016 compared to net purchases of $76 million in 2015. Cash outflows for capital expenditures decreased in 2016 by $4 million as compared to 2015. The net increase in cash inflows from marketable securities and capital expenditures were offset by the lower cash inflows for the net proceeds of asset dispositions primarily due to the sale of a surplus property in Mexico and of our ships owned by GTL and for the disposition of our Knauf USG joint venture in 2015.

Net cash used for investing activities in 2015 was $61 million compared to $679 million during 2014. Included in 2014 was a $560 million outflow for our investments in UBBP, consisting of $500 of million of base price, $15 million of customary estimated working capital and net debt adjustments, $22 million of transaction costs, and $23 million of cash held by the wholly-owned subsidiaries that we contributed to UBBP.

Net cash used for investing activities in 2015 included higher net purchases of marketable securities of $76 million compared to $14 million in 2014. Capital expenditures for 2015 were lower at $87 million as compared to $125 million in 2014. The net increase in cash outflows related to marketable securities and capital expenditures were offset by the cash inflow for the net proceeds of asset dispositions of $58 million primarily due to the sale of a surplus property in Mexico and of our ships owned by GTL and $52 million for the disposition of our Knauf USG joint venture.

Financing Activities: The net cash used for financing activities in 2016 was driven by the repayment of $1.1 billion of debt during the year.

The net cash used for financing activities in 2015 included $365 million paid to repurchase $350 million of our 8.375% senior notes due 2018 plus tender premium offset by the $344 million of proceeds received from the issuance of $350 million of 5.5% senior notes, net of debt issuance costs and $21 million used to repay our ship mortgage facility.

Discontinued Operations: Net cash provided by discontinued operations for 2016 was $726 million compared to $47 million for 2015. The higher cash inflow reflected $669 million of cash received in 2016 for the sale of L&W and higher cash inflows for accounts payable offset by higher cash outflows for accounts receivable and inventories.

Net cash provided by discontinued operations for 2015 was $47 million compared to $6 million for 2014. The higher cash inflow reflected higher cash inflows for inventories and accounts receivable offset by higher cash outflow for accounts payable.

LIQUIDITY OUTLOOK

In 2017, we plan to spend $200 million on capital expenditures in the normal course of our business, which includes $80 million allocated for advanced manufacturing projects to standardize and automate production across our Gypsum and Ceilings businesses. We expect to fund these capital expenditures with cash from operations or cash on hand.

Estimated future spending on approved capital expenditures for the replacement, modernization and expansion of operations totaled $121 million as of December 31, 2016 compared with $33 million as of December 31, 2015.

Interest payments for 2017 are expected to decrease to $77 million from $153 million in 2016 which reflects lower debt levels due to the repayment of $1.1 billion in debt in 2016. We intend to refinance our 7.75% senior notes due 2018, as well as our credit facility, in 2017.

On January 31, 2017, our Board of Directors approved a share repurchase program in which we may repurchase up to $250 million of our common stock. The timing and the amount of any repurchases will be determined based on market conditions and other factors. Share repurchases will be funded with available cash on hand. See Note 21 to the consolidated financial statements in Part II, Item 8 of this report.

Our undistributed foreign earnings as of December 31, 2016 are considered permanently reinvested with the exception of the earnings associated with the former holding company of the Knauf-USG joint venture that was sold in December 2015. The amount of cash and cash equivalents held by our foreign subsidiaries was $184 million as of December 31, 2016 and would be subject to material repatriation tax effects.

Since formation, UBBP was funded from its net cash flows from operations and third-party financing, and it is our intent that as an ongoing operation, UBBP will continue to self-fund. UBBP is targeting the distribution of 50% of combined after tax profits to USG and Boral, however, this dividend may be adjusted by the USG Boral board with unanimous resolution. During the second and fourth quarters of 2016, UBBP paid cash dividends on earnings through September 30, 2016 of which our 50% share totaled $47 million. We intend to use the dividends received to fund the potential obligation under the earnout described in Note 4 to the consolidated financial statements in Part II, Item 8 of this report.

In the event certain performance targets are satisfied by UBBP, we will be obligated to pay Boral an earnout payment in an amount up to $50 million in 2019, based on UBBP performance during the first five years. We have not recorded a liability for this earnout payment as we have concluded that it is currently not probable that the five-year performance target will be achieved.

We believe that cash on hand, cash equivalents, marketable securities, cash available from future operations and our credit facility will provide sufficient liquidity to fund our operations for at least the next 12 months. Cash requirements include, among other things, capital expenditures, working capital needs, employee retirement plans funding, interest payments and other contractual obligations.

Realization of Deferred Tax Asset

As of December 31, 2016, we had federal Net Operating Loss (“NOL”) carryforwards of approximately $923 million that are available to offset future federal taxable income and will expire in the years 2028 through 2032. In addition, as of that date, we had federal alternative minimum tax credit carryforwards of approximately $45 million that are available to reduce future regular federal income taxes over an indefinite period. We also had foreign tax credit carryforwards of $143 million that are available to offset future federal taxable income and will expire in the years 2022 through 2026.

As of December 31, 2016, we had a deferred tax asset related to our state NOLs and tax credit carryforwards of $172 million. They will expire if unused in years 2018 through 2036.

At December 31, 2016, our net deferred tax assets of $488 million were offset by a valuation allowance of $51 million. The remaining valuation allowance related to certain state net operating losses that we anticipate will not be used prior to their expiration.

See Note 15 to the consolidated financial statements in Part II, Item 8 for additional information regarding income tax matters.

Contractual Obligations and Other Commitments

As of December 31, 2016, our contractual obligations and commitments were as follows:

	Payments Due by Period				
(millions)	Total	2017	2018 - 2019	2020 - 2021	Thereafter
Debt obligations (a)	$ 1,089	$ —	$ 500	$ —	$ 589
Other long-term liabilities (b)	554	4	17	29	504
Interest payments (c)	439	77	89	66	207
Purchase obligations (d)	338	111	101	65	61
Capital expenditures (e)	121	97	24	—	—
Operating leases	115	31	48	29	7
Unrecognized tax benefits (f)	15	2	2	3	8
Earnout payment (g)	50	—	50	—	—
Total	$ 2,721	$ 322	$ 831	$ 192	$ 1,376

(a) Excludes unamortized deferred issuance costs of $6 million.
(b) Other long-term liabilities primarily consist of asset retirement obligations that principally extend over a 50-year period. The majority of associated payments are payable toward the latter part of that period.
(c) Reflects estimated interest payments on debt obligations as of December 31, 2016.
(d) Purchase obligations primarily consist of contracts to purchase energy, certain raw materials and finished goods.
(e) Reflects estimates of future spending on active capital projects that were approved prior to December 31, 2016 but were not completed by that date.
(f) Reflects estimated payments (if required) of gross unrecognized tax benefits.
(g) Reflects contractual earnout payments for our investments in UBBP up to $50 million based on performance during the first five years.

The table above excludes liabilities related to both our defined benefit pension plans and postretirement benefits (retiree health care and life insurance). For 2016, our defined benefit pension plans had no minimum funding requirements under the Employee Retirement Income Security Act of 1974. We are evaluating our level of funding for pension plans and currently estimate that we will contribute approximately $74 million to our pension plans in 2017. We voluntarily provide postretirement benefits for eligible employees and retirees and estimate cash payments to be $8 million in 2017. See Note 9 to the consolidated financial statements in Part II, Item 8 for additional information on future expected cash payments for pension and other postretirement benefits.

OFF-BALANCE-SHEET ARRANGEMENTS

With the exception of letters of credit, it is not our business practice to use off-balance-sheet arrangements, such as third-party special-purpose entities.

GUARANTEES

We are party to a variety of agreements under which we may be obligated to indemnify a third party with respect to certain matters. We do not consider the maximum potential amount of future payments that we could be required to make under these agreements to be material.

Legal Contingencies

We are named as defendants in litigation arising from our operations, including lawsuits or claims arising from commercial disputes, product performance or warranties, products liability, and worksite or vehicular accidents.

In 2015, USG, United States Gypsum Company, L&W Supply Corporation, and seven other wallboard manufacturers were named as defendants in a lawsuit filed by twelve homebuilders alleging that the defendants conspired to fix the price of wallboard sold in the United States. Earlier, in 2013, class action lawsuits making similar allegations were filed in Canada on behalf of a class of purchasers of wallboard in Canada. We believe that the cost, if any, of resolving the homebuilders' lawsuit and Canadian class action litigation will not have a material effect on our results of operations, financial position or cash flows.

In the third quarter of 2015 United States Gypsum Company was served with a federal grand jury subpoena requesting the production of company records in connection with a federal investigation of the gypsum drywall industry. Two former employees of USG have also been served with subpoenas. We believe the investigation, although a separate proceeding, is related to the same events at issue in the litigation discussed above. We are fully cooperating with the grand jury investigation. We believe we acted in full compliance with the law, and we do not expect the resolution of this matter to result in any material effect on our business, financial position, liquidity or results of operations; however, we can provide no assurances as to the scope, timing, or outcome of any such investigation.

See Note 19 to the consolidated financial statements in Part II, Item 8 of this report for additional information regarding litigation matters. See, also, Part I, Item 1A, Risk Factors, for information regarding the possible effects of environmental laws and regulations on our businesses.

Critical Accounting Policies

In preparing our consolidated financial statements in conformity with accounting principles generally accepted in the United States, we make decisions that impact the reported amounts of assets, liabilities, revenues and expenses, and related disclosures. Such decisions include the selection of the appropriate accounting principles to be applied and the assumptions on which to base accounting estimates. In reaching such decisions, we apply judgments based on our understanding and analysis of the relevant circumstances, current developments and historical experience. Actual amounts could differ materially from those estimated at the time the consolidated financial statements are prepared.

Our significant accounting policies are described in Note 1 to the consolidated financial statements in Part II, Item 8 of this report. Some of these significant accounting policies require us to make difficult, subjective or complex judgments or estimates. An accounting estimate is considered to be critical if it meets both of the following criteria: (1) the estimate requires assumptions about matters that are highly uncertain at the time the accounting estimate is made and (2) different estimates reasonably could have been used, or changes in the estimate are reasonably likely to occur from period to period, that would have a material impact on the presentation of our financial condition, changes in financial condition, results of operations or cash flows. Our critical accounting estimates are as follows:

EMPLOYEE RETIREMENT PLANS

We maintain defined benefit pension plans for most of our employees. Most of these plans require employee contributions in order to accrue benefits. We also maintain plans that provide postretirement benefits (retiree health care and life insurance) for eligible existing retirees and for eligible active employees who may qualify for coverage in the future. The accounting for these plans depend on assumptions made by management, which are used by actuaries we engage to calculate the projected and accumulated benefit obligations and the annual expense recognized for these plans. The assumptions used in developing the required estimates primarily include discount rates, expected return on plan assets for the funded plans, compensation increase rates, retirement rates, mortality rates and, for postretirement benefits, retirement rates and levels of a company-provided subsidy.

We determined the assumed discount rate based on a hypothetical AA yield curve represented by a series of annualized individual discount rates. Each underlying bond issue is required to have a credit rating of Aa or better by Moody's Investors Service or a credit rating of AA or better by Standard & Poor's Global Ratings. We consider the underlying types of bonds and our projected cash flows of the plans in evaluating the yield curve selected. The use of a different discount rate would impact net pension and postretirement benefit costs and benefit obligations. In determining the expected return on plan assets, we use a "building block" approach, which incorporates historical experience, our pension plan investment guidelines, asset allocation, and expectations for long-term rates of return. The use of a different rate of return would impact net pension costs. A one-half percentage point change in the assumed discount rate and return on plan asset rate would have the following effects (dollars in millions):

		Increase (Decrease) in	
Assumptions	Percentage Change	2017 Net Annual Benefit Cost	2016 Projected Benefit Obligation
Pension Benefits:			
Discount rate	0.5% increase	$ (6)	$ (78)
Discount rate	0.5% decrease	6	86
Expected return on plan assets	0.5% increase	(7)	N/A
Expected return on plan assets	0.5% decrease	7	N/A
Postretirement Benefits:			
Discount rate	0.5% increase	$ (1)	$ (8)
Discount rate	0.5% decrease	1	9

Compensation increase rates are based on historical experience and anticipated future management actions. Retirement rates are based primarily on actual plan experience, while standard actuarial tables are used to estimate mortality rates.

We no longer have significant exposure to health care cost trend rates due to the modifications we made to our U.S. postretirement health care plan to limit the increase in the annual amount we pay for retiree health care coverage for certain current and future retirees to 3% and to require retiree medical plan participants to purchase individual coverage in the Affordable Insurance Exchanges or individual Medicare marketplace effective January 1, 2016 using a company-funded subsidy based upon years of service at retirement.

Results that differ from these assumptions are accumulated and amortized over future periods and, therefore, generally affect the net benefit cost of future periods. The sensitivity of assumptions reflects the impact of changing one assumption at a time and is specific to conditions at the end of 2016. Economic factors and conditions could affect multiple assumptions simultaneously, and the effects of changes in assumptions are not necessarily linear.

See Note 9 to our consolidated financial statements in Part II, Item 8 of this report for additional information regarding costs, plan obligations, plan assets discount rates and other assumptions.

INCOME TAXES

We record income taxes (benefit) under the asset and liability method. Under this method, deferred tax assets and liabilities are recognized based on the future tax consequences to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply in the years in which the temporary differences are expected to be recovered or paid. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in earnings in the period when the change is enacted.

A reduction of the carrying amounts of deferred tax assets by a valuation allowance is required if, based on the available evidence, it is more likely than not that such assets will not be realized. The need to establish valuation allowances for deferred tax assets is assessed periodically. In assessing the requirement for, and amount of, a valuation allowance in accordance with the more-likely-than-not standard, we give appropriate consideration to all positive and negative evidence related to the realization of the deferred tax assets. This assessment considers, among other matters, the nature, frequency and severity of current and cumulative losses, forecasts of future profitability, the duration of statutory carryforward periods, our experience with operating loss and tax credit carryforwards not expiring unused and tax planning strategies. A history of cumulative losses for a certain threshold period is a significant form of negative evidence used in the assessment, and we are required to have a policy regarding the duration of the threshold period. We believe the historical cyclical nature of our operations show economic cycles ranging from 7 to 10 years with demand troughs historically showing recovery over four years. Accordingly, we have a policy of four years as our threshold period for cumulative losses.

We weigh, based upon the level of objectivity, all available evidence in our assessment related to the realization of deferred tax assets. Our ability to generate sufficient taxable income in the future, taking into consideration state laws on NOL expirations, will determine the need for a valuation allowance.

We recognize the tax benefits of an uncertain tax position only if those benefits are more likely than not to be sustained upon examination by the relevant taxing authorities. Unrecognized tax benefits are subsequently recognized at the time the more-likely-than-not recognition threshold is met, the tax matter is effectively settled or the statute of limitations for the relevant taxing authority to examine and challenge the tax position has expired, whichever is earlier.

See Note 15 to our consolidated financial statements in Part II, Item 8 of this report for additional information on deferred income taxes and valuation allowances.

Recently Issued Accounting Pronouncements

See Note 2, Recent Accounting Pronouncements, to the consolidated financial statements in Part II, Item 8 of this report for information related to new accounting standards.

Forward-Looking Statements

This report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 related to management's expectations about future conditions. Any forward-looking statements represent our views only as of today and should not be relied upon as representing our views as of any subsequent date, and we undertake no obligation to update any forward-looking statement. Forward-looking statements include, but are not limited to, statements under the following headings: (1) "Business" about: (a) the availability of synthetic gypsum and energy supplies; and (b) demand for new products and systems that meet regulatory and customer sustainability standards and preferences and our ability to provide such products and systems to maintain our competitive position; (2) "Risk Factors" about significant factors that may adversely affect us and our industry; (3) "Legal Proceedings" about the outcome and effect of ongoing and future legal and governmental proceedings; and (4) "Management's Discussion and Analysis" about: (a) market conditions and outlook, including anticipated growth in new residential and nonresidential construction and repair and remodel spending, and the construction industries in Canada and Mexico, and the anticipated growth or decline in countries in the UBBP territory and its effect on the cyclicality of our North American business; (b) demand for gypsum wallboard and industry capacity utilization rate; (c) our liquidity outlook, including our capital expenditure plans, expected interest payments, intended debt refinance, UBBP's dividend policy and our intended use of dividend funds received, including UBBP's ability to self-fund, cash requirements and adequacy of resources to fund them; (d) future contributions to our pension plans; and (e) the outcome and effect of ongoing and future legal and governmental proceedings.

Some of the risk factors that affect our business and financial results are discussed in "Risk Factors." We wish to caution the reader that actual business, market or other conditions, including the risk factors discussed in "Risk Factors" and those described elsewhere in this report or in our other Securities and Exchange Commission filings, could cause our actual results to differ materially from those stated in the forward-looking statements.

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Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We use derivative instruments to manage selected commodity price and foreign currency exposures. We do not use derivative instruments for speculative trading purposes, and we typically do not hedge beyond five years.

COMMODITY PRICE RISK
We use swap contracts to manage our exposure to fluctuations in commodity prices associated with anticipated purchases of natural gas. Currently, a significant portion of our anticipated purchases of natural gas is hedged for 2017. The aggregate notional amount of these hedge contracts in place as of December 31, 2016 was 36 million mmBTUs, and they mature by December 31, 2021. We review our positions regularly and make adjustments as market and business conditions warrant. The fair value of these contracts was a $3 million unrealized gain as of December 31, 2016.

A sensitivity analysis was prepared to estimate the potential change in the fair value of our natural gas hedge contracts assuming a hypothetical 10% change in market prices. Based on the results of this analysis, which may differ from actual results, the potential change in the fair value of our natural gas hedge contracts as of December 31, 2016 and 2015 was $10 million and $6 million, respectively. This analysis does not consider the underlying exposure.

FOREIGN CURRENCY EXCHANGE RISK
We have foreign exchange forward contracts to hedge forecasted purchases of products and services denominated in foreign currencies. The notional amount of these contracts was $80 million as of December 31, 2016, and they mature by December 27, 2017. The fair value of these contracts was immaterial as of December 31, 2016.

A sensitivity analysis was prepared to estimate the potential change in the fair value of our foreign exchange forward contracts assuming a hypothetical 10% change in foreign exchange rates. Based on the results of this analysis, which may differ from actual results, the potential change in the fair value of our foreign exchange forward contracts as of December 31, 2016 and 2015 was $9 million and $11 million, respectively. This analysis does not consider the underlying exposure.

INTEREST RATE RISK
As of December 31, 2016, all of our outstanding debt was fixed-rate debt. Consequently, our debt is not subject to risk from changing interest rates.

A sensitivity analysis was prepared to estimate the potential change in fair value of our marketable securities portfolio assuming a hypothetical 100-basis-point increase in interest rates. Based on the results of this analysis, which may differ from actual results, the potential change in fair value of our marketable securities as of December 31, 2016 and 2015 was immaterial and $1 million, respectively.

See Notes 1 and 7 to the consolidated financial statements in Part II, Item 8 for additional information regarding our financial exposures.

Item 8.FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

All other schedules have been omitted because they are not required or applicable or the information is included in the consolidated financial statements or notes thereto.

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USG CORPORATION
CONSOLIDATED STATEMENTS OF INCOME

(millions, except share and per-share data)	Years Ended December 31,		
	2016	2015	2014
Net sales	$ 3,017	$ 2,913	$ 2,904
Cost of products sold	2,312	2,263	2,279
Gross profit	705	650	625
Selling and administrative expenses	304	302	323
Litigation settlement charge	—	—	48
Long-lived asset impairment charges	10	—	90
(Recovery) loss on receivable and contract termination charge	(3)	(6)	15
Gain on disposal of shipping operations, net	—	(1)	—
Operating profit	394	355	149
Income from equity method investments	49	48	33
Interest expense	(145)	(163)	(179)
Interest income	4	2	1
Income and gain from the sale of equity method investment to related party	—	13	2
Gain on deconsolidation of subsidiaries and consolidated joint ventures	—	—	27
Loss on extinguishment of debt	(37)	(19)	—
Other income, net	9	—	—
Income from continuing operations before income taxes	274	236	33
Income tax (expense) benefit	(63)	740	(7)
Income from continuing operations	211	976	26
Income from discontinued operations, net of tax	20	15	12
Gain on sale of discontinued operations, net of tax	279	—	—
Net income	510	991	38
Less: Net income attributable to noncontrolling interest	—	—	1
Net income attributable to USG	$ 510	$ 991	$ 37
Earnings per common share - basic:			
Income from continuing operations	$ 1.45	$ 6.70	$ 0.18
Income from and gain on sale of discontinued operations	2.04	0.11	0.08
Net income	$ 3.49	$ 6.81	$ 0.26
Earnings per common share - diluted:			
Income from continuing operations	$ 1.44	$ 6.62	$ 0.17
Income from and gain on sale of discontinued operations	2.02	0.11	0.08
Net income	$ 3.46	$ 6.73	$ 0.25
Average common shares	145,929,506	145,457,208	141,722,616
Average diluted common shares	147,660,979	147,246,600	144,296,316

See accompanying Notes to Consolidated Financial Statements

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USG CORPORATION
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

(millions)	Years Ended December 31,		
	2016	2015	2014
Net income	$ 510	$ 991	$ 38
Other comprehensive income (loss), net of tax:			
Derivatives qualifying as cash flow hedges:			
Gain (loss) on derivatives qualifying as cash flow hedges, net of tax of $2, $4, and $0, respectively	1	(5)	(15)
Less: Reclassification adjustment for (loss) gain on derivatives included in net income, net of tax (benefit) of ($4), $2, and $0, respectively	(6)	(9)	4
Derivatives qualifying as cash flow hedges, net of tax of $6, $2, and $0, respectively	7	4	(19)
Pension and postretirement benefits:			
Changes in pension and postretirement benefits, net of tax (benefit) of ($19), $6 and ($2), respectively	(34)	74	(272)
Less: Amortization of prior service benefit cost included in net periodic pension cost, net of tax (benefit) of ($7), ($1) and ($1), respectively	(9)	(7)	(2)
Pension and postretirement benefits, net of tax (benefit) of ($12), $7 and ($1), respectively	(25)	81	(270)
Foreign currency translation:			
Changes in foreign currency translation, net of tax of $0 in all periods	(53)	(67)	(68)
Less: Translation (loss) gain realized upon sale of foreign entities, net of tax of $0 in all periods	—	(6)	5
Foreign currency translation, net of tax of $0 in all periods	(53)	(61)	(73)
Other comprehensive (loss) income, net of tax	(71)	24	(362)
Comprehensive income (loss)	$ 439	$ 1,015	$ (324)

See accompanying Notes to Consolidated Financial Statements

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USG CORPORATION
CONSOLIDATED BALANCE SHEETS

(millions, except share and per share data)	As of December 31, 2016	As of December 31, 2015
Assets		
Current Assets:		
Cash and cash equivalents	$ 427	$ 442
Short-term marketable securities	62	194
Restricted cash	—	9
Receivables (net of reserves: 2016 - $8; 2015 - $9)	183	184
Inventories	236	219
Income taxes receivable	1	5
Other current assets	40	41
Assets related to discontinued operations	—	306
Total current assets	949	1,400
Long-term marketable securities	29	36
Property, plant and equipment, net	1,707	1,771
Deferred income taxes	492	728
Equity method investments	628	682
Other assets	64	68
Assets related to discontinued operations	—	51
Total assets	$ 3,869	$ 4,736
Liabilities and Stockholders' Equity		
Current Liabilities:		
Accounts payable	$ 237	$ 208
Accrued expenses	175	186
Current portion of long-term debt	—	500
Income taxes payable	10	9
Litigation settlement accrual	—	9
Liabilities related to discontinued operations	—	80
Total current liabilities	422	992
Long-term debt	1,083	1,675
Deferred income taxes	4	5
Pension and other postretirement benefits	290	392
Other liabilities	184	216
Liabilities related to discontinued operations	—	20
Total liabilities	1,983	3,300
Stockholders' Equity:		
Preferred stock – $1 par value, authorized 36,000,000 shares; outstanding - none	—	—
Common stock – $0.10 par value; authorized 200,000,000 shares; issued: 2016 - 146,167,000 shares; 2015 - 145,667,000 shares	15	15
Additional paid-in capital	3,038	3,027
Accumulated other comprehensive loss	(385)	(314)
Retained earnings (accumulated deficit)	(782)	(1,292)
Total stockholders' equity	1,886	1,436
Total liabilities and stockholders' equity	$ 3,869	$ 4,736

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See accompanying Notes to Consolidated Financial Statements

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USG CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS

(millions)	Years Ended December 31, 2016	2015	2014
Operating Activities			
Net income	$ 510	$ 991	$ 38
Less: Income from discontinued operations, net of tax	20	15	12
Less: Gain on sale of discontinued operations, net of tax	279	—	—
Income from continuing operations	211	976	26
Adjustments to reconcile income from continuing operations to net cash:			
Depreciation, depletion, and amortization	134	131	142
Loss on extinguishment of debt	37	19	—
Litigation settlement charge	—	—	48
Long-lived asset impairment charges	10	—	90
(Recovery) loss on receivable and contract termination charge	(3)	(6)	15
Share-based compensation expense	18	14	20
Deferred income taxes	57	(742)	4
Gain on asset dispositions	(9)	(13)	(11)
Gain from the sale of equity method investment to related party	—	(6)	—
Income from equity method investments	(49)	(50)	(35)
Dividends received from equity method investments	47	38	—
Pension settlement	20	1	13
Gain on deconsolidation of subsidiaries and consolidated joint ventures	—	—	(27)
(Increase) decrease in working capital, net of deconsolidation of subsidiaries and consolidated joint ventures:			
Receivables	6	21	(35)
Income taxes receivable	3	(3)	3
Inventories	(20)	(16)	(11)
Other current assets	9	1	—
Payables	21	(16)	9
Accrued expenses	(39)	(61)	(9)
(Increase) decrease in other assets	—	4	3
Decrease in pension and other postretirement benefits	(142)	(28)	(55)
Decrease in other liabilities	(6)	(7)	(12)
Other, net	9	22	(18)
Net cash provided by operating activities of continuing operations	314	279	160
Net cash provided by operating activities of discontinued operations	59	52	12
Net cash provided by operating activities	$ 373	$ 331	$ 172
Investing Activities			
Purchases of marketable securities	(274)	(246)	(204)
Sales or maturities of marketable securities	413	170	190
Capital expenditures	(83)	(87)	(125)
Net proceeds from asset dispositions	12	58	13
Net proceeds from the sale of equity method investment to related party	—	52	—
Investments in joint ventures, including $23 of cash of contributed subsidiaries in 2014	1	—	(560)
Insurance proceeds	1	—	3

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Return (deposit) of restricted cash	9	(8)	4
Net cash provided by (used for) investing activities of continuing operations	79	(61)	(679)
Net cash provided by (used for) investing activities of discontinued operations	667	(2)	(4)
Net cash provided by (used for) investing activities	$ 746	$ (63)	$ (683)
Financing Activities			
Issuance of debt	—	350	3
Repayment of debt	(1,131)	(386)	(63)
Payment of debt issuance fees	—	(6)	(3)
Issuances of common stock	4	6	4
Repurchases of common stock to satisfy employee tax withholding obligations	(2)	(8)	(7)
Net cash used for financing activities of continuing operations	$ (1,129)	$ (44)	$ (66)

(continued on the next page)

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USG CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS

(millions)	Years Ended December 31, 2016	2015	2014
Effect of exchange rate changes on cash	(5)	(10)	(5)
Net (decrease) increase in cash and cash equivalents from continuing operations	(741)	164	(590)
Net increase in cash and cash equivalents from discontinued operations	726	50	8
Change in cash balance included in discontinued operations	—	(3)	(2)
Net (decrease) increase in cash and cash equivalents	(15)	211	(584)
Cash and cash equivalents at beginning of period	442	231	815
Cash and cash equivalents at end of period	$ 427	$ 442	$ 231
Supplemental Cash Flow Disclosures:			
Interest paid, net of interest capitalized	$ 153	$ 158	$ 172
Income taxes paid, net of refunds received	4	—	7
Noncash Investing and Financing Activities:			
Amount in accounts payable for capital expenditures	15	5	15
Reversal of USG Boral Building Products earnout	(24)	—	—
Contribution of wholly-owned subsidiaries and joint venture investments as consideration for investment in USG Boral Building Products	—	—	121
Conversion of $75 million of 10% convertible senior notes due 2018, net of discount	—	—	(73)
Issuance of common stock upon conversion of debt	—	—	75
Accrued interest on debt conversion	—	—	(2)

See accompanying Notes to Consolidated Financial Statements

USG CORPORATION
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(millions, except share data)	Common Shares Issued (000)	Treasury Shares (000)	Common Stock	Treasury Stock	Additional Paid-in Capital	Retained Earnings (Deficit)	Accumulated Other Comprehensive Income (Loss)	Stockholders' Equity	Non-controlling Interest	Total
Balance as of January 1, 2014	137,314	—	$ 14	$ —	$ 2,920	$ (2,320)	$ 24	$ 638	$ 24	$ 662
Net income						37		37	1	38
Other comprehensive loss							(362)	(362)		(362)
Share-based compensation					21			21		21
Stock issuances	947	166	—	4	1			5		5
Stock issuances upon debt conversion	6,507	72	—	3	72			75		75
Repurchase of common stock		(238)		(7)				(7)		(7)
Changes in noncontrolling interest								—	(24)	(24)
Balance as of December 31, 2014	144,768	—	$ 14	$ —	$ 3,014	$ (2,283)	$ (338)	$ 407	$ 1	$ 408
Net income						991		991		991
Other comprehensive income							24	24		24
Share-based compensation					15			15		15
Stock issuances	899	283	1	8	(2)			7		7
Repurchase of common stock		(283)		(8)				(8)		(8)
Changes in noncontrolling interest								—	(1)	(1)
Balance as of December 31, 2015	145,667	—	$ 15	$ —	$ 3,027	$ (1,292)	$ (314)	$ 1,436	$ —	$ 1,436
Net income						510		510		510
Other comprehensive loss							(71)	(71)		(71)
Share-based compensation					18			18		18
Tax deficiencies in share-based compensation					(11)			(11)		(11)
Stock issuances	500	85	—	2	4			6		6
Repurchases of common stock		(85)		(2)				(2)		(2)
Balance as of December 31, 2016	146,167	—	$ 15	$ —	$ 3,038	$ (782)	$ (385)	$ 1,886	$ —	$ 1,886

See accompanying Notes to Consolidated Financial Statements

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

In the following Notes to Consolidated Financial Statements, "USG," "we," "our" and "us" refer to USG Corporation and its subsidiaries included in the consolidated financial statements, except as otherwise indicated or as the context otherwise requires.

1. Significant Accounting Policies

Nature of Operations

USG, through its subsidiaries, is a leading manufacturer of building materials. We produce a wide range of products for use in new residential, new nonresidential, and residential and nonresidential repair and remodel construction as well as products used in certain industrial processes. Our products are distributed through building materials dealers, home improvement centers and other retailers, specialty wallboard distributors, and contractors.

Segments

Our segments are structured around our key products and business units: Gypsum, Ceilings and UBBP.

Our Gypsum reportable segment is an aggregation of the operating segments of the gypsum businesses in the United States, Canada, Mexico, and Latin America, our mining operation in Little Narrows, Nova Scotia, Canada, which we indefinitely idled in 2016, and our shipping company, which we exited in 2015. Gypsum manufactures products throughout the United States, Canada, and Mexico. These products include USG Sheetrock® brand gypsum wallboard and related products including Sheetrock® brand joint compound, Durock® brand cement board, Levelrock® brand of poured gypsum flooring, Fiberock® brand backerboard, and Securock® brand glass mat sheathing used for building exteriors and gypsum fiber and glass mat panels used as roof cover board. Ceilings manufactures ceiling tile in the United States and ceiling grid in the United States, Canada and through February 27, 2014, the Asia-Pacific region. UBBP manufactures, distributes and sells certain building products, mines raw gypsum and sells natural and synthetic gypsum throughout Asia, Australasia and the Middle East.

Consolidation and Presentation

Our consolidated financial statements include the accounts of USG Corporation, its majority-owned subsidiaries and through February 27, 2014, variable interest entities. Entities in which we have more than a 20% but not more than 50% ownership interest are accounted for using the equity method of accounting. All intercompany balances and transactions are eliminated in consolidation.

On August 29, 2016, we announced the signing of a definitive agreement to sell L&W Supply Corporation, or L&W, our distribution business, to American Builders & Contractors Supply Co., Inc., or ABC Supply, at which time L&W met the criteria to be classified as held for sale and presented as a discontinued operation. We completed the sale on October 31, 2016.

L&W's results of operations have been reclassified to "Income from discontinued operations, net of tax" in our consolidated statements of income for all periods presented. The assets and liabilities of L&W have been reclassified to "Assets related to discontinued operations" and "Liabilities related to discontinued operations", respectively, in our consolidated balance sheet as of December 31, 2015. The cash flows associated with L&W have been reclassified to "Net cash provided by operating activities of discontinued operations" and "Net cash provided by (used for) investing activities of discontinued operations" for all periods presented. The results of L&W, which previously consisted of our Distribution segment, have been excluded from our segment results. Additionally, results of our Gypsum and Ceilings segments have been revised as a result of L&W's classification as a discontinued operation to reflect only the sales of USG products from Gypsum and Ceilings to L&W that were sold outside the consolidated group prior to October 31, 2016. All L&W sales subsequent to the close of the transaction are included in net sales on our consolidated statement of income. See Note 3 for further discussion.

Our investments with Boral in the 50/50 joint ventures, UBBP, commenced on February 27, 2014, and as a result, our share of ten months of the results of UBBP were recorded in our accompanying consolidated statement of income for the year ended December 31, 2014. See Note 4 for further description of our investments in UBBP.

Use of Estimates

The preparation of our consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions. These estimates and assumptions affect the reported amounts of assets, liabilities, revenues and expenses. Actual results could differ from these estimates.

Revenue Recognition

We recognize revenue when shipment is received by the customer. We enter into agreements with customers to offer rebates, generally based on achievement of specified sales levels and various marketing allowances that are common industry practice.

Estimated reductions to revenue for customer programs and incentive offerings, including promotions and other volume–based incentives, are recorded in the period in which the sale occurs. Provisions for early payment discounts are accrued in the same period in which the related sales are recorded.

Shipping and Handling Costs

Shipping and handling costs billed to customers are included in net sales and the related costs are presented in cost of products sold.

Advertising

Advertising expenses consist of media advertising and related production costs and sponsorships. We charge advertising expenses to earnings as incurred. These expenses amounted to $12 million, $16 million and $22 million for the years ended December 31, 2016, 2015 and 2014, respectively.

Research and Development

We charge research and development expenditures to earnings as incurred. These expenditures amounted to $24 million, $23 million and $23 million for the years ended December 31, 2016, 2015 and 2014, respectively.

Litigation Costs

We expense litigation costs as incurred.

Income Taxes

We record income tax expense (benefit) under the asset and liability method. Under this method, deferred tax assets and liabilities are recognized based on temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply in the years in which the temporary differences are expected to be recovered or paid. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in earnings in the period when the change is enacted. Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not that a tax benefit will not be realized.

A reduction of the carrying amounts of deferred tax assets by a valuation allowance is required if, based on all available evidence, it is more likely than not that such assets will not be realized. The need to establish valuation allowances for deferred tax assets is assessed at each reporting date. In assessing the requirement for, and amount of, a valuation allowance in accordance with the more-likely-than-not standard, we give appropriate consideration to all positive and negative evidence related to the realization of the deferred tax assets. This assessment considers, among other matters, the nature, frequency and severity of current and cumulative losses, forecasts of future profitability, the duration of statutory carryforward periods, our experience with operating loss and tax credit carryforwards not expiring unused and tax planning strategies.

A history of cumulative losses for a certain threshold period is a significant form of negative evidence used in the assessment, and we are required to have a policy regarding the duration of the threshold period. We believe the historical cyclical nature of our operations show economic cycles ranging from 7 to 10 years with demand troughs historically showing recovery over four years. Accordingly, we have a policy of four years as our threshold period for cumulative losses.

Inventory Valuation

All of our inventories are stated at the lower of cost or market and are valued under the average cost method. Our inventories include materials, labor and applicable factory overhead costs. Depreciation associated with manufacturing assets is excluded from inventory cost but is included in cost of products sold.

Earnings per Share

Basic earnings per share is based on the weighted average number of common shares outstanding. Diluted earnings per share is based on the weighted average number of common shares outstanding plus the dilutive effect, if any, of market share units, or MSUs, restricted stock units, or RSUs, performance shares, the potential exercise of outstanding stock options and the deferred shares associated with our deferred compensation program for non-employee directors.

Cash and Cash Equivalents

Cash and cash equivalents include highly liquid investments, primarily money market funds, with maturities of three months or less at the time of purchase.

Marketable Securities

Marketable securities are classified as available-for-sale securities and reported at fair value, with unrealized gains and losses excluded from earnings and reported in accumulated other comprehensive loss, or AOCI. If it is deemed that marketable securities have unrealized losses that are other than temporary, these losses will be recorded in earnings immediately. Situations in which losses may be considered other than temporary include when we have decided to sell a security or when it is more likely than not that we will be required to sell the security before we recover its amortized cost basis. Cost basis for securities sold are determined on a first-in-first-out basis.

Receivables

Receivables are recorded at net realizable value, which includes allowances for cash discounts and doubtful accounts. We review the collectability of receivables on an ongoing basis and reserve for receivables determined to be uncollectible. This determination is based on the delinquency of the account, the financial condition of the customer and our collection experience.

We include short-term financing receivables in receivables and long-term financing and loan receivables in other assets on our consolidated balance sheets. Financing and loan receivables are recorded at net realizable value which includes an allowance for credit losses. We review the collectability of financing and loan receivables on an ongoing basis and reserve for financing and loan receivables determined to be uncollectible. This determination is based on the delinquency of the account and the financial condition of the other party. As of December 31, 2016, the allowance for credit losses was immaterial.

Investments in Unconsolidated Joint Ventures

The equity method of accounting is used for investments in joint ventures that we do not consolidate, but over which we have the ability to exercise significant influence. These investments are initially recorded at cost and subsequently adjusted for our share of the net income or loss and cash contributions and distributions to or from these entities. If the underlying net assets in our investments are denominated in a foreign currency, we adjust the value of our investment for translation gains or losses. Profits resulting from sales with equity method investees are eliminated until realized by the investee.

At least quarterly, we review the probability of the earnout payment to Boral. At December 31, 2016, we concluded that it is currently not probable that the five-year performance target will be achieved. If our conclusion on the probability of achievement were to change, we will record a liability representing the present value of the second earnout payment with a corresponding increase to our investment.

Losses in the value of an equity method investment that are other than temporary, are recognized when the current fair value of the investment is less than its carrying value. We review our investments in equity method investments for impairment whenever factors indicate an other than temporary loss in value. If we conclude a loss in value is other than temporary, an impairment charge is recognized for the difference between the investment's carrying value and its estimated fair value.

Property, Plant and Equipment

Property, plant and equipment is recorded at cost. We record depreciation of property, plant and equipment on a straight-line basis over the expected useful lives of the assets. We have determined estimated useful lives to be 50 years for buildings and improvements, a range of 10 to 25 years for machinery and equipment, and a range of 5 to 7 years for computer software and systems development costs. Leasehold improvements are capitalized and amortized over the shorter of the remaining lease term or remaining economic useful life. We compute depletion on a basis calculated to spread the cost of gypsum and other applicable resources over the estimated quantities of material recoverable.

We capitalize interest during the active construction period of major capital projects. Capitalized interest is added to the cost of the underlying assets and is depreciated over the useful lives of those assets. We recorded $1 million of capitalized interest in the year ended December 31, 2016, and $3 million in the years ended December 31, 2015 and 2014. Facility start-up costs that cannot be capitalized are expensed as incurred and recorded in cost of products sold.

Property, plant and equipment is reviewed for impairment when indicators of a potential impairment are present by comparing the carrying values of the assets with their estimated future undiscounted cash flows. If we determine an impairment exists, the asset is written down to estimated fair value.

Asset Retirement Obligations

Our asset retirement obligations include reclamation requirements as regulated by government authorities related principally to assets such as our mines, quarries, landfills, ponds and wells. The accounting for asset retirement obligations requires estimates by management about the timing of asset retirements, the cost of retirement obligations, discount and inflation rates used in determining fair values and the methods of remediation associated with our asset retirement obligations. We generally use assumptions and estimates that reflect the most likely remediation method on a site-by-site basis. Our estimated liability for asset retirement obligations is revised annually, and whenever events or changes in circumstances indicate that a revision to the estimate is necessary.

In instances where a decrease in the asset retirement obligation is in excess of the related remaining net book value of the asset retirement costs, the excess is recorded to the consolidated statement of income as a reduction in cost of products sold. Asset retirement obligations are included in other liabilities on the consolidated balance sheets.

Share-Based Compensation

We award share-based compensation to employees in the form of MSUs, performance shares and RSUs and to non-employee directors in the form of shares of our common stock. All grants under share-based payment programs are accounted for at fair value at the date of grant. We recognize expense on all share-based awards to employees expected to vest over the service period, which is the shorter of the period until the employees' retirement eligibility dates or the service period of the award. Expense is generally reduced for estimated forfeitures, which are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

Derivative Instruments

We use derivative instruments to manage selected commodity price and foreign currency exposures. We do not use derivative instruments for speculative trading purposes, and we typically do not hedge beyond five years. All derivative instruments are recorded on the balance sheet at fair value. For derivatives designated as fair value hedges, the changes in the fair values of both the derivative instrument and the hedged item are recognized in earnings in the current period. For derivatives designated as cash flow hedges, the effective portion of changes in the fair value of the derivative is recorded to AOCI, and is reclassified to earnings when the underlying forecasted transaction affects earnings. The ineffective portion of changes in the fair value of the derivative is reported in cost of products sold in the current period. We periodically reassess the probability of the underlying forecasted transaction occurring. For derivatives designated as net investment hedges, we record changes in fair value to AOCI. For derivatives not designated as hedging instruments, all changes in fair value are recorded to earnings in the current period.

We use swaps to hedge a significant portion of our anticipated purchases of natural gas to be used in our manufacturing operations. Generally, we hedge the cost of a majority of our anticipated purchases of natural gas over the next 12 months. However, we review our positions regularly and make adjustments as market conditions warrant. The majority of contracts currently in place are designated as cash flow hedges and the remainder are not designated as hedging instruments.

We have operations outside of the United States and use forward contracts to hedge the risk of changes in cash flows resulting from selected forecasted intercompany and third-party sales or purchases, as well as intercompany loans, denominated in non-U.S. currencies, or to hedge the risk of selected changes in our net investment in foreign subsidiaries. These contracts are designated as either cash flow or net investment hedges or are not designated as hedging instruments.

Foreign Currency Translation

We translate foreign-currency-denominated assets and liabilities into U.S. Dollars at the exchange rates existing as of the respective balance sheet dates. We translate income and expense items at the average exchange rates during the respective periods. We record translation adjustments resulting from fluctuations in exchange rates to AOCI on our consolidated balance sheets and our share of the translation adjustments recorded by our equity method investments to AOCI.

We record transaction gains and losses to earnings. In 2016, the total transaction gain was $3 million. In 2015 and 2014, the total transaction loss was $7 million and $6 million, respectively.

Fair Value Measurements

Certain assets and liabilities are required to be recorded at fair value. The estimated fair values of those assets and liabilities have been determined using market information and valuation methodologies. Changes in assumptions or estimation methods could affect the fair value estimates. However, we do not believe any such changes would have a material impact on our financial condition, results of operations or cash flows. There are three levels of inputs that may be used to measure fair value:

- Level 1 – Quoted prices for identical assets and liabilities in active markets;
- Level 2 – Quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in markets that are not active; and model-derived valuations in which all significant inputs and significant value drivers are observable in active markets; and
- Level 3 – Valuations derived from valuation techniques in which one or more significant inputs or significant value drivers are unobservable.

Certain assets and liabilities are measured at fair value on a nonrecurring basis rather than on an ongoing basis, but are subject to fair value adjustments in certain circumstances, such as when there is evidence of impairment or when a new liability is being established that requires fair value measurement.

2. Recent Accounting Pronouncements

In November 2016, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update, or ASU, 2016-18, "Statement of Cash Flows (Topic 230): Restricted Cash," which will require restricted cash to be presented with cash and cash equivalents in the statement of cash flows. The standard will be effective for us in the first quarter of 2018 and will be applied using the retrospective approach. As our restricted cash amounts are immaterial, we do not expect the adoption of ASU 2016-18 will have a significant impact to our consolidated financial statements or disclosures.

In October 2016, the FASB issued ASU 2016-16, "Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other than Inventory," which eliminates the exception for all intra-entity transfers, except for intra-entity transfers of inventory. The significant components of the standard are 1) current and deferred income tax consequences of intra-entity asset transfers (other than inventory) will be reflected when the transaction occurs and 2) the impact of the sale, if any, is reflected in the effective tax rate for the period in which the transaction occurs. The standard will be effective for us in the first quarter of 2018 and we will adopt the new standard using a modified retrospective approach with a cumulative-effect adjustment to retained earnings. We do not expect the adoption of ASU 2016-16 will have a significant impact to our consolidated financial statements or disclosures.

In August 2016, the FASB issued ASU 2016-15, "Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments," which addresses eight specific cash flow issues with the objective of reducing the existing diversity in practice. The standard will be effective for us in the first quarter of 2018, there will be no impact to our consolidated cash flow statement and disclosures as we are already compliant with the provisions of the standard.

In March 2016, the FASB issued ASU 2016-09, "Compensation-Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting," which simplifies certain aspects of accounting for employee share-based payments. The standard will be effective for us in the first quarter of 2017 and will be applied in part prospectively and in part using a modified retrospective transition approach. The components of this standard that will impact our financial statements are as follows:

- Excess tax benefits and deficiencies related to stock compensation will be prospectively recognized in income tax expense instead of in equity when the awards vest or are settled. For the twelve months ended December 31, 2016 and 2015, we recorded a reduction to equity of $11 million and $0 million, respectively. Under the new standard, $9 million of tax expense and $4 million of income tax benefit would have been recognized in 2016 and 2015, respectively.
- Excess tax benefits that were previously unrecognized because the related tax deduction had not been realized through a reduction in taxes payable will be recorded on a modified retrospective basis. If we had early adopted this standard, we would have recorded a cumulative-effect adjustment to opening retained earnings of $25 million on our December 31, 2016 consolidated balance sheet.
- Upon adoption, we will elect an accounting policy to recognize forfeitures as they occur and will record a cumulative effect change to retained earnings in accordance with the modified retrospective approach. If we had early adopted this standard, we would have recorded an immaterial cumulative effect adjustment to opening retained earnings on our December 31, 2016 balance sheet.

In February 2016, the FASB issued ASU 2016-02, "Leases (Topic 842)," which supersedes existing lease guidance to require lessees to recognize assets and liabilities on the balance sheet for the rights and obligations created by long-term leases and to disclose additional quantitative and qualitative information about leasing arrangements. The standard will be effective for us in the first quarter of 2019, and we will adopt the new standard using the modified retrospective approach. While we continue to evaluate the impact of the new standard, we believe the standard will require us to implement a new lease accounting system and related policies and processes. Further, we anticipate the adoption of ASU 2016-02 will have a significant impact to our consolidated balance sheets, consolidated statements of income and disclosures, but we are unable to quantify the financial statement impact at this time.

In January 2016, the FASB issued ASU 2016-01, "Financial Instruments-Overall (Topic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities," which requires that most equity instruments be measured at fair value, with subsequent changes in fair value recognized in net income. The pronouncement also impacts the financial liabilities under the fair value option and the presentation and disclosure requirements for financial instruments. The ASU does not apply to equity method investments or investments in consolidated subsidiaries. The new standard will be effective for us for the first quarter of 2018, with early adoption permitted and amendments to be applied as a cumulative-effect adjustment to the balance sheet in the year of adoption. We do not expect the adoption of ASU 2016-01 will have a significant impact to our consolidated financial statements or disclosures.

In July 2015, the FASB issued ASU 2015-11, "Inventory (Topic 330): Simplifying the Measurement of Inventory", which changes the measurement principle for inventory from the lower of cost or market to the lower of cost or net realizable value for entities that measure inventory using the first-in, first-out (FIFO) or average cost method. The ASU defines net realizable value as estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. The standard, which we will adopt using the prospective approach, is effective for us beginning January 1, 2017. ASU 2015-11 will not have an impact to our consolidated financial statements or disclosures.

In May 2014, the FASB issued ASU 2014-09, “Revenue from Contracts with Customers (Topic 606),” which supersedes the revenue recognition requirements in “Revenue Recognition (Topic 605),” and requires entities to recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Subsequently, the FASB has issued various ASUs to provide further clarification around certain aspects of ASC 606. This standard will be effective for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period, and we will adopt the standard on January 1, 2018. We are in the process of completing the analysis of the standard's impact on our sales to customers. While we have not completed our analysis of the impact of the provisions of this standard, we do not expect a significant impact to our financial statements or disclosure.

3. Discontinued Operations

On October 31, 2016, we completed the sale of our L&W business to ABC Supply for total cash consideration of $675 million inclusive of the final working capital adjustment and recorded a gain on the sale of $279 million.

For the year ended December 31, 2016, L&W met the criteria to be classified as held for sale and to be presented as a discontinued operation. Accordingly, we reclassified the results of operations and the cash flows of L&W to discontinued operations in our consolidated statements of income and consolidated statements of cash flows for all periods presented. Additionally, we reclassified the assets and liabilities of L&W to discontinued operations in our consolidated balance sheets.

The summarized financial information related to L&W that has been excluded from continuing operations and reported as a discontinued operation is as follows:

(millions)	For the year ended December 31,		
	2016(a)	2015	2014
Net sales	$ 1,252	$ 1,428	$ 1,345
Cost of products sold	1,196	1,387	1,316
Gross profit	56	41	29
Selling and administrative expenses [(b)]	22	15	16
Operating profit	34	26	13
Income tax expense	12	11	—
Net income from discontinued operations [(c)]	$ 22	$ 15	$ 13
Gain on sale of discontinued operations	$ 279	$ —	$ —

(a) Operating results for 2016 are presented for the ten months ended October 31, 2016.

(b) The ten month period ended October 31, 2016 includes transaction costs of $8 million.

(c) Years ended December 31, 2016 and 2014 include net income from discontinued operations from our European business, which were sold in 2012.

The assets and liabilities related to discontinued operations as of December 31, 2015 are as follows:

(millions)		December 31, 2015
Accounts receivable, net		207
Inventories		95
Other current assets		4
Property, plant and equipment, net [(a)]		17
Intangible assets [(a)]		31
Other assets [(a)]		3
Total assets related to discontinued operations	$	357
Accounts payable	$	51
Accrued expenses		29
Other liabilities [(a)]		20
Total liabilities related to discontinued operations	$	100

(a) As of December 31, 2015, these balances are reflected as long-term in our consolidated balance sheet.

We retained responsibility for the benefits payable to employees of L&W from the USG pension and postretirement plans for the benefits accrued while employed by USG. As such, these liabilities are not reflected in liabilities related to discontinued operations. See Note 9 for further discussion. We also agreed to defend and indemnify L&W in connection with the pricing lawsuits. See Note 19 for discussion of the liability associated with the pricing lawsuits.

Additionally, upon the close of the sale, we entered into a supply agreement with L&W and a transition services agreement with ABC Supply to provide certain transition services. For the years ended December 31, 2016, 2015, and 2014, we recorded sales to L&W of $568 million, $531 million and $532 million that, prior to October 31, 2016, were eliminated in consolidation. We recorded a cash inflow of $102 million from L&W in the two months since the sale related to payments on trade receivables.

4. Equity Method Investments

Equity method investments were as follows:

	December 31, 2016		December 31, 2015	
(millions)	Carrying Value	Ownership Percentage	Carrying Value	Ownership Percentage
USG Boral Building Products	$ 621	50%	$ 675	50%
Other equity method investments	7	33% - 50%	$ 7	33% - 50%
Total equity method investments	$ 628		$ 682	

Investments in USG Boral Building Products (UBBP)

On February 27, 2014, we formed the 50/50 joint ventures, USG Boral Building Products Pte. Limited, a company organized under the laws of Singapore, and USG Boral Building Products Pty Limited, a company organized under the laws of Australia, with Boral Limited, or Boral. These joint ventures are herein referred to as USG Boral Building Products, or UBBP. As consideration for our 50% ownership in UBBP, we (i) made a cash payment of $514 million to Boral, (ii) contributed to UBBP our subsidiaries and joint venture investments in China, Singapore, India, Malaysia, New Zealand, Australia, the Middle East and Oman and (iii) granted to UBBP licenses to use certain of our intellectual property rights in the Territory. Our existing wholly-owned subsidiaries and consolidated variable interest entities that were contributed into the joint venture were deconsolidated resulting in a gain of $27 million, which is included in our consolidated statement of income for the year ended December 31, 2014.

During 2016, UBBP paid cash dividends on earnings through September 2016 of which our 50% share totaled $47 million. We recorded the cash dividend in operating activities on our statements of cash flows. As of December 31, 2016, the amount of our consolidated retained earnings which represents undistributed earnings from UBBP is $44 million.

In the event certain U.S. Dollar performance targets are satisfied by UBBP, we are obligated to pay Boral two scheduled earnout payments in an aggregate amount up to $75 million. Upon inception of the joint ventures, we recorded a liability representing the present value of the first earnout payment of $25 million which was reversed in 2016 as the three-year performance target was not met. The second earnout payment of up to $50 million is based on performance over the first five years. We have concluded that it is currently not probable that the five-year performance target will be achieved. As of December 31, 2016, we had no liability recorded for the earnout payments. As of December 31, 2015, our liability for the earnout payments totaled $24 million and is included in other liabilities on our accompanying consolidated balance sheet.

Translation losses recorded in other comprehensive income were as follows:

(millions)	2016	2015	2014
Translation loss	$ (30)	$ (23)	$ (34)

Transactions with UBBP

Our Gypsum segment sells products to UBBP. Total sales to UBBP for each of the years ended December 31, 2016, 2015 and 2014 were immaterial.

In 2014, in connection with the formation of UBBP, we contributed our ownership interest in a joint venture in China to UBBP but retained our loan receivable from this joint venture. As of December 31, 2016 and 2015, the loan receivable, including interest, totaled $15 million and $14 million, respectively, as included in "Other assets" on our consolidated balance sheets.

Investment in Knauf-USG Joint Venture

In 2015, we sold our 50% interest in Knauf/USG Verwaltungs GmbH and Knauf/USG Systems GmbH & Co. KG, or collectively the Knauf-USG joint venture, to our joint venture partner, Knauf Aquapanel GmbH, a subsidiary of Gebr. Knauf Verwaltungsgesellschaft KG (Knauf) for €48 million in cash, or approximately $52 million. The Knauf-USG joint venture manufactured and distributed Aquapanel® brand cement-based panels in Europe (excluding Turkey) and all countries that were part of the former Soviet Union. Affiliates of Knauf are the beneficial owners of approximately 10% of USG's outstanding shares of common stock.

We recorded a gain of approximately $6 million, which is net of $5 million for income taxes payable on the sale. The gross gain and our equity method income in the Knauf-USG joint venture was $13 million for the year ended December 31, 2015 and $2 million for the year ended December 31, 2014 and is recorded in "Income and gain from the sale of equity method investment to related party" in our consolidated statement of income.

Summarized Financial Information

Summarized financial information for our equity method investments is as follows:

Statement of Income

(millions)	For the year ended December 31, 2016	2015	2014 (a)
USG Boral Building Products:			
Net sales	$ 1,052	$ 1,003	$ 927
Gross profit	337	278	251
Operating profit[b]	133	124	95
Net income before taxes	142	132	101
Net income	95	101	72
Net income attributable to USG Boral Building Products	99	96	67
USG share of income from USG Boral Building Products[c]	49	48	33
Other equity method investments[d]:			
USG share of income from other investments accounted for using the equity method	—	2	2
Total income from equity method investments	49	50	35

(a) Operating results are presented for UBBP for the ten months ended December 31, 2014.
(b) Year ended December 31, 2016 includes long-lived asset impairment charges of $8 million for China and of $14 million for Oman.
(c) Year ended December 31, 2016 includes long-lived asset impairment charges of $4 million for China and of $4 million for Oman.
(d) Amounts represent our share of income or loss from all equity method investments, other than UBBP.

Balance Sheet

(millions)	December 31, 2016	December 31, 2015
USG Boral Building Products:		
Current assets	$ 389	$ 368
Non-current assets	903	935
Current liabilities[a]	211	197
Long-term debt	37	40
Other non-current liabilities	17	17
Shareholders' equity[b]	1,027	1,049

(a) Includes the current portion of long-term debt of $15 million and $16 million as of December 31, 2016 and 2015, respectively.
(b) Shareholders' equity includes $50 million and $60 million related to non-controlling interests as of December 31, 2016 and 2015, respectively.

5. Marketable Securities

Our investments in marketable securities as of December 31, 2016 and 2015 consisted of the following:

(millions)	2016 Amortized Cost	2016 Fair Value	2015 Amortized Cost	2015 Fair Value
Corporate debt securities	$ 69	$ 69	$ 134	$ 134
U.S. government and agency debt securities	14	14	57	57
Asset-backed debt securities	2	2	21	21
Certificates of deposit	6	6	15	15
Municipal debt securities	—	—	3	3
Total marketable securities	$ 91	$ 91	$ 230	$ 230

The realized and unrealized gains and losses as of and for the years ended December 31, 2016, 2015 and 2014 were immaterial.

Contractual maturities of marketable securities as of December 31, 2016 were as follows:

(millions)	Amortized Cost	Fair Value
Due in 1 year or less	$ 62	$ 62
Due in 1-5 years	29	29
Total marketable securities	$ 91	$ 91

Actual maturities may differ from the contractual maturities because issuers of the securities may have the right to prepay them.

6. Debt

Total debt as of December 31 consisted of the following:

(millions)	2016	2015
5.5% senior notes due 2025	$ 350	$ 350
5.875% senior notes due 2021	—	350
6.3% senior notes due 2016	—	500
7.75% senior notes due 2018	500	500
7.875% senior notes due 2020 (net of discount: 2016 - $0; 2015- $1)	—	249
Industrial revenue bonds (due 2028 through 2034)	239	239
Total	$ 1,089	$ 2,188
Less unamortized debt issuance costs	$ 6	$ 13
Total	$ 1,083	$ 2,175

Repurchase of Senior Notes

During 2016, we retired $500 million of our 6.3% Senior Notes due in 2016, referred to as the 6.3% Notes, $250 million of our 7.875% senior notes due 2020, referred to as the 7.875% Notes, and $350 million of our 5.875% senior notes due 2021, referred to as the 5.875% Notes. The early redemption of the 6.3% Notes, the 7.875% Notes and the 5.875% Notes included premiums of $30 million and accrued interest of $9 million. As a result of the repurchases, we recorded a loss on early extinguishment of debt, before tax, of $37 million including premiums, write-off of deferred financing fees, debt discount and broker fees.

In the first quarter of 2015, we repurchased $350 million of our 8.375% senior notes due in 2018, through both a cash tender offer and a subsequent notice of redemption for aggregate consideration, including tender offer premium and accrued and unpaid interest, of $377 million. As a result of the repurchases, we recorded a loss on early extinguishment of debt of $19 million including the write-off of unamortized debt issuance costs.

Issuance of Senior Notes

In the first quarter of 2015, we issued $350 million of 5.5% senior notes due March 1, 2025. The net proceeds from the issuance of these notes and cash on hand were used to fund the repurchases of the 8.375% senior notes and all related costs and expenses. We deferred approximately $6 million of debt issuance costs that are being amortized to interest expense over the term of the notes. As of December 31, 2016 and December 31, 2015, these notes were recorded on the accompanying consolidated balance sheets at $345 million and $344 million, respectively.

Senior Notes

All of the senior notes are senior unsecured obligations and rank equally with all of our other existing and future unsecured senior indebtedness. The indentures governing the notes contain events of default, covenants and restrictions that are customary for similar transactions, including a limitation on our ability and the ability of certain of our subsidiaries to create or incur secured indebtedness.

Interest rate [(a)]	7.75%	5.500%
Principal net of discount (in millions) [(b)]	$500	$350
Maturity	January 15, 2018	March 1, 2025
Call date	Any time [(c)]	March 1, 2020 [(d)]
Mandatory redemption	at 101% plus accrued and unpaid interest in the event of a change in control and a related downgrade below investment grade by both Moody's Investors Service and Standard & Poor's Global Ratings	at 101% plus accrued and unpaid interest in the event of a change in control

(a) The 7.75% senior notes currently have an effective interest rate of 8.25%. The rate is subject to an adjustment of up to 2% if the debt rating is downgraded or subsequently upgraded by Moody's Investors Service and Standard & Poor's Global Ratings.

(b) Principal amounts exclude unamortized debt issuance costs.

(c) Callable at any time at a price equal to the greater of (1) 100% of the principal and (2) the sum of the present value of the remaining scheduled payments of principal and interest discounted to the redemption date on a semi-annual basis at the applicable U.S. Treasury rate plus a spread (as outlined in the applicable indenture), plus any accrued and unpaid interest on the principal amount being called.

(d) Callable at any time prior to the call date at a price equal to 100% of the principal plus a premium (as outlined in the respective indentures), plus any accrued and unpaid interest on the principal amount being called. Callable after the call date at stated redemption prices (as outlined in the applicable indenture), plus any accrued and unpaid interest on the principal amount being called.

Credit Facility

We maintain a credit facility with a maximum borrowing limit of $180 million (including a $50 million borrowing sublimit for CGC) that is available to fund working capital needs and other general corporate purposes and matures on October 22, 2019. The facility is secured by certain of our accounts receivable and inventory. The maximum borrowing limit under the credit agreement may be increased up to $650 million at our request and our lenders' approval. In December 2016, we reduced the facility size to $180 million due to the L&W sale and in January 2017, we amended the credit agreement to reduce payment condition threshold amounts in conjunction with the lower facility size.

The credit agreement requires us to maintain a minimum fixed charge coverage ratio in the event excess availability falls below a minimum threshold. Because our excess borrowing availability of $85 million exceeds this threshold, the requirement to maintain the minimum fixed charge coverage ratio is not applicable. The credit agreement contains other covenants and events of default that are customary for similar agreements and may limit our ability to take various actions including our ability to pay a dividend or repurchase our stock. We are in compliance with all covenants in our credit facility.

As of December 31, 2016 and during the year then ended, there were no borrowings under the facility. Had there been any borrowings as of that date, the applicable interest rate would have been 2.00% for loans in the U.S. and 1.95% for loans in Canada. Outstanding letters of credit as of December 31, 2016 totaled $38 million.

Industrial Revenue Bonds

Our $239 million of industrial revenue bonds have fixed interest rates ranging from 5.5% to 6.4%. The weighted average rate of interest on our industrial revenue bonds is 5.875%. These bonds mature during the years 2028 through 2034.

OTHER INFORMATION

The fair value of our debt was $1.129 billion and $2.295 billion as of December 31, 2016 and 2015, respectively, and was determined using the fair value hierarchy of inputs described in Note 1. The decline primarily reflected the repayment of the 6.3% Notes, the 7.875% Notes, and the 5.875% Notes in 2016. The fair values were determined utilizing prices from independent pricing services. The vendors' methodologies utilize various forms of market data, including but not limited to, trade data, yield, spreads, bids and offers. We review the values provided by the independent pricing service for reasonableness by comparing the valuations received from the independent pricing service to valuations from at least one other observable source. We have not adjusted the prices obtained from the independent pricing service. As a result, the fair values are classified as Level 2.

Interest accrued on our debt as of December 31, 2016 and December 31, 2015 was $31 million and $45 million, respectively.

As of December 31, 2016, the amounts of total debt outstanding maturing in each of the next five years and beyond were as follows:

(millions)	2017	2018	2019	2020	2021	After 2021
Debt maturities (principal amounts)	$ —	$ 500	$ —	$ —	$ —	$ 589

7. Derivative Instruments

COMMODITY DERIVATIVE INSTRUMENTS

As of December 31, 2016, we had 36 million mmBTUs (millions of British Thermal Units) in aggregate notional amount of outstanding natural gas swap contracts to hedge forecasted purchases. All of these contracts mature by December 31, 2021. For contracts designated as cash flow hedges, the amount that remained in AOCI was a pre-tax unrealized gain of $2 million as of December 31, 2016 and an unrealized loss of $19 million as of December 31, 2015. No ineffectiveness was recorded on contracts designated as cash flow hedges in 2016, 2015, or 2014.

Changes in fair value on contracts not designated as cash flow hedges are recorded to earnings. The fair value of those contracts not designated as cash flow hedges was a $1 million unrealized gain as of December 31, 2016 and a $2 million unrealized loss as of December 31, 2015.

FOREIGN EXCHANGE DERIVATIVE INSTRUMENTS

We have foreign exchange forward contracts to hedge forecasted purchases of products and services denominated in foreign currencies. The notional amount of these contracts was $80 million as of December 31, 2016, and they mature by December 27, 2017. These forward contracts are designated as cash flow hedges and no ineffectiveness was recorded in 2016, 2015, or 2014. The fair value of these contracts that remained in AOCI was zero and an unrealized net pre-tax gain of $8 million as of December 31, 2016 and December 31, 2015, respectively.

During the third quarter of 2015, we entered into foreign exchange forward contracts to hedge a portion of our net investment in our Knauf-USG joint venture. The notional amount of these contracts was $35 million and they matured on November 16, 2015. In November 2015, we entered into a similar foreign exchange forward contract with the same critical terms that was scheduled to mature on January 31, 2016. These forward contracts were designated as net investment hedges and no ineffectiveness was recorded. On December 22, 2015, we completed the sale and, as a result, we terminated the outstanding foreign exchange forward contract and reclassified the $1 million net gain realized for these contracts from AOCI to earnings which increased the gain on the sale of the equity method investment. See Note 4 for further discussion on the sale.

COUNTERPARTY RISK, MASTER NETTING ARRANGEMENTS AND BALANCE SHEET OFFSETTING

We are exposed to credit losses in the event of nonperformance by the counterparties to our derivative instruments. As of December 31, 2016, our derivatives were in a $3 million net asset position. All of our counterparties have investment grade credit ratings; accordingly, we anticipate that they will be able to fully satisfy their obligations under the contracts.

All of our derivative contracts are governed by master netting agreements negotiated between us and the counterparties that reduce our counterparty credit exposure. The agreements outline the conditions (such as credit ratings and net derivative fair values) upon which we, or the counterparties, are required to post collateral. As required by certain of our agreements, we had $10 million of collateral posted with our counterparties related to our derivatives as of December 31, 2016. Amounts paid as cash collateral are included in receivables on our consolidated balance sheets.

We have not adopted an accounting policy to offset fair value amounts related to derivative contracts under our master netting arrangements; therefore, individual derivative contracts are reflected on a gross basis, as either assets or liabilities, on our consolidated balance sheets, based on their fair value as of the balance sheet date.

FINANCIAL STATEMENT INFORMATION

The following are the pre-tax effects of derivative instruments on the consolidated statements of income and the consolidated statements of comprehensive income (loss) for the years ended December 31, 2016, 2015 and 2014:

(millions)	Amount of Gain or (Loss) Recognized in Other Comprehensive Income (Loss) on Derivatives (Effective Portion) 2016	2015	2014	Location of Gain or (Loss) Reclassified from AOCI into Income (Effective Portion)	Amount of Gain or (Loss) Reclassified from AOCI into Income (Effective Portion) 2016	2015	2014
Derivatives Designated as Hedging Instruments							
Commodity contracts	$ 6	$ (14)	$ (19)	Cost of products sold	$ (15)	$ (15)	$ 2
Foreign exchange contracts	(3)	12	4	Cost of products sold	5	7	2
Foreign exchange contracts	—	1	—	Income and gain from the sale of equity method investment to related party	—	1	—
Total	$ 3	$ (1)	$ (15)		$ (10)	$ (7)	$ 4

(millions)	Location of Gain or (Loss) Recognized in Income on Derivatives	Amount of Gain or (Loss) Recognized in Income on Derivatives 2016	2015	2014
Derivatives Not Designated as Hedging Instruments				
Commodity contracts	Cost of products sold	$ 1	$ (3)	$ (4)
Foreign exchange contracts	Other (income) expense, net	—	2	—
Total		$ 1	$ (1)	$ (4)

As of December 31, 2016, we had no derivatives designated as net investment or fair value hedges.

The following are the fair values of derivative instruments on the consolidated balance sheets as of December 31, 2016 and 2015:

(millions)	Balance Sheet Location	Fair Value 12/31/16	12/31/15	Balance Sheet Location	Fair Value 12/31/16	12/31/15
Derivatives Designated as Hedging Instruments						
Commodity contracts	Other current assets	$ 8	$ 1	Accrued expenses	$ 4	$ 15
Commodity contracts	Other assets	3	—	Other liabilities	5	5
Foreign exchange contracts	Other current assets	1	8	Accrued expenses	1	—
Total derivatives in hedging relationships		$ 12	$ 9		$ 10	$ 20

(millions)	Balance Sheet Location	Fair Value 12/31/16	12/31/15	Balance Sheet Location	Fair Value 12/31/16	12/31/15
Derivatives Not Designated as Hedging Instruments						
Commodity contracts	Other current assets	$ 1	$ —	Accrued expenses	$ —	$ 2
Commodity contracts	Other assets	—	—	Other liabilities	—	—
Total derivatives not designated as hedging instruments		$ 1	$ —		$ —	$ 2
Total derivatives	Total assets	$ 13	$ 9	Total liabilities	$ 10	$ 22

8. Fair Value Measurements

Certain assets and liabilities are required to be recorded at fair value. The fair values of our cash equivalents, equity mutual funds, marketable securities and derivatives were determined using the fair value hierarchy of inputs described in Note 1. The cash equivalents and equity mutual funds shown in the table below primarily consist of money market funds that are valued based on quoted prices in active markets and, as a result, are classified as Level 1. We use quoted prices, other readily observable market data and internally developed valuation models when valuing our marketable securities or derivatives and have therefore classified them as Level 2. Marketable securities are valued using a "market value" approach and values are based on quoted prices or other observable market inputs received from data providers. Derivatives are valued using the "income" approach such as discounted-cash-flow models and readily observable market data. The inputs for the valuation models are obtained from data providers and include end-of-period spot and forward natural gas prices, foreign currency exchange rates, natural gas price volatility and LIBOR and swap rates for discounting the cash flows implied from the derivative contracts.

Our assets and liabilities measured at fair value on a recurring basis were as follows:

	Quoted Prices in Active Markets for Identical Assets (Level 1)		Significant Other Observable Inputs (Level 2)		Significant Unobservable Inputs (Level 3)		Total	
(millions)	12/31/16	12/31/15	12/31/16	12/31/15	12/31/16	12/31/15	12/31/16	12/31/15
Cash equivalents	$ 38	$ 223	$ 34	$ 25	$ —	$ —	$ 72	$ 248
Equity mutual funds	5	4	—	—	—	—	5	4
Marketable securities:								
Corporate debt securities	—	—	69	134	—	—	69	134
U.S. government and agency debt securities	—	—	14	57	—	—	14	57
Asset-backed debt securities	—	—	2	21	—	—	2	21
Certificates of deposit	—	—	6	15	—	—	6	15
Municipal debt securities	—	—	—	3	—	—	—	3
Derivative assets	—	—	13	9	—	—	13	9
Derivative liabilities	—	—	(10)	(22)	—	—	(10)	(22)

Certain assets and liabilities are measured at fair value on a nonrecurring basis rather than on an ongoing basis, but are subject to fair value adjustments in certain circumstances, such as when there is evidence of impairment or when a new liability is being established that requires fair value measurement. As disclosed in Note 12 and 13, during 2016 and 2014, we recorded asset impairment charges of $10 million and $90 million, respectively. No impairment was recorded in 2015.

During 2016, we indefinitely idled our mining operations in Little Narrows, Nova Scotia, Canada. We reviewed the property, plant and equipment at Little Narrows for potential impairment by comparing the carrying values of those assets with their future undiscounted cash flows for their remaining useful lives. We measured the fair value of the machinery, equipment and buildings using measurements classified as Level 3 and recorded long-lived asset impairment charges of $10 million.

During 2014, we reviewed the carrying value of the ocean vessels owned by GTL for potential impairment by comparing the carrying value of those assets with their fair values. To determine the estimated fair value for the ocean vessels, we engaged a third-party ship broker. Management developed our estimate of fair value by considering comparable sales for similar asset types and incorporating an adjustment for the specialized nature of these assets. This fair value measurement is classified as Level 3, and we recorded a long-lived asset impairment charge of $60 million during the fourth quarter of 2014.

Also during 2014, we reviewed our property, plant and equipment for potential impairment by comparing the carrying values of those assets with their future undiscounted cash flows for their remaining useful lives. We measured the fair value of the machinery, equipment and buildings using measurements classified as Level 3 and recorded long-lived asset impairment charges of $30 million.

9. Employee Retirement Plans

We maintain defined benefit pension plans for most of our employees. Most of these plans require employee contributions in order to accrue benefits. Benefits payable under the plans are based on employees' years of service and compensation during specified years of employment. Effective December 31, 2010, we amended the USG Corporation defined benefit pension plan to replace the final average pay formula with a cash balance formula for employees hired after that date. In November 2016, we amended the US pension plan to allow retirees and all terminated vested employees to take a lump-sum at all times without restriction.

We also maintain plans that provide postretirement benefits (retiree health care and life insurance) for eligible employees. Employees hired before January 1, 2002 generally become eligible for the postretirement benefit plans when they meet minimum retirement age and service requirements. The cost of providing most postretirement benefits is shared with retirees.

We retained responsibility for the benefits payable to employees of L&W for the benefits accrued while employed by USG under the USG pension and postretirement plans upon the sale of L&W to ABC Supply. All L&W employees had the option to receive a lump sum benefit payment from the USG Corporation pension plan upon termination of their employment from USG. The total of the lump sum distributions made by the USG Corporation pension plan to both L&W employees and USG retirees or terminated vested employees during 2016 exceeded the settlement threshold and, as a result, we incurred settlement expense of $26 million. Of this amount, $15 million related to the benefits paid to terminated employees of L&W and was recorded to "Gain on sale of discontinued operations" and $11 million related to benefits paid to USG retirees or terminated vested employees, of which $7 million was recorded to "Costs of products sold" and $4 million was recorded to "Selling and administrative expenses" in our consolidated statement of income. The benefits payable to employees of L&W who did not take lump sum distributions in connection with their termination or retirement from USG are included in our benefit obligation as of December 31, 2016.

We had a curtailment to our pension and postretirement plans as a result of the L&W sale. We recorded a curtailment gain of $20 million for our USG Corporation postretirement plan to "Gain on sale of discontinued operations" in our consolidated statement of income, for those benefits no longer accruable to the employees of L&W who were not retirement eligible or did not elect retirement upon employment termination from USG.

We had maintained a pension plan for our subsidiary USG (U.K.) Ltd which had been previously frozen to permanently eliminate future benefit accruals. In December 2014, we irrevocably purchased annuities for the remaining deferred members of the plan relieving us of the responsibility of the pension benefit obligation, and recorded a settlement charge in selling and administrative expenses in the amount of $13 million.

In 2011 and 2014, we amended our U.S. postretirement benefit plan to require retiree medical plan participants to begin purchasing individual coverage in the Affordable Insurance Exchanges or individual Medicare marketplace beginning January 1, 2016 using a company-funded subsidy. The subsidy is determined based upon years of service at retirement and Medicare eligibility. The subsidy provided to retirees eligible for Medicare will end December 31, 2019. As a result of the amendments, the measurement of the accumulated postretirement benefit obligation, or APBO, was reduced and a credit to unrecognized prior service cost is being amortized into the statement of income over the average remaining service of active plan participants to retirement eligibility.

The components of net pension and postretirement benefit costs are summarized in the following table:

(millions)	2016	2015	2014
Pension Benefits:			
Service cost of benefits earned	$ 45	$ 49	$ 37
Interest cost on projected benefit obligation	66	66	65
Expected return on plan assets	(89)	(83)	(79)
Settlement [(a)]	35	1	13
Net amortization	22	39	24
Net pension cost [(b)]	$ 79	$ 72	$ 60
Postretirement Benefits:			
Service cost of benefits earned	$ 2	$ 2	$ 3
Interest cost on projected benefit obligation	6	6	7
Curtailment	(20)	—	—
Net amortization	(27)	(31)	(35)
Net postretirement benefit [(c)]	$ (39)	$ (23)	$ (25)

(a) In 2016, $26 million of the settlement charge reflects the increase in lump sum benefits paid largely driven by the sale of L&W and $9 million reflected payments from our supplemental plan. In 2014, the settlement charge related to the elimination of the benefit obligation of the UK pension plan due to the purchase of annuities.
(b) Net pension costs, excluding settlement costs, includes expenses allocated to income from discontinued operations for L&W totaling $7 million for 2016, exclusive of settlement expense, $12 million for 2015 and $8 million for 2014.
(c) Net postretirement benefit, excluding curtailment gain, includes a net benefit allocated to income from discontinued operations for L&W of $3 million for 2016, exclusive of curtailment expense, $3 million for 2015 and $3 million for 2014.

We use a December 31 measurement date for our plans. The accumulated benefit obligation, or ABO, for the defined benefit pension plans was $1.396 billion as of December 31, 2016 and $1.354 billion as of December 31, 2015.

	As of December 31,	
(millions)	2016	2015
Selected information for pension plans with accumulated benefit obligations in excess of plan assets:		
Accumulated benefit obligation	$ (39)	$ (1,182)
Fair value of plan assets	2	1,097
Selected information for pension plans with benefit obligations in excess of plan assets:		
Benefit obligation	$ (1,384)	$ (1,365)
Fair value of plan assets	1,205	1,099

The following table summarizes projected benefit obligations, plan assets and funded status as of December 31:

	Pension		Postretirement	
(millions)	2016	2015	2016	2015
Change in Benefit Obligation:				
Benefit obligation as of January 1	$ 1,564	$ 1,686	$ 144	$ 167
Service cost	45	49	2	2
Interest cost	66	66	6	6
Settlements	(123)	(4)	—	—
Curtailments	(37)	—	(7)	—
Participant contributions	11	11	—	3
Benefits paid	(33)	(86)	(7)	(11)
Actuarial (gain) loss	112	(119)	(5)	(14)
Foreign currency translation	5	(39)	2	(9)
Benefit obligation as of December 31	$ 1,610	$ 1,564	$ 135	$ 144
Change in Plan Assets:				
Fair value as of January 1	$ 1,301	$ 1,340	$ —	$ —
Actual return on plan assets	107	17	—	—
Employer contributions	167	61	7	8
Participant contributions	11	11	—	3
Benefits paid	(33)	(86)	(7)	(11)
Settlements	(123)	(4)	—	—
Foreign currency translation	5	(38)	—	—
Fair value as of December 31	$ 1,435	$ 1,301	$ —	$ —
Funded status	$ (175)	$ (263)	$ (135)	$ (144)
Components on the Consolidated Balance Sheets:				
Noncurrent assets	$ 4	$ 3	$ —	$ —
Current liabilities	(16)	(9)	(8)	(9)
Noncurrent liabilities	(163)	(257)	(127)	(135)
Net liability as of December 31	$ (175)	$ (263)	$ (135)	$ (144)
Pretax Components in AOCI:				
Net actuarial loss	$ 388	$ 387	$ —	$ 7
Prior service credit	(1)	(1)	(65)	(108)
Total as of December 31	$ 387	$ 386	$ (65)	$ (101)

For our defined benefit pension plans, the 2016 actuarial loss of $112 million was primarily due to a decrease in the discount rates offset by the adoption of the new mortality tables published by the Society of Actuaries used to determine the benefit obligation. The weighted-average discount rate decreased from 4.43% at December 31, 2015 to 4.02% at December 31, 2016 and increased from 4.10% at December 31, 2014 to 4.43% at December 31, 2015.

For the defined benefit pension plans, we estimate that during 2017 we will amortize from AOCI into net pension cost a net actuarial loss of $23 million and no prior service cost. For the postretirement benefit plans, we estimate that during 2017 we will amortize from AOCI into net postretirement cost a net actuarial loss of $0 million and a prior service credit of $28 million.

ASSUMPTIONS

The following tables reflect the assumptions used in the accounting for our plans:

	Pension		Postretirement	
	2016	2015	2016	2015
Weighted average assumptions used to determine benefit obligations as of December 31:				
Discount rate	4.02%	4.43%	3.90%	4.24%
Compensation increase rate	3.55%	3.55%	N/A	N/A
Weighted average assumptions used to determine net cost for years ended December 31:				
Discount rate	4.43%	4.10%	4.24%	3.70%
Expected return on plan assets	6.66%	6.70%	N/A	N/A
Compensation increase rate	3.55%	3.50%	N/A	N/A

We no longer have significant exposure to health care cost trend rates due to the modifications we made to our U.S. postretirement health care plan to limit the increase in the annual amount we pay for retiree health care coverage for certain current and future retirees to 3% and to require retiree medical plan participants to begin purchasing individual coverage in the Affordable Insurance Exchanges or individual Medicare marketplace beginning January 1, 2016 using a company-funded subsidy based upon years of service at retirement.

For the measurement of the APBO at December 31, 2016 for our Canadian postretirement health care plan, the assumed health care cost trend rates start with a 7.75% increase in 2017, followed by a gradual decline in increases to 4% for 2032. For the measurement of the APBO at December 31, 2015, the assumed health care cost trend rates started with an 8% increase in 2016, followed by a gradual decline in increases to 4% for 2032 and beyond.

A one percentage point change in the assumed health care cost trend rates would have the following effects on our Canadian plans:

(millions)	One-Percentage-Point Increase	One-Percentage-Point Decrease
Effect on total service and interest cost	$ 1	$ —
Effect on postretirement benefit obligation	11	(8)

RETIREMENT PLAN ASSETS

Investment Policies and Strategies: We have established investment policies and strategies for the defined benefit pension plans' assets with a long-term objective of maintaining the plans' assets at a level equal to or greater than that of their liabilities (as measured by a funded ratio of 100% or more of the ABO) and maximizing returns on the plans' assets consistent with our moderate tolerance for risk. Contributions are made to the plans periodically as needed to meet funding targets or requirements. Factors influencing our determination to accept a moderate degree of risk include the timing of plan participants' retirements and the resulting disbursement of retirement benefits, the liquidity requirements of the plans and our financial condition.

Our overall long-term objective is to achieve a 6.7% rate of return on plan assets with a moderate level of risk as indicated by the volatility of investment returns. This rate of return target was established using a "building block" approach. In this approach, ranges of long-term expected returns for the various asset classes in which the plans invest are estimated. The estimated ranges are primarily based on observations of historical asset returns and their historical volatility. In determining the expected returns, we also consider consensus forecasts of certain market and economic factors that influence returns, such as inflation, gross domestic product trends and dividend yields. We then calculate an overall range of likely expected rates of return by applying the expected asset returns to the plans' target asset allocation. The most likely rate of return is then determined and is adjusted to account for investment management fees.

Our investment strategy is to invest in a diversified mix of asset classes in accordance with an asset allocation that we believe is likely to achieve our long-term target return while prudently considering risk. In order to manage risk, the plans' pension and investment committees periodically rebalance the asset allocations as outlined by our investment policy statements. Our investment policy statements include glide paths which outline how our asset allocation would increase the portion of liability-hedging assets, such as fixed income, as our funded status improves in the future. This liability-driven investing approach is carried out by professional investment managers who help the committees in this process. The committees also monitor the investment performance of the individual investment managers compared to their benchmark returns and investment guidelines on an ongoing basis, in part through the use of quarterly investment portfolio reviews and compliance reporting by investment managers. The pension and investment committees also evaluate risk by periodically conducting asset/

liability studies to assess the correlation of the plans' assets and liabilities and the degree of risk in the target asset allocations. The plans limit the use of leverage to select investment strategies where leverage is typically employed, such as private equity and real estate. Certain investment managers utilize derivatives, such as swaps, bond futures, and options, as part of their investment strategies. This is done primarily to gain a desired market exposure or manage factors such as interest rate risk or duration of a bond portfolio.

The following table shows the aggregate target asset allocation on a weighted average basis for all the plans and the acceptable ranges around the targets as of December 31, 2016.

		Investment Policy	
		Target	Range
Asset Categories:	*Asset Category Description*		
Equity	Institutional commingled/pooled equity funds, equity mutual funds and direct holdings of the common stock of U.S. and non-U.S. companies; equity funds and direct holdings are invested in companies with a range of market capitalizations	39%	35%-43%
Fixed income	U.S. Treasury securities, non-U.S. government debt securities such as Canadian federal bonds, corporate bonds of companies from diversified industries and mortgage-backed securities	50%	46%-54%
Limited partnerships	Investments in funds that follow any of several different strategies, including investing in distressed debt, energy development, infrastructure, and hedge funds. These investments use strategies with returns normally expected to have a reduced correlation to the return of equities as compared to other asset classes and often provide a current income component that is a meaningful portion of the investment's total return.	5%	2%-8%
Other real assets	Primarily investments in large core, private real estate funds that directly own a diverse portfolio of properties located in the United States. It also includes an allocation to funds investing in equities of real estate and infrastructure companies	6%	3%-10%
Cash equivalents and short-term investments	Primarily held in short-term investment funds or registered money market funds with daily liquidity	—%	0%-5%
Total		100%	

Fair Values of Plan Assets: Pension assets are classified based on the valuation methodologies and inputs used to determine the fair value as described in Note 1.

Level 1 investments include mutual funds, or direct investments in common stocks of U.S. and non-U.S. companies that trade on liquid exchanges. These investments are valued based on the closing price on these exchanges.

Level 2 investments include primarily fixed income securities such as corporate, or government debentures, mortgage- and asset-backed securities. They are valued primarily using income and market approaches, such as pricing based on recent market transactions, and values are based on quoted prices or other observable market inputs received from data providers. Commingled funds not traded on an exchange, even though their underlying investments are common stocks traded on liquid exchanges, are also included in the Level 2 category. The net asset value of commingled funds investing in either stocks or fixed income securities is calculated by subtracting the value of any liabilities from the market value of all securities owned by a fund.

Level 3 investments include real estate, infrastructure, or direct energy investments as well as distressed securities or hedge funds. These are valued using income approach methodologies such as discounted cash flows, or market approach methodologies such as relative value (specific to equity securities), direct capitalization and comparable sales (specific to real estate investments). Some of the key inputs used to value these securities include discount rate, EBITDA multiple, yield-to-worst, yield-to-maturity, and cap rate (specific to real estate investments).

The fair values by hierarchy of inputs as of December 31 were as follows:

	Quoted Prices in Active Markets for Identical Assets (Level 1)		Significant Other Observable Inputs (Level 2)		Significant Unobservable Inputs (Level 3)		Total	
(millions)	2016	2015	2016	2015	2016	2015	2016	2015
Asset Categories:								
Equity:								
Common and preferred stock	$ 66	$ 55	$ —	$ —	$ —	$ —	$ 66	$ 55
Commingled/pooled/mutual funds [(a)]	—	54	490	448	—	—	490	502
Total equity	66	109	490	448	—	—	556	557
Fixed income:								
U.S. government and agency debt securities	—	—	194	177	—	—	194	177
Non-U.S. government and agency debt securities	—	—	54	32	—	—	54	32
Investment-grade debt securities	—	—	197	199	—	—	197	199
High-yield debt securities	—	—	53	36	—	—	53	36
Commingled/pooled funds [(a)]	—	—	165	129	—	—	165	129
Mortgaged backed securities	—	—	3	—	—	—	3	—
Other	—	—	10	3	1	1	11	4
Total fixed income	—	—	676	576	1	1	677	577
Limited partnerships	—	—	—	—	103	106	103	106
Other real estate assets	—	—	16	15	38	37	54	52
Cash equivalents and short-term investments	—	—	11	10	—	—	11	10
Total	$ 66	$ 109	$ 1,193	$ 1,049	$ 142	$ 144	$ 1,401	$ 1,302
Cash on hand							—	—
Receivables							35	9
Accounts payable							(1)	(10)
Total							$ 1,435	$ 1,301

(a) Certain investments in commingled/pooled equity funds have been classified as Level 2 in 2016 and 2015 because observable quoted prices for these institutional funds are not available.

A reconciliation of the change in the fair value measurement of the defined benefit plans' consolidated assets using significant unobservable inputs (Level 3) between January 1, 2015 and December 31, 2016 is as follows:

(millions)	Fixed Income	Other Real Estate Assets	Limited Partnerships	Total
Balance as of January 1, 2015	$ 1	$ 35	$ 103	$ 139
Realized losses	—	(1)	—	(1)
Unrealized gains	—	5	1	6
Purchases, sales and settlements:				
Purchases	—	—	2	2
Sales	—	(2)	—	(2)
Settlements	—	—	—	—
Net transfers into (out of) Level 3	—	—	—	—
Balance as of December 31, 2015	$ 1	$ 37	$ 106	$ 144
Realized gains	—	1	5	6
Unrealized gains (losses)	—	2	(3)	(1)
Purchases, sales and settlements:				
Purchases	—	—	1	1

Sales	—	(2)	(6)	(8)
Settlements	—	—	—	—
Net transfers into (out of) Level 3	—	—	—	—
Balance as of December 31, 2016	$ 1	$ 38	$ 103	$ 142

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CASH FLOWS

For 2017, our defined benefit pension plans have no minimum funding requirements under the Employee Retirement Income Security Act of 1974. We are evaluating our level of funding for pension plans and currently estimate that we will contribute approximately $74 million to our pension plans in 2017. Our cash payments for postretirement plans are estimated to be $8 million in 2017.

Total benefit payments we expect to make to participants, which include payments funded from USG's assets as well as payments from our pension plans' assets, are as follows (in millions):

Years ended December 31	Pension Benefits	Postretirement Benefits
2017(a)	$ 165	$ 8
2018	100	8
2019	100	9
2020	110	7
2021	114	7
2022 - 2026	580	39

(a) Pension benefits for the year ended December 31, 2017 include expected payments to L&W employees who elected lump sum upon termination from USG Corporation.

DEFINED CONTRIBUTION PLANS

Total charges for our defined contribution plans amounted to approximately $5 million, $6 million and $5 million for the years ended December 31, 2016, 2015 and 2014, respectively. These charges primarily consisted of contributions to our U.S. plan, commonly known as a 401(k) plan. The U.S. plan provides participating employees the opportunity to invest 1% to 75% of their compensation on a pretax and/or Roth after-tax basis. As of December 31, 2016, participants earn a guaranteed company match of 25% on employee contributions up to 6% of their eligible compensation. Employees are fully vested in company matching contributions after three years of participation in the plan. USG's contributions are charged to cost of products sold and selling and administrative expenses.

10. Share-Based Compensation

We grant share-based compensation to eligible participants under our 2016 Long-Term Incentive Plan, or New LTIP, which was approved by our Board of Directors and stockholders in 2016, and prior thereto under our Long-Term Incentive Plan, which, together with the New LTIP, is referred to as the LTIP. As of December 31, 2016, a total of 7 million shares of common stock were reserved for future grants under the New LTIP. The New LTIP authorizes the Board's Compensation and Organization Committee to provide equity-based compensation in the form of stock options, stock appreciation rights, or SARs, restricted stock, restricted stock units, or RSUs, market share units, or MSUs, performance shares and units, and other cash incentive and share-based awards for the purpose of providing our employees, officers and non-employee directors incentives and rewards for performance. We may issue common shares upon option exercises and upon the vesting or grant of other awards under the LTIP from our authorized but unissued shares or from treasury shares.

Our expense in continuing operations for share-based arrangements was $18 million in 2016, $14 million in 2015 and $20 million in 2014 and is included in selling and administrative expense in our consolidated statements of income. No income tax benefits were recognized for share-based arrangements in the consolidated statements of income in 2016, 2015 and 2014.

Excess tax benefits related to share based compensation are the difference between the amount of deductible compensation expense reported for tax purposes and the compensation expense recorded for financial reporting purposes for a stock award. Excess tax benefits that are not realized are not reflected in additional paid-in-capital until there is a reduction to taxes payable. As a result of the NOL carryforwards for federal tax purposes in 2016, 2015 and 2014, none of the excess tax benefits with respect to exercised stock options and vestings of RSUs, MSUs and performance shares for those years has been reflected in additional paid-in-capital as of December 31, 2016. Included in our federal tax NOL carryforwards is $70 million of unrealized excess tax benefits for which a tax benefit of $26 million will be recorded in additional paid-in-capital if the loss carryforward is fully utilized.

Certain employees of L&W previously received grants of MSUs, performance shares and RSUs. The expense associated with these awards was $1 million for 2016, 2015, and 2014 and is included in "Income from discontinued operations" in our consolidated statements of income. On October 31, 2016, any unvested awards were forfeited upon the sale of L&W to ABC Supply and are included as forfeited in the respective tables below.

MARKET SHARE UNITS

We granted MSUs with the following weighted average grant date fair values:

	2016	2015	2014
Weighted average grant date fair values	$ 19.59	$ 30.06	$ 40.20

MSUs generally vest after a three-year period based on our actual stock price performance during such period. The number of MSUs earned will vary from zero to 150% of the number of MSUs awarded depending on the actual performance of our stock price. In the case of termination of employment due to death, disability or retirement during the performance period, vesting will be pro-rated based on the number of full months employed in 2016. Awards earned will be issued at the end of the three-year period. MSUs may vest earlier in the case of a change in control in most circumstances only if there is also a related loss of employment or diminution of duties. Each MSU earned will be settled in common stock.

We estimated the fair value of each MSU granted on the date of grant using a Monte Carlo simulation that used the assumptions noted in the following table. Volatility was based on stock price history immediately prior to grant for a period commensurate with the expected term. The risk-free rate was based on zero-coupon U.S. government issues at the time of grant. The expected term represents the period from the valuation date to the end of the performance period.

Assumptions:	2016	2015	2014
Expected volatility	34.02%	42.70%	54.93%
Risk-free rate	0.86%	1.09%	0.63%
Expected term (in years)	2.95	2.95	2.94
Expected dividends	—	—	—

Nonvested MSUs outstanding as of December 31, 2016 and MSU activity during 2016 were as follows:

	Weighted Number of Shares (000)	Weighted Average Grant Date Fair Value
Nonvested at January 1, 2016	743	$ 34.33
Granted	801	19.59
Vested	(304)	40.20
Forfeited	(83)	23.22
Nonvested at December 31, 2016	1,157	23.39

With respect to the MSUs granted in 2014, for which the three-year period ended December 31, 2016, 303,790 vested for approximately 267,335 common shares based on the actual performance of our stock price. The remaining MSUs granted in 2014 were forfeited.

Total unrecognized compensation cost related to nonvested share-based compensation awards represented by MSUs granted under the LTIP was $5 million as of December 31, 2016. We expect that cost to be recognized over a weighted average period of 1.7 years.

PERFORMANCE SHARES

We granted performance shares with the following weighted average grant date fair values:

	2016	2015	2014
Weighted average grant date fair values	$ 21.10	$ 30.63	$ 46.46

The performance shares generally vest after a period of three years based on our total stockholder return relative to the performance of the Dow Jones U.S. Construction and Materials Index, with adjustments to that index in certain circumstances, for the three-year period. The number of performance shares earned will vary from zero to 200% of the number of performance shares awarded depending on that relative performance. Vesting will be pro-rated based on the number of full months employed during the performance period in the case of death, disability, retirement or a change in control, and pro-rated awards earned will be settled in common stock at the end of the three-year period.

We estimated the fair value of each performance share granted on the date of grant using a Monte Carlo simulation that uses the assumptions noted in the following table. Volatility was based on stock price history immediately prior to grant for a period commensurate with the expected term. The risk-free rate was based on zero coupon U.S. government issues at the time of grant. The expected term represents the period from the grant date to the end of the three-year performance period.

Assumptions:	2016	2015	2014
Expected volatility	34.02%	42.70%	54.93%
Risk-free rate	0.86%	1.09%	0.63%
Expected term (in years)	2.95	2.95	2.94
Expected dividends	—	—	—

Nonvested performance shares outstanding as of December 31, 2016 and performance share activity during 2016 were as follows:

	Weighted Number of Shares (000)	Weighted Average Grant Date Fair Value
Nonvested at January 1, 2016	222	$ 37.20
Granted	214	21.10
Vested	(86)	46.46
Forfeited	(104)	25.22
Nonvested at December 31, 2016	246	24.98

With respect to the performance shares granted in 2014, for which the three-year performance period ended December 31, 2016, 86,478 of the performance awards vested for no common shares.

Total unrecognized compensation cost related to nonvested share-based compensation awards represented by performance shares granted under the LTIP was $2 million as of December 31, 2016. We expect that cost to be recognized over a weighted average period of 1.7 years.

RESTRICTED STOCK UNITS

We granted RSUs during 2016, 2015 and 2014 with the following weighted average grant date fair values:

	2016	2015	2014
Weighted average grant date fair values	$ 23.94	$ 28.56	$ 32.50

RSUs granted as special retention awards, including those granted in 2016, generally vest after a specified number of years from the date of grant or at a specified date and RSUs granted with performance goals vest if those goals are attained. RSUs may vest earlier in the case of death, disability, retirement or a change in control. Each RSU is settled in a share of our common stock after the vesting period. The fair value of each RSU granted is equal to the closing market price of our common stock on the date of grant.

In 2016, we granted RSUs as special retention awards with respect to 106,000 shares of common stock that generally vest in three years from the date of grant.

RSUs outstanding as of December 31, 2016 and RSU activity during 2016 were as follows:

	Number of Shares (000)	Weighted Average Grant Date Fair Value
Nonvested at January 1, 2016	270	$ 24.49
Granted	106	23.94
Vested	(128)	18.70
Forfeited	(20)	26.45
Nonvested at December 31, 2016	228	27.31

As of December 31, 2016, there was $3 million of total unrecognized compensation cost related to nonvested share-based compensation awards represented by RSUs granted under the LTIP. We expect that cost to be recognized over a weighted average period of 2.6 years. The total fair value of RSUs that vested was $2 million during 2016, $4 million during 2015 and $6 million during 2014.

STOCK OPTIONS

We last granted stock options in 2012. Stock options generally become exercisable in four equal annual installments beginning one year from the date of grant, although they may become exercisable earlier in the event of death, disability, retirement or a change in control. The stock options generally expire ten years from the date of grant, or earlier in the event of death, disability or retirement.

A summary of stock options outstanding as of December 31, 2016 and of stock option activity during 2016 is presented below:

	Number of Options (000)	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value (millions)
Outstanding at January 1, 2016	3,496	$ 28.00	2.99	$ 19
Exercised	(305)	13.71		
Canceled	(1,017)	43.93		
Outstanding at December 31, 2016	2,174	$ 22.55	2.78	$ 22
Exercisable at December 31, 2016	2,174	$ 22.55	2.78	$ 22
Vested or expected to vest at December 31, 2016	2,174	$ 22.55	2.78	$ 22

(millions)	2016	2015	2014
Intrinsic value of stock options exercised	$ 4	$ 6	$ 8
Cash received from stock options exercised	$ 4	$ 6	$ 4
Fair value of stock options vested	$ 1	$ 1	$ 2

Intrinsic value for stock options is defined as the difference between the current market value of our common stock and the exercise price of the stock options.

NON-EMPLOYEE DIRECTOR DEFERRED STOCK UNITS

Our non-employee directors may elect to receive a portion of their compensation as deferred stock units that increase or decrease in value in direct relation to the market price of our common stock. Deferred stock units earned through December 31, 2007 will be paid in cash upon termination of board service. Deferred stock units earned thereafter will be paid in cash or shares of USG common stock, at the election of the director, upon termination of board service.

The number of deferred stock units held by non-employee directors as of December 31 was as follows:

	2016	2015	2014
Deferred stock units held by non-employee directors	220,047	193,117	164,235

We recorded expense related to these deferred stock units of $1 million in 2016, 2015 and 2014, respectively.

11. Supplemental Balance Sheet Information

INVENTORIES

Inventories as of December 31 consisted of the following:

(millions)	2016	2015
Finished goods	$ 132	$ 115
Work in progress	37	36
Raw materials	67	68
Total	$ 236	$ 219

PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment as of December 31 consisted of the following:

(millions)	2016	2015
Land and mineral deposits	$ 116	$ 127
Buildings and improvements	1,078	1,075
Machinery and equipment	2,473	2,450
	3,667	3,652
Reserves for depreciation and depletion	(1,960)	(1,881)
Total	$ 1,707	$ 1,771
Annual depreciation and depletion expense	$ 129	$ 125

ACCRUED EXPENSES

Accrued expenses as of December 31 consisted of the following:

(millions)	2016	2015
Self-insurance reserves	$ 12	$ 13
Employee compensation	35	29
Interest	31	45
Derivatives	5	17
Pension and other postretirement benefits	24	18
Environmental	18	16
Other	50	48

Total	$ 175	$ 186

ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

Changes in the balances of each component of accumulated other comprehensive income (loss), or AOCI, are summarized in the following table:

(millions)	Derivatives	Pension and Other Postretirement Benefit Plans	Foreign Currency Translation	Total AOCI
Balance as of January 1, 2014	$ 35	$ (32)	$ 21	$ 24
Other comprehensive income (loss) before reclassifications	(15)	(272)	(68)	(355)
Less: Amounts reclassified from AOCI, net of tax	4	(2)	5	7
Other comprehensive income (loss), net of tax	(19)	(270)	(73)	(362)
Balance as of December 31, 2014	$ 16	$ (302)	$ (52)	$ (338)
Other comprehensive loss before reclassifications	(5)	74	(67)	2
Less: Amounts reclassified from AOCI, net of tax	(9)	(7)	(6)	(22)
Other comprehensive loss, net of tax	4	81	(61)	24
Balance as of December 31, 2015	$ 20	$ (221)	$ (113)	$ (314)
Other comprehensive income (loss) before reclassifications	1	(34)	(53)	(86)
Less: Amounts reclassified from AOCI, net of tax	(6)	(9)	—	(15)
Other comprehensive income (loss), net of tax	7	(25)	(53)	(71)
Balance as of December 31, 2016	$ 27	$ (246)	$ (166)	$ (385)

Amounts reclassified from AOCI, net of tax, for the years ended December 31, 2016, 2015 and 2014 were as follows:

(millions)	2016	2015	2014
Derivatives			
Net reclassification from AOCI for cash flow hedges included in cost of products sold	$ (10)	$ (8)	$ 4
Net reclassification from AOCI for cash flow hedges included in income and gain from the sale of equity method investment to related party	—	1	—
Less: Income tax (benefit) expense on reclassification from AOCI included in income tax expense	(4)	2	—
Net amount reclassified from AOCI	$ (6)	$ (9)	$ 4
Pension and postretirement benefits			
Net reclassification from AOCI for amortization of prior service (benefit) cost included in cost of products sold	$ (1)	$ 1	$ —
Net reclassification from AOCI for amortization of prior service (benefit) cost included in selling and administrative expenses	(12)	(5)	1
Net reclassification from AOCI for amortization of prior service (benefit) cost included in gain on sale of discontinued operations	(3)	(4)	(4)
Less: Income tax expense on reclassification from AOCI included in income tax benefit	(7)	(1)	(1)
Net amount reclassified from AOCI	$ (9)	$ (7)	$ (2)
Foreign Currency Translation			
Net reclassification from AOCI for translation (loss) gain realized upon the sale of foreign entities	$ —	$ (6)	$ 5
Net amount reclassified from AOCI	$ —	$ (6)	$ 5

We estimate that we will reclassify a net $2 million after-tax loss on derivatives from AOCI to earnings within the next 12 months.

ASSET RETIREMENT OBLIGATIONS

Changes in our liability for asset retirement obligations consisted of the following:

(millions)	2016	2015
Balance as of January 1	$ 119	$ 123
Accretion expense	7	7
Liabilities incurred	2	1
Changes in estimated cash flows [a]	(12)	(5)
Liabilities settled [b]	(4)	(2)
Foreign currency translation	1	(5)
Balance as of December 31	$ 113	$ 119

(a) Changes in estimated cash flows for the year ended December 31, 2016 includes a $8 million reduction related to one of our quarries.

(b) Liabilities settled for the year ended December 31, 2016 includes a $2 million liability that was relieved in conjunction with the sale of a surplus property.

12. Long-Lived Asset Impairment Charges

We continuously evaluate our manufacturing and sourcing needs by considering the capacity of existing and idled plants and production lines, as well as capital projects for manufacturing facilities, relative to the demand assumptions included in our long-range plan. Although industry and economic factors have improved and we believe that the overall economic recovery is intact, they are improving at a slower pace than expected, which required us to reconsider the future utilization of idled plants and mines and production lines, and capital projects for manufacturing facilities. We recorded the following impairment charges which are included in our consolidated statements of income in "Long-lived asset impairment charges":

(millions)	2016	2015	2014
Ocean vessels	$ —	$ —	$ 60
Wallboard lines or facilities	—	—	16
Previously incurred costs related to construction of future facilities	—	—	12
Indefinitely idled mining operations	10	—	—
Other	—	—	2
Total long-lived asset impairment charges	$ 10	$ —	$ 90

In 2016, we indefinitely idled our mining operations in Little Narrows, Nova Scotia, Canada after completing a review of our gypsum sourcing needs. As a result, we recorded impairment charges of $10 million. We also recorded severance and other charges of $2 million for the termination of employees at the Little Narrows location, which are included in "Costs of products sold". Both the impairment and severance charges relate to our Gypsum segment.

In 2014, the long-lived asset impairment charges in the Gypsum segment totaling $90 million included the following:

(a) $60 million related to two self-unloading ocean vessels that were subsequently sold in the second quarter of 2015. See Note 13 for further discussion.

(b) $16 million related to the carrying values of machinery, equipment and buildings at our temporarily idled gypsum quarry and wallboard production facility in Empire, Nevada and at our previously idled and now permanently closed gypsum wallboard line in New Orleans, Louisiana. In addition, in the third quarter of 2014 we permanently closed our wallboard line in Detroit, Michigan. No impairment charge was recorded with respect to our wallboard line in Detroit, Michigan, as these assets were previously impaired at the time the plant was originally idled.

(c) $12 million related to previously incurred and capitalized costs for the construction of two future facilities which we do not anticipate will be built within our planning horizon.

(d) $2 million related to the carrying values of machinery, equipment and buildings at our previously idled and now permanently closed paper production line in Gypsum, Ohio.

The carrying values of the machinery, equipment and buildings at the facility in Empire, Nevada, exceeded the estimated future undiscounted cash flows for the remaining useful lives of the assets and resulted in a full impairment. This facility was sold in 2016.

For the production line in Gypsum, Ohio that we deemed to be permanently closed, we fully impaired the long-lived assets specific to that line.

13. Gypsum Transportation Limited

Gypsum Transportation Limited, or GTL, owned two self-unloading ocean vessels. The two previously owned vessels and the third previously leased vessel were used to transship iron ore in and around Sierra Leone in accordance with a contract of affreightment. During 2014, our trading partner ceased performing under the contract, and consequently, we terminated the agreement. As a result of the contract termination, we assessed the recoverability of the two owned vessels and recorded an impairment charge of $60 million. Also in 2014, we recorded a contract termination charge of $6 million for costs to be incurred for the remaining term without economic benefit to us under the lease of the third vessel and we recorded a $9 million provision for bad debt for the trade receivable from our trading partner that we deemed uncollectible.

The impairment charge for the two owned vessels is recorded within "Long-lived asset impairment charges" on our consolidated statement of income. The contract termination charge and provision for bad debt are recorded within "(Recovery) loss on receivable and contract termination charge" on our consolidated statements of income.

In April 2015, we completed the sale of our two self-unloading ocean vessels owned by GTL for $42 million and recorded a gain of $7 million on the disposition. With a portion of the proceeds from the sale, GTL repaid the outstanding loan balance under GTL's secured loan facility agreement with DVB Bank SE and paid applicable selling costs. Additionally, we returned the third vessel leased by GTL and paid $7 million of early termination costs which were previously accrued for in 2014. In the second quarter of 2015, GTL incurred charges of $6 million to exit our shipping operations. The net impact of the gain on the sale of the vessels and charges incurred to exit the shipping operations of $1 million is recorded in "Gain on disposal of shipping operations, net" on the consolidated statement of income.

In November 2015, we entered into a release and debt settlement agreement (Settlement Agreement) to recover a portion of our loss incurred when our former trading partner ceased performing under the contract in the fourth quarter of 2014. The Settlement Agreement required payments beginning in December 2015 for a total of $14 million. The payments received to settle the $9 million loss on the trade receivable were recorded as a benefit to our consolidated statements of income when we determined the payments to be probable. We recorded a recovery of $6 million in 2015 and it is presented within the "(Recovery) loss on receivable and contract termination charge" on our consolidated statement of income. We received an additional $8 million for the recovery in 2016, of which $3 million is recorded within "(Recovery) loss on receivable and contract termination charge", $1 million is recorded within "Interest income" and $4 million is recorded within "Other income, net" on our consolidated statement of income.

GTL recorded operating profit of $3 million in 2016 and $7 million in 2015 and an operating loss of $52 million in 2014.

14. Segments

Our operations are organized into three reportable segments: Gypsum, Ceilings and UBBP. As discussed in Note 3, the results of our Distribution segment have been reclassified to discontinued operations. Additionally, as a result of the presentation of L&W as a discontinued operation, the results of our Gypsum and Ceilings segments have been revised to reflect only the sales of USG products from Gypsum and Ceilings to L&W that have been sold by L&W outside the consolidated group. Segment results were as follows:

GYPSUM AND CEILINGS

	For the year ended December 31,		
(millions)	2016	2015	2014
Net Sales:			
Gypsum	$ 2,526	$ 2,426	$ 2,396
Ceilings	500	496	518
Eliminations	(9)	(9)	(10)
Total	$ 3,017	$ 2,913	$ 2,904
Operating Profit (Loss):			
Gypsum	$ 389	$ 361	$ 165
Ceilings	109	88	89
Corporate	(104)	(94)	(105)
Total	$ 394	$ 355	$ 149
Depreciation, Depletion and Amortization:			
Gypsum	$ 108	$ 106	$ 116
Ceilings	16	16	14
Corporate	10	9	12
Total	$ 134	$ 131	$ 142
Capital Expenditures:			
Gypsum	$ 78	$ 84	$ 94
Ceilings	4	3	30
Corporate	1	—	1
Total	$ 83	$ 87	$ 125
Assets:	December 31, 2016	December 31, 2015	December 31, 2014
Gypsum	$ 1,920	$ 1,991	$ 2,104
Ceilings	241	276	285
Corporate	1,080	1,485	489
Equity method investments	628	682	735
Assets related to discontinued operations	—	357	380
Eliminations	—	(55)	(57)
Total	$ 3,869	$ 4,736	$ 3,936

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GEOGRAPHIC INFORMATION

(millions)	For the year ended December 31, 2016	2015	2014
Net Sales:			
United States	$ 2,625	$ 2,524	$ 2,400
Canada	389	379	406
Other Foreign	189	196	283
Geographic transfers	(186)	(186)	(185)
Total	$ 3,017	$ 2,913	$ 2,904

Long-lived assets, consisting of property, plant and equipment, net, by geographic location were as follows:

(millions)	December 31, 2016	December 31, 2015	December 31, 2014
Long-Lived Assets:			
United States	$ 1,563	$ 1,605	$ 1,648
Canada	80	90	112
Other Foreign	64	76	131
Total	$ 1,707	$ 1,771	$ 1,891

UBBP (millions)	For the year ended December 31, 2016	2015	2014 (a)
Net sales	$ 1,052	$ 1,003	$ 927
Operating profit	133	124	95
Net income attributable to UBBP	99	96	67
Depreciation, depletion, and amortization	43	43	31
Capital expenditures	45	49	40

	December 31, 2016	December 31, 2015	December 31, 2014
Assets	$ 1,292	$ 1,303	$ 1,435

UBBP GEOGRAPHIC INFORMATION (millions)	For the year ended December 31, 2016	2015	2014 (a)
Net Sales:			
Australia	$ 381	$ 345	$ 312
South Korea	223	200	197
Thailand	141	145	133
China	103	120	122
Other	255	234	206
Geographic Transfers	(51)	(41)	(43)
Total	$ 1,052	$ 1,003	$ 927

(a) Operating results are presented for UBBP for the ten months ended December 31, 2014.

Long-lived assets, consisting of property, plant and equipment, net, by geographic location for UBBP were as follows:

(millions)	December 31, 2016	December 31, 2015	December 31, 2014
Long-Lived Assets:			
Australia	$ 217	$ 216	$ 245
South Korea	107	106	113
China	97	116	127
Oman	86	103	96
Thailand	75	72	72
Other	71	67	78
Total	$ 653	$ 680	$ 731

OTHER SEGMENT INFORMATION

Segment operating profit (loss) includes all costs and expenses directly related to the segment involved and an allocation of expenses that benefit more than one segment.

Revenues are attributed to geographic areas based on the location of the assets producing the revenues. Transactions between reportable segments and geographic areas are accounted for at transfer prices that are approximately equal to market value. Geographic transfers largely reflect intercompany sales from U.S. Gypsum and USG Interiors, LLC to CGC and USG Mexico, S.A. de C.V.

For each of the years ended December 31, 2016, 2015, and 2014, The Home Depot accounted for 23%, 23% and 22% of our net consolidated sales, respectively, and L&W accounted for 19%, 18% and 18% of our consolidated net sales, respectively. Both our Gypsum and Ceilings segments had net sales to these two customers in each of those years.

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15. Income Taxes

Income from continuing operations before income taxes consisted of the following:

(millions)	2016	2015	2014
U.S.	$ 201	$ 152	$ 14
Foreign	73	84	19
Total	$ 274	$ 236	$ 33

Income tax expense (benefit) on continuing operations consisted of the following:

(millions)	2016	2015	2014
Current:			
Federal	$ —	$ —	$ —
Foreign	5	12	2
State	1	1	1
Total current	$ 6	$ 13	$ 3
Deferred:			
Federal	41	(631)	—
Foreign	2	(4)	4
State	14	(118)	—
Total deferred	57	(753)	4
Total	$ 63	$ (740)	$ 7

For our continuing operations, differences between actual provisions for income taxes and provisions for income taxes at the U.S. federal statutory rate (35%) were as follows:

(millions)	2016	2015	2014
Taxes on income from continuing operations at U.S. federal statutory rate	$ 96	$ 82	$ 12
Foreign earnings subject to different tax rates [(a)]	(3)	(3)	16
State income tax, net of federal benefit	10	8	1
Change in valuation allowance	—	(827)	(5)
Income from equity method investments [(b)]	(17)	(16)	(12)
Withholding taxes	—	—	2
Other, net	(2)	2	(1)
Tax release from AOCI	—	—	(2)
Gain on deconsolidation	—	—	(7)
Benefits from unrecognized tax positions	—	(6)	—
Tax expense not realized on pension loss	—	—	3
Foreign tax credits	(21)	—	—
Tax expense on distribution of foreign earnings	—	20	—
Provision for income tax expense	$ 63	$ (740)	$ 7
Effective income tax rate	22.9%	(313.6)%	21.2%

(a) Foreign earnings subject to different tax rates includes amounts related to impairments and other charges associated with our shipping operations.

(b) Included in income from equity method investments are taxes associated with that income in the respective jurisdictions. These taxes, which are predominately foreign statutory rates, are at rates that are lower than the U.S. federal statutory rate.

Significant components of deferred tax assets and liabilities as of December 31 were as follows:

(millions)	2016	2015
Deferred Tax Assets:		
Net operating loss and tax credit carryforwards	$ 599	$ 774
Pension and postretirement benefits	112	150
Goodwill and other intangible assets	—	24
Reserves not deductible until paid	20	29
Self insurance	2	11
Capitalized interest	13	13
Inventories	6	8
Share-based compensation	28	33
Other	4	5
Deferred tax assets before valuation allowance	784	1,047
Valuation allowance	(51)	(70)
Total deferred tax assets	$ 733	$ 977
Deferred Tax Liabilities:		
Property, plant and equipment	245	254
Other	—	—
Total deferred tax liabilities	245	254
Net deferred tax assets	$ 488	$ 723

In 2015, we reversed $731 million of our valuation allowance. We considered all positive and negative evidence and gave more weight to evidence that was objective in nature as compared to subjective evidence. Significant weight was given to evidence that directly relates to our current financial performance. As of December 31, 2015, we emerged from a four-year cumulative pre-tax loss and had five consecutive quarters of domestic pre-tax earnings. The recent domestic pre-tax operating earnings was a significant, principal piece of positive evidence, which was weighed with the underlying momentum in the business, and generally improved market and economic conditions. Other evidence included strategic actions taken by management to lower costs and our expected utilization of deferred tax assets. All of this positive evidence lead to the determination that December 31, 2015 was the appropriate time to reverse a significant portion of the valuation allowance.

During the current year, we recorded a decrease in the valuation allowance against our deferred tax assets of $19 million as of December 31, 2016, which was related to the expiration of state Net Operating Loss (NOL) carryforwards.

As of December 31, 2016, our deferred tax assets of $488 million were offset by a valuation allowance of $51 million, consisting of state deferred tax assets. The components of the valuation allowance remaining primarily relate to certain state NOL carryforwards that we anticipate will not be used prior to their expiration.

As of December 31, 2016, we had federal NOL carryforwards of approximately $923 million that are available to offset future federal taxable income and will expire in the years 2028 through 2032. In addition, as of that date, we had federal alternative minimum tax credit carryforwards of approximately $45 million that are available to reduce future regular federal income taxes over an indefinite period and foreign tax credit carryforwards of $143 million that are available to offset future federal taxable income and expire in the years 2022 through 2026. The foreign tax credits are attributable to tax planning strategies to optimize foreign tax credit utilization and management’s intention to amend its tax returns for the tax years 2012-2014 in order to claim credits for previously deducted foreign tax. In order to fully realize the U.S. federal net deferred tax assets, taxable income of approximately $1.460 billion would need to be generated during the period before their expiration.

As of December 31, 2016, we had a gross deferred tax asset of $172 million related to state NOLs and tax credit carryforwards. The NOLs will expire if unused in years 2018 through 2036. To the extent that we do not generate sufficient state taxable income within the statutory carryforward periods to utilize the NOL and tax credit carryforwards in these states, they will expire unused.

The Internal Revenue Code imposes limitations on a corporation’s ability to utilize NOLs if it experiences an “ownership change” which can result from transactions increasing the ownership of certain stockholders in the stock of a corporation by more than 50 percentage points over a three-year period. If we were to experience an ownership change, utilization of our NOLs would be subject to an annual limitation that may be carried over to later years within the allowed NOL carryforward period. Over the entire carryforward period, we may not be able to use all our NOLs due to the aforementioned annual limitation. If an ownership change had occurred as of December 31, 2016, our annual U.S. federal NOL utilization would have been limited to approximately $71 million per year.

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

(millions)	2016	2015	2014
Balance as of January 1	$ 18	$ 22	$ 22
Tax positions related to the current period:			
Gross increase	—	4	2
Gross decrease	—	—	—
Tax positions related to prior periods:			
Gross increase	—	—	—
Gross decrease	(3)	(1)	—
Settlements	—	(6)	(2)
Lapse of statutes of limitations	—	(1)	—
Balance as of December 31	$ 15	$ 18	$ 22

We classify interest expense and penalties related to unrecognized tax benefits and interest income on tax overpayments as components of income taxes (benefit). The total amounts of interest expense and penalties recognized on our consolidated balance sheets were $1 million and $1 million, respectively, as of December 31, 2016 and 2015. The total amounts of interest and penalties recognized in our consolidated statements of income was zero in each of the three years of 2016, 2015 and 2014. The total amounts of unrecognized tax benefit that, if recognized, would affect our effective tax rate were $14 million for 2016, $17 million for 2015 and $5 million for 2014.

Our federal income tax returns for 2008 and prior years have been examined by the Internal Revenue Service. The U.S. federal statute of limitations remains open for 2006 and later years. We are under examination in various U.S. state and foreign jurisdictions. We do not believe our gross unrecognized tax benefits will change as a result. There are statutes, however, that are expiring within the next 12 months that could result in recognition of approximately $2 million of tax benefit. Foreign and U.S. state jurisdictions have statutes of limitations generally ranging from three to five years.

We do not provide for U.S. income taxes on the portion of undistributed earnings of foreign subsidiaries that is intended to be permanently reinvested. The cumulative amount of such undistributed earnings totaled approximately $324 million as of December 31, 2016. These earnings could become taxable in the United States upon the sale or liquidation of these foreign subsidiaries or upon the remittance of dividends. It is not practical to calculate the residual income tax which would result if these basis differences reversed due to the complexities of the tax law and the hypothetical nature of the calculations.

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16. Earnings Per Share

The reconciliation of basic income per share to diluted income per share is shown in the following table:

(millions, except per-share data)	2016	2015	2014
Income from continuing operations	$ 211	$ 976	$ 26
Net income attributable to noncontrolling interest	—	—	$ 1
Income from continuing operations attributable to USG	$ 211	$ 976	$ 25
Income from discontinued operations, net of tax	20	15	12
Gain on sale of discontinued operations, net of tax	279	—	—
Income available to USG and shareholders	$ 510	$ 991	$ 37
Average common shares	145.9	145.5	141.7
Dilutive RSUs, MSUs, performance shares and stock options	1.8	1.6	2.4
Deferred shares associated with a deferred compensation program for non-employee directors	—	0.1	0.2
Average diluted common shares	147.7	147.2	144.3
Basic earnings per average common share:			
Income from continuing operations attributable to USG	$ 1.45	$ 6.70	$ 0.18
Income from and gain on sale of discontinued operations	2.04	0.11	0.08
Net income attributable to USG	$ 3.49	$ 6.81	$ 0.26
Diluted earnings per average common share:			
Income from continuing operations attributable to USG	$ 1.44	$ 6.62	$ 0.17
Income from and gain on sale of discontinued operations	2.02	0.11	0.08
Net income attributable to USG	$ 3.46	$ 6.73	$ 0.25

Stock options, RSUs, MSUs, performance shares and deferred shares associated with our deferred compensation program for non-employee directors that were not included in the computation of diluted earnings per share for those periods because their inclusion was anti-dilutive were as follows:

(millions, common shares)	2016	2015	2014
Stock options, RSUs, MSUs and performance shares	1.5	1.9	2.1
Deferred shares associated with a deferred compensation program for non-employee directors	0.2	—	—

17. Stockholder Rights Plan

NOL Protective Provisions of our Rights Plan

We have a stockholder rights plan that is intended to protect our substantial NOL carryforwards and related tax benefits. See Note 15 for a description of our NOL carryforwards. Under federal tax laws, we generally can use our NOLs and certain related tax credits to reduce ordinary income tax paid in our prior two tax years or on our future taxable income for up to 20 years, when they "expire" for such purposes.

Our ability to use our NOLs could be substantially limited if we experience an "ownership change," as defined under Section 382 of the Internal Revenue Code of 1986, as amended (the "Code"), and the rights plan has been designed to help prevent such an "ownership change." Under Section 382 of the Code, an "ownership change" occurs if, over a rolling three-year period, there has been an aggregate increase of 50 percentage points or more in the percentage of our common stock owned by one or more of our "5-percent stockholders" (as determined under Section 382 of the Code).

The rights plan provides that if any person becomes the beneficial owner (as defined in the Code) of 4.9% or more of our common stock, stockholders other than the triggering stockholder will have the right to purchase additional shares of our common stock at half the market price, thereby diluting the triggering stockholder; provided that stockholders whose beneficial ownership, as defined in Section 382 of the Code, exceeded 4.9% of our common stock outstanding on February 11, 2015 will not be deemed to have triggered the rights plan, so long as they do not thereafter acquire beneficial ownership of additional common stock other than in certain specified exempt transactions.

The rights will expire at the close of business on May 31, 2019, unless earlier redeemed or exchanged. Our Board of Directors has the power to accelerate or extend the expiration date of the rights. The NOL protective provisions of the rights plan described above will be effective until the earliest of the close of business on (i) May 31, 2019, (ii) the date on which our Board of Directors determines that these provisions are no longer necessary for the protection of certain tax benefits because of the repeal of Section 382 of the Code, (iii) the first day of a taxable year as to which our Board of Directors determines that no tax benefits may be carried forward, or (iv) such other date as our Board of Directors determines that these provisions are no longer necessary for the preservation of tax benefits (the "Special Period"). After the end of the Special Period, the triggering threshold for the rights issued pursuant to the rights plan will revert to 15% of our outstanding common stock and the definition of "beneficial owner" will revert to definitions that do not track Section 382 of the Code. At our 2016 annual meeting our stockholders ratified, on an advisory basis, the extension of the term of the rights plan and the NOL protective provisions described above.

A board committee composed solely of independent directors reviews the rights plan at least once every three years to determine whether to modify the rights plan in light of all relevant factors. This review was most recently conducted in November 2015. The next review is required by the end of 2018.

Restated Certificate of Incorporation

Our Restated Certificate of Incorporation also restricts certain transfers of our common stock and includes provisions intended to further protect the tax benefits of our NOL carryforwards. Subject to certain limited exceptions, these transfer restrictions restrict any person from transferring our common stock (or any interest in our common stock) if the transfer would result in a stockholder (or several stockholders, in the aggregate, who hold their stock as a "group" under Section 382 of the Code) owning 4.9% or more of our common stock. Any direct or indirect transfer attempted in violation of these transfer restrictions would be void as of the date of the prohibited transfer as to the purported transferee, and the purported transferee would not be recognized as the owner of the shares attempted to be owned in violation of the transfer restrictions for any purpose, including for purposes of voting and receiving dividends or other distributions in respect of that common stock, or in the case of options, receiving our common stock in respect of their exercise. These restrictions are effective until the earliest of (i) the close of business on May 31, 2019, (ii) the repeal of Section 382 of the Code if our Board of Directors determines that the restrictions are no longer necessary or desirable for the preservation of tax benefits, (iii) the close of business on the first day of a taxable year as to which our Board of Directors determines that no tax benefits may be carried forward, or (iv) such other date as determined by our Board of Directors pursuant to the provisions described above.

Treatment of Berkshire Hathaway under Rights Plan and Restated Certificate of Incorporation

Pursuant to a Shareholder's Agreement reached in 2006, Berkshire Hathaway and certain of its affiliates may acquire beneficial ownership of up to 50% of our voting stock on a fully-diluted basis without triggering the ownership thresholds in our Restated Certificate of Incorporation or the rights plan, and may acquire beneficial ownership of more than 50% of our voting stock on a fully-diluted basis without triggering the ownership thresholds in our Restated Certificate of Incorporation or the rights plan through an offer to purchase all of our common stock that remains open for at least 60 days, in each case subject to specified exceptions.

18. Lease Commitments

We lease some of our offices, buildings, machinery and equipment, and autos under noncancelable operating leases. These leases have various terms and renewal options. Lease expense amounted to $37 million in 2016, $36 million in 2015 and $41 million in 2014. Future minimum lease payments required under operating leases with initial or remaining noncancelable terms in excess of one year as of December 31, 2016 were as follows:

(millions)	2017	2018	2019	2020	2021	After 2021
Future minimum lease payments	$ 31	$ 26	$ 22	$ 17	$ 12	$ 7

19. Litigation

WALLBOARD PRICING CLASS ACTION LAWSUITS

In the first quarter of 2015, USG, United States Gypsum Company, L&W Supply Corporation, and seven other wallboard manufacturers were named as defendants in a lawsuit filed in federal court in California by twelve homebuilders alleging that since at least September 2011, U.S. wallboard manufacturers conspired to fix and raise the price of gypsum wallboard sold in the United States and to effectuate the alleged conspiracy by ending the practice of providing job quotes on wallboard. The lawsuit was transferred to the United States District Court for the Eastern District of Pennsylvania under the title In re: Domestic Drywall Antitrust Litigation, MDL No. 2437. In the second quarter of 2016, the Court dismissed with prejudice the portions of the homebuilders' complaint alleging a conspiracy in 2014 and 2015, ruling that there were insufficient factual allegations to allow such a claim to go forward. The homebuilders' claims alleging a conspiracy prior to 2014 have not been dismissed, and the case proceeds as to those claims. USG has agreed to defend and indemnify L&W Supply Corporation in connection with this matter.

Beginning in the third quarter of 2013, class action lawsuits making similar allegations with regard to Canada were filed in Quebec, Ontario and British Columbia courts on behalf of purchasers of wallboard in Canada and naming USG Corporation, United States Gypsum Company, CGC Inc., and other wallboard manufacturers as defendants.

We believe that the cost, if any, of resolving the homebuilders' lawsuit and Canadian class action litigation will not have a material effect on our results of operations, financial position or cash flows.

ENVIRONMENTAL LITIGATION

We have been notified by state and federal environmental protection agencies of possible involvement as one of numerous "potentially responsible parties" in a number of Superfund sites in the United States. As a potentially responsible party, we may be responsible to pay for some part of the cleanup of hazardous waste at those sites. In most of these sites, our involvement is expected to be minimal. In addition, we are involved in environmental cleanups of other property that we own or owned. As of December 31, 2016 and December 31, 2015, we had an accrual of $18 million and $16 million, respectively, for our probable and reasonably estimable liability in connection with these matters. Our accruals take into account all known or estimated undiscounted costs associated with these sites, including site investigations and feasibility costs, site cleanup and remediation, certain legal costs, and fines and penalties, if any. However, we continue to review these accruals as additional information becomes available and revise them as appropriate. Based on the information known to us, we believe these environmental matters will not have a material effect on our results of operations, financial position or cash flows.

OTHER LITIGATION

We are named as defendants in other claims and lawsuits arising from our operations, including lawsuits or claims arising from commercial disputes, product performance, product liabilities and worksite or vehicular accidents. We believe that we have properly accrued for our probable liability in connection with these claims and suits, taking into account the probability of liability, whether our exposure can be reasonably estimated and, if so, our estimate of our liability or the range of our liability. We do not expect these or any other litigation matters involving USG to have a material effect on our results of operations, financial position or cash flows.

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20. Quarterly Financial Data (unaudited)

	Quarter			
(millions, except per-share data)	First	Second	Third	Fourth
2016				
Net sales	$ 747	$ 769	$ 767	$ 734
Gross profit	181	193	181	150
Operating profit	116	122	97	59
Income from continuing operations	60	67	56	28
Income from discontinued operations, net of tax	7	7	6	—
Gain on sale of discontinued operations, net of tax	—	—	—	279
Net income	67	74	62	307
Income per average common share:				
Basic (a)	0.46	0.50	0.43	2.10
Diluted (a)	0.46	0.50	0.42	2.07
2015				
Net sales	$ 708	$ 740	$ 747	$ 718
Gross profit	146	170	169	165
Operating profit	72	95	94	94
Income from continuing operations (b)	20	69	68	819
Income (loss) from discontinued operations, net of tax	4	10	8	(7)
Net income (b)	24	79	76	812
Income per average common share:				
Basic (a)	0.16	0.54	0.52	5.58
Diluted (a)	0.16	0.54	0.52	5.51

(a) The sum of the four quarters is not necessarily the same as the total for the year.

(b) Income from continuing operations and net income attributable to USG for the fourth quarter of 2015 included a reversal of an income tax valuation allowance of $731 million.

21. Subsequent Event

On January 31, 2017, the Board of Directors approved a share repurchase program in which we may purchase up to $250 million of our common stock. Under the program, we may repurchase shares from time to time in open market transactions or in privately-negotiated transactions in accordance with applicable securities laws. We may discontinue the program at any time. The timing and the amount of any repurchases will be determined based on market conditions and other factors. Share repurchases will be funded with available cash on hand. Through date of filing, repurchases have been immaterial.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of USG Corporation:

We have audited the accompanying consolidated balance sheets of USG Corporation and subsidiaries (the "Corporation") as of December 31, 2016 and 2015, and the related consolidated statements of income, comprehensive income (loss), stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2016. Our audits also included the financial statement Schedule II-Valuation and Qualifying Accounts. These consolidated financial statements and financial statement schedule are the responsibility of the Corporation's management. Our responsibility is to express an opinion on the financial statements and financial statement schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of USG Corporation and subsidiaries as of December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, such financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Corporation's internal control over financial reporting as of December 31, 2016, based on the criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 8, 2017 expressed an unqualified opinion on the Corporation's internal control over financial reporting.

/s/ DELOITTE & TOUCHE LLP
Chicago, Illinois
February 8, 2017

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USG CORPORATION
SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS

		Additions	
(millions)	Balance at beginning of period	Charged to costs and expenses	Charged to other accounts

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

☑ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended March 31, 2017

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from __________ to __________

Commission File Number 1-8864

USG CORPORATION
(Exact name of registrant as specified in its charter)

Delaware	36-3329400
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
550 West Adams Street, Chicago, Illinois	60661-3676
(Address of principal executive offices)	(Zip code)

Registrant's telephone number, including area code (312) 436-4000

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☑ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of large accelerated filer, accelerated filer, smaller reporting company, and emerging growth company in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☑	Accelerated filer	☐
Non-accelerated filer	☐	(Do not check if a smaller reporting company)	
		Smaller reporting company	☐
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

0343

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☑

The number of shares of the registrant's common stock outstanding as of March 31, 2017 was 145,792,158.

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PART I. FINANCIAL INFORMATION
ITEM 1. FINANCIAL STATEMENTS

USG CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF INCOME
(Unaudited)

(millions, except per-share and share data)	Three months ended March 31, 2017	Three months ended March 31, 2016
Net sales	$ 767	$ 747
Cost of products sold	603	566
Gross profit	164	181
Selling and administrative expenses	73	68
Recovery of receivable	—	(3)
Operating profit	91	116
Income from equity method investments	13	7
Interest expense	(20)	(40)
Interest income	1	2
Loss on extinguishment of debt	—	(2)
Other (expense) income, net	(1)	3
Income from continuing operations before income taxes	84	86
Income tax expense	(29)	(26)
Income from continuing operations	55	60
Income from discontinued operations, net of tax	—	7
Net income	$ 55	$ 67
Earnings per average common share - basic:		
Income from continuing operations	$ 0.38	$ 0.41
Income from discontinued operations	—	0.05
Net income	$ 0.38	$ 0.46
Earnings per average common share - diluted:		
Income from continuing operations	$ 0.37	$ 0.41
Income from discontinued operations	—	0.05
Net income	$ 0.37	$ 0.46
Average common shares	146,309,994	145,819,026
Dilutive awards under long-term incentive plan	2,420,360	1,167,366
Average diluted common shares	148,730,354	146,986,392

See accompanying Notes to Condensed Consolidated Financial Statements.

USG CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(Unaudited)

(millions)	Three months ended March 31, 2017	2016
Net income	$ 55	$ 67
Other comprehensive income (loss), net of tax:		
Derivatives qualifying as cash flow hedges:		
Loss on derivatives qualifying as cash flow hedges, net of tax benefit of $3 and $3, respectively	(6)	(8)
Less: Reclassification adjustment for loss on derivatives included in net income, net of tax benefit of $0 and $1, respectively	—	(2)
Net derivatives qualifying as cash flow hedges	(6)	(6)
Pension and postretirement benefits:		
Changes in pension and postretirement benefits, net of tax benefit of $0 and $1, respectively	(1)	(3)
Less: Amortization of prior service cost included in net periodic pension cost, net of tax benefit of $0 in both periods	—	—
Net pension and postretirement benefits	(1)	(3)
Foreign currency translation:		
Changes in foreign currency translation, net of tax benefit of $0 in both periods	40	24
Other comprehensive income, net of tax	$ 33	$ 15
Comprehensive income	$ 88	$ 82

See accompanying Notes to Condensed Consolidated Financial Statements.

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USG CORPORATION
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited)

(millions, except share data)	March 31, 2017	December 31, 2016
Assets		
Cash and cash equivalents	$ 341	$ 427
Short-term marketable securities	69	62
Receivables (net of reserves 2017 - $8 and 2016 - $8)	264	183
Inventories	243	236
Income taxes receivable	1	1
Other current assets	35	40
Total current assets	953	949
Long-term marketable securities	24	29
Property, plant and equipment (net of accumulated depreciation and depletion - 2017 - $1,995 and 2016 - $1,960)	1,715	1,707
Deferred income taxes	493	492
Equity method investments	665	628
Other assets	62	64
Total assets	$ 3,912	$ 3,869
Liabilities and Stockholders' Equity		
Accounts payable	$ 233	$ 237
Accrued expenses	126	175
Current portion of long-term debt	500	—
Income taxes payable	10	10
Total current liabilities	869	422
Long-term debt	584	1,083
Deferred income taxes	4	4
Pension and other postretirement benefits	292	290
Other liabilities	187	184
Total liabilities	1,936	1,983
Preferred stock – $1 par value, authorized 36,000,000 shares; outstanding - none	—	—
Common stock – $0.10 par value; authorized 200,000,000 shares; issued: 2017 - 146,513,000 shares and 2016 - 146,167,000 shares	15	15
Treasury stock at cost – 2017- 721,000 shares and 2016 - 0 shares	(24)	—
Additional paid-in capital	3,039	3,038
Accumulated other comprehensive loss	(352)	(385)
Retained earnings (accumulated deficit)	(702)	(782)
Total stockholders' equity	1,976	1,886
Total liabilities and stockholders' equity	$ 3,912	$ 3,869

See accompanying Notes to Condensed Consolidated Financial Statements.

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USG CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

(millions)	Three months ended March 31, 2017	2016
Operating Activities		
Net income	$ 55	$ 67
Less: income from discontinued operations	—	7
Income from continuing operations	55	60
Adjustments to reconcile net income from continuing operations to net cash:		
Depreciation, depletion and amortization	33	34
Loss on extinguishment of debt	—	2
Recovery of receivable	—	(3)
Share-based compensation expense	4	4
Deferred income taxes	29	25
Income from equity method investments	(13)	(7)
Pension settlement	—	2
Change in operating assets and liabilities	(138)	(158)
Other, net	1	(5)
Net cash used for operating activities of continuing operations	(29)	(46)
Net cash (used for) provided by operating activities of discontinued operations	(1)	16
Net cash used for operating activities	$ (30)	$ (30)
Investing Activities		
Purchases of marketable securities	(24)	(79)
Sales or maturities of marketable securities	22	84
Capital expenditures	(39)	(14)
Return of restricted cash	—	9
Net cash used for investing activities of continuing operations	(41)	—
Net cash provided by (used for) investing activities of discontinued operations	6	(1)
Net cash used for investing activities	$ (35)	$ (1)
Financing Activities		
Repayment of debt	—	(64)
Issuance of common stock	3	—
Repurchase of common stock	(25)	—
Repurchases of common stock to satisfy employee tax withholding obligations	(3)	(1)
Net cash used for financing activities of continuing operations	$ (25)	$ (65)
Effect of exchange rate changes on cash from continuing operations	4	1
Net decrease in cash and cash equivalents from continuing operations	$ (91)	$ (110)
Net increase in cash and cash equivalents from discontinued operations	5	15
Net decrease in cash and cash equivalents	(86)	(95)
Cash and cash equivalents at beginning of period	427	442
Cash and cash equivalents at end of period	$ 341	$ 347

Supplemental Cash Flow Disclosures:

Interest paid, net of capitalized interest	$ 35	$ 47
Income taxes paid, net of refunds received	2	3
Noncash Investing and Financing Activities:		
Amount in accounts payable for capital expenditures	9	3

See accompanying Notes to Condensed Consolidated Financial Statements.

USG CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

In the following Notes to Condensed Consolidated Financial Statements, "USG," "we," "our" and "us" refer to USG Corporation, a Delaware corporation, and its subsidiaries included in the condensed consolidated financial statements, except as otherwise indicated or as the context otherwise requires.

1. Organization, Consolidation and Presentation of Financial Statements

PREPARATION OF FINANCIAL STATEMENTS
We prepared the accompanying unaudited condensed consolidated financial statements of USG Corporation in accordance with applicable United States Securities and Exchange Commission, or SEC, guidelines pertaining to interim financial information. The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. Actual results could differ materially from those estimates. In the opinion of our management, the financial statements reflect all adjustments, which are of a normal recurring nature, necessary for a fair presentation of our financial results for the interim periods. The results of operations for the three months ended March 31, 2017 are not necessarily indicative of the results of operations to be expected for the entire year.

Certain reclassifications have been made to prior year amounts in order to conform with current year presentation. On our condensed consolidated statements of cash flows, we condensed the increase/decrease in working capital, other assets, pension and postretirement benefits, and other liabilities into "Change in operating assets and liabilities".

In conjunction with the sale of L&W Supply Corporation, or L&W, which was completed on October 31, 2016 to American Builders & Contractors Supply Co., Inc., or ABC Supply, L&W is presented as discontinued operations. The results of L&W, which consisted of our Distribution segment, have been excluded from segment results. The 2016 results of our Gypsum and Ceilings segment have been revised to reflect only the sales of USG products from Gypsum and Ceilings to L&W that were sold by L&W to third party customers prior to March 31, 2016. All sales to L&W subsequent to the close of the transaction are included in net sales on our condensed consolidated statements of income. See Note 2 for further discussion.

Our segments are structured around our key products and business units: Gypsum, Ceilings and USG Boral Building Products, or UBBP.

Our Gypsum reportable segment is an aggregation of the operating segments of the gypsum businesses in the United States, Canada, Mexico, and Latin America, our mining operation in Canada, which we indefinitely idled in the third quarter of 2016 and our shipping company, which we exited in 2015. Gypsum manufactures products throughout the United States, Canada and Mexico. These products include USG Sheetrock® brand gypsum wallboard, Sheetrock® brand joint compound, Durock® brand cement board, Levelrock® brand gypsum underlayment, Fiberock® brand backerboard, Securock® brand glass mat sheathing used for building exteriors, Securock® brand gypsum fiber and glass mat panels used as roof cover board and USG Structural Panels.

Our Ceilings reportable segment is an aggregation of the operating segments of the ceilings businesses in the United States, Canada, Mexico, and Latin America. Ceilings manufactures ceiling tile in the United States and ceiling grid in the United States and Canada.

UBBP is our 50/50 joint ventures with Boral Limited. UBBP manufactures, distributes and sells certain building products, mines raw gypsum and sells natural and synthetic gypsum throughout Asia, Australasia and the Middle East.

These condensed consolidated financial statements and notes are to be read in conjunction with the financial statements and notes included in USG's Annual Report on Form 10-K for the fiscal year ended December 31, 2016, which we filed with the SEC on February 8, 2017.

RECENTLY ADOPTED ACCOUNTING PRONOUNCEMENTS
We adopted Accounting Standards Update, or ASU, 2016-09, "Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting," on January 1, 2017. This ASU simplifies certain aspects of accounting for employee share-based payments. Upon adoption, we recorded to retained earnings a $25 million cumulative-effect adjustment for previously unrecognized excess tax benefits and an immaterial cumulative-effect adjustment for the reversal of cumulative forfeiture estimates to record forfeitures as they occur.

RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS

In March 2017, the Financial Accounting Standards Board, or FASB, issued ASU, 2017-07, “Compensation - Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost,” which will require entities to disaggregate the current service cost component from the other components of net benefit cost. Current service cost will be presented with other current compensation costs for related employees in the income statement and the other components of net benefit cost will be presented below operating profit. In addition, under the new ASU, only the service cost component of net benefit cost is eligible for capitalization when applicable. We will adopt the standard on January 1, 2018 and will adopt using the retrospective method for presentation of service cost and other components in the income statement. We will prospectively adopt the requirement to limit the capitalization of benefit costs to the service cost component. Select line items from our condensed consolidated statements of income for the three months ended March 31, 2017 and the year end December 31, 2016 which reflect the changes in presentation of net benefit costs are as follows.

(millions)	Three months ended March 31, 2017		Year ended December 31, 2016	
	After Adoption	As Reported	After Adoption	As Reported
Gross profit	$ 158	$ 164	$ 700	$ 705
Operating profit	84	91	396	394
Other net periodic postretirement (benefit) costs	(7)	—	2	—
Net income	55	55	510	510

We do not expect the adoption of ASU 2017-07 to have a significant impact on our other financial statements.

In February 2016, the FASB issued ASU 2016-02, “Leases (Topic 842),” which supersedes existing lease guidance to require lessees to recognize assets and liabilities on the balance sheet for the rights and obligations created by long-term leases and to disclose additional quantitative and qualitative information about leasing arrangements. The standard will be effective for us in the first quarter of 2019 and we will adopt the new standard using the modified retrospective approach. While we continue to evaluate the impact of the new standard, we believe the standard will require us to implement a new lease accounting system and related policies and processes. Further, we anticipate the adoption of ASU 2016-02 will have a significant impact to our condensed consolidated balance sheets, condensed consolidated statements of income and disclosures, but we are unable to quantify the financial statement impact at this time.

In May 2014, the FASB issued ASU 2014-09, “Revenue from Contracts with Customers (Topic 606),” which supersedes the revenue recognition requirements in “Revenue Recognition (Topic 605),” and requires entities to recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Subsequently, the FASB has issued various ASUs to provide further clarification around certain aspects of Topic 606. We intend to adopt the standard on January 1, 2018 retrospectively with practical expedients. We do not expect the adoption to have a significant impact to our condensed consolidated financial statements, but it will impact our disclosures.

2. Discontinued Operations

The sale of L&W was completed on October 31, 2016. The summarized financial information related to L&W that has been excluded from continuing operations and reported as a discontinued operation is as follows:

(millions)	Three months ended March 31, 2016
Net sales	$ 357
Cost of products sold	343
Gross profit	14
Selling and administrative expenses	3
Operating profit	11
Income tax expense	(4)
Income from discontinued operations	$ 7

Additionally, upon the close of the sale, we entered into a supply agreement with L&W. For the three months ended March 31, 2017, we recorded sales to L&W of $131 million. In the comparative period for 2016, we recorded sales of $145 million, which reflect only the sales that were sold by L&W to third party customers through March 31, 2016. We recorded a cash inflow of $109 million from L&W in the three months ended March 31, 2017 related to payments on trade receivables.

3. Equity Method Investments

Equity method investments as of March 31, 2017 and December 31, 2016, were as follows:

	March 31, 2017		December 31, 2016	
(dollars in millions)	Carrying Value	Ownership Percentage	Carrying Value	Ownership Percentage
USG Boral Building Products	$ 658	50%	$ 621	50%
Other equity method investments	7	33% - 50%	7	33% - 50%
Total equity method investments	$ 665		$ 628	

Investment in USG Boral Building Products

UBBP is our 50/50 joint ventures with Boral Limited, or Boral. We account for our investment in UBBP using the equity method of accounting. As of March 31, 2017, the amount of our consolidated retained earnings which represents undistributed earnings from UBBP is $56 million.

In the event certain U.S. Dollar denominated performance targets are satisfied by UBBP, we will be obligated to pay Boral a scheduled earnout payment of up to $50 million based on performance during the first five years after closing on February 27, 2014. We have not recorded a liability for this earnout payment as we have concluded that it is currently not probable that the five-year performance target will be achieved. If our conclusion on the probability of achievement was to change, we will record a liability representing the present value of the earnout payment with a corresponding increase to our investment.

Our underlying net assets in our investments are denominated in a foreign currency, and translation gains or losses will impact the recorded value of our investments. Translation gains or losses recorded in other comprehensive income were as follows:

	Three months ended March 31,	
(millions)	2017	2016
Translation gain	$ 24	$ 17

Summarized financial information for our equity method investments is as follows:

	Three months ended March 31,	
(millions)	2017	2016
USG Boral Building Products:		
Net sales	$ 276	$ 229
Gross profit	86	65
Operating profit	35	23
Income from continuing operations before income taxes	38	24
Net income	26	15
Net income attributable to USG Boral Building Products	25	14
USG share of income from investment accounted for using the equity method	13	7

TRANSACTIONS WITH UBBP

Our Gypsum segment sells products to UBBP. Total sales to UBBP for the three months ended March 31, 2017 and 2016 were immaterial.

In 2014, in connection with the formation of UBBP, we contributed our ownership interest in a joint venture in China to UBBP, but retained our loan receivable from this joint venture. As of both March 31, 2017 and December 31, 2016, the loan receivable, including interest, totaled $15 million and is included in "Other assets" on our accompanying condensed consolidated balance sheets.

4. Segments

Our operations are organized into three reportable segments: Gypsum, Ceilings and UBBP. As discussed in Note 2, the results of L&W for the three months ended March 31, 2016 are presented as discontinued operations. Additionally, the results of our Gypsum and Ceilings segments for the three months ended March 31, 2016 have been revised to reflect only the sales of USG products from Gypsum and Ceilings to L&W that had been sold by L&W to third party customers by March 31, 2016. See Note 3 for segment results for UBBP. Segment results for our Gypsum and Ceilings segments were as follows:

	Three months ended March 31,	
(millions)	2017	2016
Net Sales:		
Gypsum	$ 649	$ 628
Ceilings	120	121
Eliminations	(2)	(2)
Total	$ 767	$ 747
Operating Profit (Loss):		
Gypsum	$ 91	$ 109
Ceilings	23	28
Corporate	(23)	(21)
Total	$ 91	$ 116

5. Marketable Securities

Marketable securities are classified as available-for-sale securities and reported at fair value, with unrealized gains and losses excluded from earnings and reported in "Accumulated other comprehensive loss" on our accompanying condensed consolidated balance sheets.

Our investments in marketable securities consisted of the following:

	As of March 31, 2017		As of December 31, 2016	
(millions)	Amortized Cost	Fair Value	Amortized Cost	Fair Value
Corporate debt securities	$ 65	$ 65	$ 69	$ 69
U.S. government and agency debt securities	14	14	14	14
Non-U.S. government debt securities	1	1	—	—
Asset-backed debt securities	6	6	2	2
Certificates of deposit	7	7	6	6
Total marketable securities	$ 93	$ 93	$ 91	$ 91

The realized and unrealized gains and losses for the three months ended March 31, 2017 and 2016 were immaterial. Cost basis for securities sold are determined on a first-in-first-out basis.

Contractual maturities of marketable securities as of March 31, 2017 were as follows:

(millions)	Amortized Cost	Fair Value
Due in 1 year or less	$ 69	$ 69
Due in 1-5 years	24	24
Total marketable securities	$ 93	$ 93

Actual maturities may differ from the contractual maturities because issuers of the securities may have the right to prepay them.

6. Debt

Total debt, including the current portion of long-term debt, consisted of the following:

(millions)	March 31, 2017	December 31, 2016
5.5% senior notes due 2025	$ 350	$ 350
7.75% senior notes due 2018	500	500
Industrial revenue bonds (due 2028 through 2034)	239	239
Total	$ 1,089	$ 1,089
Less: Unamortized debt issuance costs	5	6
Total	$ 1,084	$ 1,083

CREDIT FACILITY

Our credit facility agreement requires us to maintain a minimum fixed charge coverage ratio in the event excess availability falls below a minimum threshold. Because our excess borrowing availability as of March 31, 2017 of $125 million exceeds this threshold, the requirement to maintain the minimum fixed charge coverage ratio is not applicable. As of March 31, 2017, we were in compliance with the covenants contained in our credit facility.

As of March 31, 2017 and during the quarter then-ended, there were no borrowings under the facility. Had there been any borrowings as of that date, the applicable interest rate would have been 2.15% for loans in the U.S. and 1.94% for loans in Canada. Outstanding letters of credit totaled $37 million as of March 31, 2017.

REPURCHASE OF SENIOR NOTES

In the first three months of 2016, we repurchased $62 million of our 6.3% Senior Notes due in 2016 on the open market. The transaction included premiums of $2 million and accrued interest of $1 million for aggregate consideration of $65 million. As a result of the repurchases, we recorded a loss on early extinguishment of debt, before tax, of $2 million including premiums, write-off of deferred financing fees.

OTHER

(millions)	March 31, 2017	December 31, 2016
Fair value of debt	$ 1,128	$ 1,129
Accrued interest	14	31

The fair values of our debt were determined utilizing prices from independent pricing services. The vendors' methodologies utilize various forms of market data, including but not limited to, trade data, yield, spreads, bids and offers. We review the values provided by the independent pricing service for reasonableness by comparing the valuations received from the independent pricing service to valuations from at least one other observable source. We have not adjusted the prices obtained from the independent pricing service. As a result, the fair values are classified as Level 2.

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7. Derivative Instruments

We use derivative instruments to manage selected commodity price and foreign currency exposures as described below. We do not use derivative instruments for speculative trading purposes, and we typically do not hedge beyond five years. Cash flows from derivative instruments are included in net cash used for operating activities in the condensed consolidated statements of cash flows. Gains and losses on contracts designated as cash flow hedges are reclassified into earnings when the underlying forecasted transactions affect earnings. For contracts designated as cash flow hedges, we reassess the probability of the underlying forecasted transactions occurring on a quarterly basis.

Derivative Instruments	Type	Hedged Item	Aggregate Notional Amount	Contracts Maturing Through
Commodity	Natural gas swaps	Purchases of natural gas	33 million mmBTUs*	December 31, 2021
Foreign Exchange	Forward contracts	Purchases of products and services denominated in a foreign currency	$89 million	December 31, 2018
Foreign Exchange	Forward contracts	Intercompany Loan	$23 million	May 31, 2017

* - millions of British Thermal Units

COUNTERPARTY RISK, MASTER NETTING ARRANGEMENTS AND BALANCE SHEET OFFSETTING

We are exposed to credit losses in the event of nonperformance by the counterparties to our derivative instruments. As of March 31, 2017, our derivatives were in a $7 million net liability position. All of our counterparties have investment grade credit ratings; accordingly, we anticipate that they will be able to fully satisfy their obligations under the contracts.

All of our derivative contracts are governed by master netting agreements negotiated between us and the counterparties that reduce our counterparty credit exposure. The agreements outline the conditions (such as credit ratings and net derivative fair values) upon which we, or the counterparties, are required to post collateral. As required by certain of our agreements, we had $6 million of collateral posted with our counterparties related to our derivatives as of March 31, 2017. Amounts paid as cash collateral are included in "Receivables" on our accompanying condensed consolidated balance sheets.

We have not adopted an accounting policy to offset fair value amounts related to derivative contracts under our master netting arrangements; therefore, individual derivative contracts are reflected on a gross basis, as either assets or liabilities, on our accompanying condensed consolidated balance sheets, based on their fair value as of the balance sheet date.

FINANCIAL STATEMENT INFORMATION

The following are the pretax effects of derivative instruments on the condensed consolidated statements of income for the three months ended March 31, 2017 and 2016.

	Amount of Gain or (Loss) Recognized in Other Comprehensive Income on Derivatives (Effective Portion)		Location of Gain or (Loss) Reclassified from AOCI into Income (Effective Portion)	Amount of Gain or (Loss) Reclassified from AOCI into Income (Effective Portion)	
(millions)	2017	2016		2017	2016
Derivatives in Cash Flow Hedging Relationships					
Commodity contracts	$ (9)	$ (5)	Cost of products sold	$ —	$ (5)
Foreign exchange contracts	—	(6)	Cost of products sold	—	2
Total	$ (9)	$ (11)		$ —	$ (3)

For both commodity contracts and foreign exchange contracts, no ineffectiveness was recorded in three months ended March 31, 2017 and 2016.

	Location of Gain or (Loss) Recognized in Income on Derivatives	Amount of Gain or (Loss) Recognized in Income on Derivatives	
(millions)		2017	2016
Derivatives Not Designated as Hedging Instruments			
Commodity contracts	Cost of products sold	$ (1)	$ (1)
Total		$ (1)	$ (1)

The following are the fair values of derivative instruments and the location on our accompanying condensed consolidated balance sheets as of March 31, 2017 and December 31, 2016.

	Balance Sheet Location	Fair Value		Balance Sheet Location	Fair Value	
(millions)		3/31/17	12/31/16		3/31/17	12/31/16
Derivatives in Cash Flow Hedging Relationships						
Commodity contracts	Other current assets	$ 4	$ 8	Accrued expenses	$ 4	$ 4
Commodity contracts	Other assets	1	3	Other liabilities	8	5
Foreign exchange contracts	Other current assets	1	1	Accrued expenses	1	1
Total derivatives in cash flow hedging relationships		$ 6	$ 12		$ 13	$ 10
Derivatives Not Designated as Hedging Instruments						
Commodity contracts	Other current assets	$ —	$ 1	Accrued expenses	$ —	$ —
Total derivatives not designated as hedging instruments		$ —	$ 1		$ —	$ —
Total derivatives	Total assets	$ 6	$ 13	Total liabilities	$ 13	$ 10

As of March 31, 2017, we had no derivatives designated as fair value hedges or net investment hedges.

8. Fair Value Measurements

Certain assets and liabilities are required to be recorded at fair value. There are three levels of inputs that may be used to measure fair value. Level 1 uses quoted prices for identical assets and liabilities in active markets. Level 2 uses quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in markets that are not active; and model-derived valuations in which all significant inputs and significant value drivers are observable in active markets. Level 3 uses valuations derived from valuation techniques in which one or more significant inputs or significant value drivers are unobservable.

The cash equivalents and equity mutual funds shown in the table below primarily consist of money market funds that are valued based on quoted prices in active markets and, as a result, are classified as Level 1. Marketable securities are valued using a "market value" approach and values are based on quoted prices or other observable market inputs received from data providers. Derivatives are valued using the "income" approach such as discounted-cash-flow models and readily observable market data. The inputs for the valuation models are obtained from data providers and include end-of-period spot and forward natural gas prices, foreign currency exchange rates, natural gas price volatility and LIBOR and swap rates for discounting the cash flows implied from the derivative contracts. Therefore, we have classified our marketable securities and derivatives as Level 2.

Our assets and liabilities measured at fair value on a recurring basis were as follows:

	Quoted Prices in Active Markets for Identical Assets (Level 1)		Significant Other Observable Inputs (Level 2)		Significant Unobservable Inputs (Level 3)		Total	
(millions)	3/31/17	12/31/16	3/31/17	12/31/16	3/31/17	12/31/16	3/31/17	12/31/16
Cash equivalents	$ 37	$ 38	$ 32	$ 34	$ —	$ —	$ 69	$ 72
Equity mutual funds	5	5	—	—	—	—	5	5
Marketable securities:								
Corporate debt securities	—	—	65	69	—	—	65	69
U.S. government and agency debt securities	—	—	14	14	—	—	14	14
Non-U.S. government debt securities	—	—	1	—	—	—	1	—
Asset-backed debt securities	—	—	6	2	—	—	6	2
Certificates of deposit	—	—	7	6	—	—	7	6
Derivative assets	—	—	6	13	—	—	6	13
Derivative liabilities	—	—	(13)	(10)	—	—	(13)	(10)

9. Employee Retirement Plans

The components of net pension and postretirement benefit costs are summarized in the following table:

	Three months ended March 31,	
(millions)	2017	2016
Pension:		
Service cost of benefits earned	$ 10	$ 11
Interest cost on projected benefit obligation	16	17
Expected return on plan assets	(23)	(22)
Settlement	—	2
Net amortization	5	5
Net pension cost [(a)]	$ 8	$ 13
Postretirement:		
Service cost of benefits earned	$ 1	$ 1
Interest cost on projected benefit obligation	1	1
Net amortization	(6)	(7)
Net postretirement benefit[(b)]	$ (4)	$ (5)

(a) Net pension cost, excluding settlement costs, includes expenses allocated to income from discontinued operations for L&W totaling $2 million for the three months ended March 31, 2016.

(b) Net postretirement benefit includes a net benefit allocated to income from discontinued operations for L&W totaling $1 million for the three months ended March 31, 2016.

During the first three months of 2017, we made cash contributions of $2 million to our pension plan in Canada. We expect to make total contributions to our pension plans in 2017 of approximately $74 million.

10. Share-Based Compensation

During the first three months of 2017, we granted share-based compensation in the form of market share units, or MSUs, performance shares, and restricted stock units, or RSUs, to eligible participants under our 2016 Long-Term Incentive Plan. We recognize expense on all share-based grants over the service period, which is the shorter of the period until the employees' retirement eligibility dates and the service period of the award for awards expected to vest. We record forfeitures as they occur. Awards granted during the first three months of 2017, weighted average fair value, and assumptions used to determine fair value were as follows:

	MSUs	Performance Shares	RSUs
Awards granted	371,346	112,732	49,000
Weighted average fair value [(a)]	$ 35.79	$ 39.42	$ 31.36
Expected volatility [(b)]	32.10%	32.10%	N/A
Risk-free rate [(c)]	1.39%	1.39%	N/A
Expected term (in years) [(d)]	2.96	2.96	N/A
Expected dividends	—	—	N/A

(a) Fair value of MSUs and Performance Shares is estimated on the date of grant using the Monte Carlo simulation that used the assumptions outlined above. Fair value of RSUs is equal to the closing price of our common stock on the date of grant.
(b) The expected volatility rate was based on stock price history immediately prior to grant for a period commensurate with the expected term.
(c) The risk-free rate was based on zero coupon U.S. government issues at the time of grant.
(d) The expected term represents the period from the valuation date to the end of the performance period.

Terms of the awards granted during the first three months of 2017 were as follows:

	MSUs	Performance Shares	RSUs
Maximum shares/units earned	Varies from 0% to 150% of the number of MSUs awarded depending on the actual performance of our stock price	Varies from 0% to 200% of the number of performance shares awarded depending on the performance of our total stockholder return relative to the performance of the Dow Jones U.S. Construction and Materials Index [(a)]	100%
Vesting Provisions	Three-year performance period	Three-year performance period	Specified number of years from the grant date
Vesting in the case of termination of employment due to death, disability, retirement or change in control during performance period [(b)]	Pro-rated based on the number of full months employed in 2017 with awards issued at the end of the three-year period	Pro-rated based on the number of full months employed during the performance period with awards issued at the end of the three-year period	Varies.
Settlement	Settled in common stock at the end of the performance or vesting period		

(a) Adjustments to the performance of the Dow Jones U.S. Construction and Materials Index may be made in certain circumstances.
(b) Early vesting for MSUs, performance shares and RSUs in situations where there is a change in control also requires a related loss of employment or diminution of duties.

OTHER

MSUs, performance shares, RSUs, and stock options and deferred shares associated with our deferred compensation program for non-employee directors that were not included in the computation of diluted earnings per share for those periods because their inclusion would be anti-dilutive were as follows:

	Three months ended March 31,	
(millions, common shares)	2017	2016
MSUs, performance shares, RSUs and stock options	1.0	1.7
Deferred shares associated with a deferred compensation program for non-employee directors	—	0.2

11. Supplemental Balance Sheet Information

INVENTORIES

Total inventories consisted of the following:

(millions)	March 31, 2017	December 31, 2016
Finished goods	$ 134	$ 132
Work in progress	38	37
Raw materials	71	67
Total	$ 243	$ 236

ASSET RETIREMENT OBLIGATIONS

Changes in the liability for asset retirement obligations consisted of the following:

	Three months ended March 31,	
(millions)	2017	2016
Balance as of January 1	$ 113	$ 119
Accretion expense	1	2
Foreign currency translation	—	1
Balance as of March 31	$ 114	$ 122

12. Stockholders' Equity

TREASURY STOCK

Changes in treasury stock for the three months ended March 31, 2017 and 2016 were as follows:

	March 31, 2017		March 31, 2016	
(millions, except share data)	Treasury Shares (000)	Treasury Stock	Treasury Shares (000)	Treasury Stock
Balance as of January 1	—	$ —	—	$ —
Stock issuances	150	4	67	1
Repurchase of common stock for tax withholdings related to stock based compensation	(107)	(3)	(70)	(1)
Repurchase of common stock under share repurchase program	(764)	(25)	—	—
Balance as of March 31	(721)	$ (24)	(3)	$ —

ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

Changes in the balances of each component of AOCI for the three months ended March 31, 2017 and 2016 were as follows:

	Derivatives		Defined Benefit Plans		Foreign Currency Translation		AOCI	
(millions)	2017	2016	2017	2016	2017	2016	2017	2016
Balance as of January 1	$ 27	$ 20	$ (246)	$ (221)	$ (166)	$ (113)	$ (385)	$ (314)
Other comprehensive income (loss) before reclassifications, net of tax	(6)	(8)	(1)	(3)	40	24	33	13
Less: Amounts reclassified from AOCI, net of tax	—	(2)	—	—	—	—	—	(2)
Net other comprehensive income (loss)	(6)	(6)	(1)	(3)	40	24	33	15
Balance as of March 31	$ 21	$ 14	$ (247)	$ (224)	$ (126)	$ (89)	$ (352)	$ (299)

Amounts reclassified from AOCI, net of tax, for the three months ended March 31, 2017 and 2016, were as follows:

	Three months ended March 31,	
(millions)	2017	2016
Derivatives		
Net reclassification from AOCI for cash flow hedges included in cost of products sold	$ —	$ (3)
Less: Income tax benefit on reclassification from AOCI included in income tax (expense) benefit	—	(1)
Net amount reclassified from AOCI	$ —	$ (2)
Defined Benefit Plans		
Net reclassification from AOCI for amortization of prior service benefit included in cost of products sold	$ —	$ (2)
Net reclassification from AOCI for amortization of prior service cost included in selling and administrative expenses	—	2
Less: Income tax benefit on reclassification from AOCI included in income tax (expense) benefit	—	—
Net amount reclassified from AOCI	$ —	$ —

We estimate that we will reclassify a net immaterial after-tax loss on derivatives from AOCI to earnings within the next 12 months.

13. Income Taxes

In the first quarter of 2017, we recorded income tax expense of approximately $29 million, and our effective tax rate was 34.5%. In the first quarter of 2016, we recorded income tax expense of approximately $26 million, and our effective tax rate was 30.2%. The income tax expense for the three months ended both March 31, 2017 and 2016 reflected taxes from federal, foreign, state and local jurisdictions. Our effective tax rate in the first quarter of both 2016 and 2017 was lower than the U.S. statutory rate primarily because of earnings realized in countries that had lower statutory tax rates and our equity method income. Our effective tax rate in the future will depend on the portion of our profits earned within and outside the United States.

As of March 31, 2017, we had federal net operating loss, or NOL, carryforwards of approximately $846 million that are available to offset future federal taxable income and will expire in the years 2029 through 2032, none of which are subject to Internal Revenue Code limitations under Section 382. In addition, as of that date, we had federal AMT credit carryforwards of approximately $45 million that are available to reduce future regular federal income taxes over an indefinite period and foreign tax credit carryforwards of $145 million that are available to offset future federal taxable income and expire in the years 2022 through 2026. As of December 31, 2016, the foreign tax credits were $143 million and are attributable to tax planning strategies to optimize foreign tax credit utilization and management's intention to amend its tax returns for the tax years 2012-2014 in order to claim credits for previously deducted foreign tax. In order to fully realize these U.S. federal net deferred tax assets, taxable income of approximately $1.387 billion would need to be generated during the period before their expiration.

As of March 31, 2017, we had a gross deferred tax asset of $169 million related to our state NOLs and tax credit carryforwards. The NOLs will expire if unused in years 2018 through 2036. To the extent that we do not generate sufficient state taxable income within the statutory carryforward periods to utilize the NOL and tax credit carryforwards in these states, they will expire unused.

During the first three months of 2017, we recorded an increase in the valuation allowance against our deferred tax assets of $1 million for a total valuation allowance of $52 million. The increase in the valuation allowance relates to foreign tax credits generated in 2017 that may expire unused.

The Internal Revenue Code imposes limitations on a corporation's ability to utilize NOLs if it experiences an "ownership change" which can result from transactions increasing the ownership of certain stockholders in the stock of a corporation by more than 50 percentage points over a three-year period. If we were to experience an ownership change, utilization of our NOLs would be subject to an annual limitation that may be carried over to later years within the allowed NOL carryforward period. Over the entire carryforward period, we may not be able to use all our NOLs due to the aforementioned annual limitation. If an ownership change had occurred as of March 31, 2017, our annual U.S. federal NOL utilization would have been limited to approximately $97 million per year.

14. Litigation

WALLBOARD PRICING LAWSUITS

In the first quarter of 2015, USG, United States Gypsum Company, L&W Supply Corporation, and 7 other wallboard manufacturers were named as defendants in a lawsuit filed in federal court in California by 12 homebuilders alleging that since at least September 2011, U.S. wallboard manufacturers conspired to fix and raise the price of gypsum wallboard sold in the United States and to effectuate the alleged conspiracy by ending the practice of providing job quotes on wallboard. The lawsuit was transferred to the United States District Court for the Eastern District of Pennsylvania under the title In re: Domestic Drywall Antitrust Litigation, MDL No. 2437. In the second quarter of 2016, the Court dismissed with prejudice the portions of the homebuilders' complaint alleging a conspiracy in 2014 and 2015, ruling that there were insufficient factual allegations to allow such a claim to go forward. The homebuilders' claims alleging a conspiracy prior to 2014 have not been dismissed, and the case proceeds as to those claims. USG is retaining the liability with respect to L&W Supply Corporation.

Beginning in the third quarter of 2013, class action lawsuits making similar allegations with regard to Canada were filed in Quebec, Ontario and British Columbia courts on behalf of purchasers of wallboard in Canada and naming USG Corporation, United States Gypsum Company, CGC Inc., and other wallboard manufacturers as defendants.

We believe that the cost, if any, of resolving the homebuilders' lawsuit and Canadian class action litigation will not have a material effect on our results of operations, financial position or cash flows.

ENVIRONMENTAL LITIGATION

We have been notified by state and federal environmental protection agencies of possible involvement as one of numerous "potentially responsible parties" in a number of Superfund sites in the United States. As a potentially responsible party, we may be responsible to pay for some part of the cleanup of hazardous waste at those sites. In most of these sites, our involvement is expected to be minimal. In addition, we are involved in environmental cleanups of other property that we own or owned. As of March 31, 2017 and December 31, 2016, we had an accruals of $17 million and $18 million, respectively, for our probable and reasonably estimable liability in connection with these matters. Our accruals take into account all known or estimated undiscounted costs associated with these sites, including site investigations and feasibility costs, site cleanup and remediation, certain legal costs, and fines and penalties, if any. However, we continue to review these accruals as additional information becomes available and revise them as appropriate. Based on the information known to us, we believe these environmental matters will not have a material effect on our results of operations, financial position or cash flows.

15. Gypsum Transportation Limited

We exited our shipping operations in the second quarter of 2015. In November 2015, we entered into a release and debt settlement agreement to recover a portion of our loss incurred when our former trading partner ceased performing under the contract . We recorded a recovery of receivable of $8 million in the first quarter of 2016, which is presented as $3 million within "Recovery of receivable", $1 million within "Interest income" and $4 million within "Other (expense) income, net" on our condensed consolidated statement of income.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

In the following Management's Discussion and Analysis of Financial Condition and Results of Operations, "USG," "we," "our" and "us" refer to USG Corporation, a Delaware corporation, and its subsidiaries included in the condensed consolidated financial statements, except as otherwise indicated or as the context otherwise requires.

Overview

We are a leading manufacturer of building products and innovative building solutions. We produce a wide range of products for use in new residential, new nonresidential, and residential and nonresidential repair and remodel construction as well as products used in certain industrial processes. We estimate that during the first three months of 2017 in North America:

- residential and nonresidential repair and remodel activity accounted for approximately 52% of our net sales,
- new residential construction accounted for approximately 31% of our net sales,
- new nonresidential construction accounted for approximately 14% of our net sales, and
- other activities accounted for approximately 3% of our net sales.

During the first quarter of 2017, we expanded our wallboard portfolio with the launch of USG Sheetrock® Brand EcoSmart Panels. EcoSmart is our next generation of ultra-light wallboard in our USG Sheetrock® gypsum panels portfolio and is a sustainable and specifiable lightweight panel.

SEGMENTS

Our operations are organized into three segments: Gypsum, Ceilings and USG Boral Building Products, or UBBP. In conjunction with the sale of L&W Supply Corporation, or L&W, which was completed on October 31, 2016 to American Builders & Contractors Supply Co., Inc., or ABC Supply, L&W is presented as discontinued operations. The results of L&W, which consisted of our Distribution segment, have been excluded from segment results and the 2016 results of our Gypsum and Ceilings segment have been revised to reflect only the sales of USG products from Gypsum and Ceilings to L&W that were sold to third party customers prior to March 31, 2016. All L&W sales subsequent to the close of the transaction including those under a supply agreement that governs the sales of wallboard and certain other products from USG to L&W are included in net sales on our condensed consolidated statements of income.

Gypsum: Our Gypsum segment manufactures and markets gypsum and related products in the United States, Canada Mexico and Latin America. It includes United States Gypsum Company, or U.S. Gypsum, in the United States, CGC Inc., or CGC, in Canada, USG Mexico, S.A. de C.V., or USG Mexico, and subsidiaries in Latin America, our mining operation in Canada, which we indefinitely idled in the third quarter of 2016, and our shipping company, which we exited in 2015. Gypsum's products are used in a variety of building applications to construct walls, ceilings, roofs and floors of residential, commercial and institutional buildings, as well as in certain industrial applications. The major product lines within the Gypsum segment are:

Wallboard	Sheetrock® brand gypsum wallboard and Securock® brand glass mat sheathing portfolios
Surfaces	Sheetrock® brand joint compound portfolio, as well as corner bead, joint tape and plaster
Substrates	Durock® brand cement board, Fiberock® brand backerboard, Levelrock® brand systems of poured gypsum flooring, Securock® brand roof board, ExoAir® 430 brand air-water barrier system, industrial gypsum, and construction plaster products, sold under the brand names Red Top®, Imperial®, Diamond® and Supremo®

Ceilings: Our Ceilings segment manufactures and markets interior ceilings systems products in the United States, Canada, Mexico and Latin America. Ceilings includes USG Interiors, LLC, or USG Interiors in the United States, CGC, and USG Mexico and subsidiaries in Latin America. Ceilings is a leading supplier of interior ceilings products used primarily in commercial applications. Ceilings manufactures ceiling tile in the United States and ceiling grid in the United States and Canada. It markets ceiling tile and ceiling grid in the United States, Canada, Mexico, and Latin America.

USG Boral Building Products: USG Boral Building Products, or UBBP, is our 50/50 joint ventures with Boral Limited, or Boral. UBBP manufactures, distributes and sells certain building products, mines raw gypsum and sells natural and synthetic

gypsum throughout Asia, Australasia and the Middle East. UBBP manufactures and distributes products for wall, ceiling, floor lining and exterior systems that utilize gypsum wallboard, referred to as plasterboard in the region in which UBBP operates, mineral fiber ceiling tiles, steel grid and joint compound.

Geographic Information: For the first three months of 2017, we recorded $767 million of net sales in our condensed consolidated statements of income, of which approximately 83% were attributable to the United States, approximately 12% were attributable to Canada and other foreign countries accounted for the remaining 5%. Net sales for UBBP, which are not included in our condensed consolidated statement of income, were $276 million for the first three months of 2017, of which approximately 33% were attributable to Australia, 24% to South Korea, 12% to Thailand, 7% to China, and 24% to South East Asian and Middle Eastern countries.

MARKET CONDITIONS AND OUTLOOK

Our businesses are cyclical in nature and sensitive to changes in general economic conditions, including, in particular, conditions in the housing and construction-based markets in North America and in Asia and Australasia. Our expansion via UBBP into the markets of Asia, Australasia, and the Middle East has significantly increased our exposure to the economic conditions in those areas. However, the UBBP investment has helped diversify USG's overall exposure to changes in the North American economic conditions.

For the new residential construction market, housing starts are a good indicator of demand for our gypsum products. Installation of our gypsum products into a single family home typically follows a housing start by 90 to 120 days. In March 2017, the seasonally-adjusted annualized rate of housing starts reported by the U.S. Census Bureau was 1.22 million units. This is an increase from the March 2016 rate of 1.113 million units. In comparison, housing starts for all of 2016 were 1.174 million units. Most industry analysts believe that the recovery in new residential construction will continue, although the recovery over the next few years may be modest, and that over the longer term housing starts will reach historical averages. Industry analysts' forecasts for 2017 housing starts in the United States included in the most recent Blue Chip Economic Indicators are 1.22 million to 1.33 million units, based on the average of the bottom ten and top ten forecasts included in the report, respectively. We currently estimate that 2017 housing starts in the United States will be 1.25 million units.

Demand for our products from new nonresidential construction is determined by floor space for which contracts are signed. Installation of gypsum and ceilings products typically follows signing of construction contracts by about 12 to 18 months. According to the most recent construction market forecast from Dodge Data & Analytics, total floor space for which new nonresidential construction contracts were signed in the United States decreased 1% in 2016 compared with 2015. Dodge Data & Analytics forecasts that total floor space for which new nonresidential construction contracts in the United States are signed will increase approximately 6% in 2017 from the 2016 level. Dodge Data & Analytics' forecast includes several building types which do not generate significant demand for our products; therefore, we anticipate new nonresidential construction growth in our business sectors in 2017 compared to 2016 will increase low to mid single digits.

The repair and remodel market includes renovation of both residential and nonresidential buildings. As a result of the low levels of new home construction in recent years, this market currently accounts for the largest portion of our sales. Many buyers begin to remodel an existing home within two years of purchase. According to the National Association of Realtors, sales of existing homes in the United States were 5.45 million units in 2016, reflecting a 4% increase from the 2015 level of 5.25 million units. The seasonally adjusted annual rate of existing home sales was 5.71 million units in March 2017 and reflected the strongest month since February 2007, when 5.79 million units were sold. The March 2017 rate is 6% higher than the revised rate of 5.39 million in March 2016. The generally rising levels of existing home sales and home resale values in recent years have contributed to an increase in demand for our products from the residential repair and remodel market. We currently estimate that overall repair and remodel spending in 2017, compared to 2016, will increase by mid single digits.

The rate of recovery in the new residential construction market, new nonresidential construction market and the repair and remodel market still remains uncertain and will depend on broader economic circumstances, including employment, household formation, the home ownership rate, existing home price trends, availability of mortgage financing, interest rates, consumer confidence, job growth and discretionary business investment. An increase in interest rates, high levels of unemployment, restrictive lending practices, a decrease in consumer confidence or other adverse economic conditions could have a material adverse effect on our business, financial condition, operating results and cash flows. Our businesses are also affected by a variety of other factors beyond our control, including the inventory of unsold homes, the level of foreclosures, home resale rates, housing affordability, office and retail vacancy rates and foreign currency exchange rates. Since we operate in a variety of geographic markets, our businesses are subject to the economic conditions in each of these geographic markets. General economic downturns or localized downturns or financial concerns in the regions where we have operations may have a material adverse effect on our business, financial condition, results of operations and cash flows.

We expect modest improvement over the next twelve months in the construction industries of Canada and Mexico. Other international markets, including those that are within the UBBP territory, provide opportunities for our operations to serve the demand in these regions. Australia is expected to experience a decline in housing starts; however, these housing starts are expected to remain above the long-term average. South Korea is expecting continued growth in its residential sector although the overall construction industry is expected to slow. Several emerging markets which are within the UBBP territory are forecast to experience steady growth. The international markets within the UBBP territory are adopting Western practices of building which provide more opportunities. We anticipate that the results from UBBP will enable us to counteract some of the potential cyclicality in our North American business.

Our Gypsum segment has generally improved with the modest recovery in residential housing, although it continues to be adversely affected by the low level of residential and other construction activity compared to historical averages. Our Ceilings segment, which primarily serves the commercial markets, has shown some improvement. However, it continues to be adversely affected by the low levels of new commercial construction activity as compared to historical averages. Our Ceilings segment is also adversely affected by changing construction preferences such as open plenum.

Industry shipments of gypsum board in the United States (including gypsum wallboard, other gypsum-related paneling products and imports), as reported by the Gypsum Association, were an estimated 6.0 billion square feet in the first three months of 2017, down approximately 3% compared with 6.2 billion square feet in the first three months of 2016. We estimate that industry shipments in the United States for all of 2017 will increase mid single digits from 25.0 billion square feet in 2016.

There is excess wallboard production capacity industry-wide in the United States. Industry capacity in the United States was approximately 33.4 billion square feet as of January 1, 2017. We estimate that the industry capacity utilization rate was approximately 71% and 74% during the first three months of 2017 and 2016, respectively. Based on current industry trends and forecasts, demand for gypsum wallboard is expected to increase in 2017, but the magnitude of any increase will depend on the levels of housing starts and repair and remodel activity, among other factors. We project that the industry capacity utilization rate will experience a modest increase in 2017 compared to 2016.

We could experience pressure on gypsum wallboard selling prices and our gross margins at these levels of capacity utilization. U.S. Gypsum implemented a price increase for wallboard effective in January 2017. However, it is uncertain that we will be able to maintain the increase or obtain additional price increases in our selling prices. If we are unable to maintain or implement price increases, our net sales, operating results and cash flows may be materially and adversely impacted.

CURRENCY IMPACT

Currency impacts on consolidated and segment results have been derived by translating current period results at the quarter-to-date average foreign currency rates for the quarter ended March 31, 2016.

Consolidated Results of Operations

(dollars in millions, except per-share data)	2017	2016	$ Favorable (Unfavorable)	% Favorable (Unfavorable)
Three months ended March 31:				
Net sales	$ 767	$ 747	$ 20	3 %
Cost of products sold	603	566	(37)	(7%)
Gross profit	164	181	(17)	(9)%
Selling and administrative expenses	73	68	(5)	(7)%
Recovery of receivable	—	(3)	(3)	(100)%
Operating profit	91	116	(25)	(22)%
Income from equity method investments	13	7	6	86 %
Interest expense	(20)	(40)	20	50 %
Interest income	1	2	(1)	50 %
Loss on extinguishment of debt	—	(2)	2	100 %
Other (expense) income, net	(1)	3	(4)	*
Income before continuing operations before income taxes	84	86	(2)	(2%)
Income tax expense	(29)	(26)	(3)	(12)%
Income from continuing operations	$ 55	$ 60	(5)	(8%)
Income from discontinued operations, net of tax	$ —	$ 7	(7)	(100%)
Net income	$ 55	$ 67	$ (12)	(18%)
Diluted earnings per share - net income	$ 0.37	$ 0.46	$ (0.09)	(20%)

*not meaningful

NET SALES

Consolidated net sales for the first quarter of 2017 increased $20 million, or 3%, from the first quarter of 2016. This reflected higher net sales for our Gypsum segment due primarily to higher average selling price offset by a small decrease in net sales from our Ceilings segment due to lower volumes. Sales for our Gypsum segment increased 3% which reflected higher average selling price of gypsum wallboard and increased shipments of joint compound offset by lower volumes of gypsum wallboard. The decrease in net sales of 1% for our Ceilings segment was driven by decreased shipments of both ceiling grid and ceiling tile. On a consolidated basis for the comparative periods, the impact of foreign currency translation was not material.

GROSS PROFIT

Gross profit for the first quarter of 2017 decreased $17 million, or 9%, compared with the first quarter of 2016. Gross profit as a percentage of net sales was 21.4% for the first quarter of 2017, compared with 24.2% for the first quarter of 2016. The decrease reflected lower margins in both our Gypsum and Ceilings segments due to an increase in manufacturing costs. The decrease in gross margin for our Gypsum segment was driven primarily by increased per unit costs for Gypsum products due to higher average price of waste paper and synthetic gypsum and higher per unit costs due to lower volumes. The decrease in gross margin for our Ceilings segment also reflected higher per unit costs for both ceiling grid and ceiling tile due to lower volumes.

SELLING AND ADMINISTRATIVE EXPENSES

Selling and administrative expenses totaled $73 million in the first quarter of 2017 compared to $68 million in the first quarter of 2016. As a percentage of net sales, selling and administrative expenses increased to 9.5% for the first quarter of 2017 from 9.1% for the first quarter of 2016. The increase as a percentage of net sales reflected higher costs for compensation, marketing and services, including those in support of growth platforms.

RECOVERY ON RECEIVABLE

In the first quarter of 2016, we received the remaining payments under a settlement agreement with our former trading partner of which $3 million represented a recovery of a previously deemed uncollectible receivable. The remaining payments received under the settlement agreement were recorded in "Interest income" and "Other (expense) income, net."

INCOME FROM EQUITY METHOD INVESTMENTS

Income from equity method investments, primarily UBBP, in the first quarter of 2017 was $13 million, an increase of $6 million, or 86% from the first quarter of 2016. This reflected improved operating results for UBBP due to higher margins in South Korea and Australia offset by an increase in selling and administrative expenses. The increase also reflected favorable currency impact of $1 million.

INTEREST EXPENSE

Interest expense was $20 million in the first quarter of 2017, down $20 million, or 50%, from the first quarter of 2016. The decrease in interest expense reflected lower debt levels.

LOSS ON EXTINGUISHMENT OF DEBT

In the first quarter of 2016, we recorded a loss of $2 million on the extinguishment of debt, including premiums, in connection with the open market purchases of the 6.3% Notes and write-off of deferred financing fees. See Note 6 to the condensed consolidated financial statements for additional information.

OTHER (EXPENSE) INCOME, NET

In the first quarter of 2017, we recorded $1 million of net other expense which primarily reflected net losses on foreign currency transactions. The $3 million of net other income recorded in the first quarter of 2016 was due primarily to the receipt of payments in conjunction with a settlement agreement with our former trading partner of which $4 million was recorded as other income. See Note 15 to the condensed consolidated financial statements for additional information.

INCOME TAX EXPENSE

We recorded income tax expense of $29 million in the first quarter of 2017 from federal, foreign, state and local jurisdictions. Our effective tax rate was 34.5% for the first quarter of 2017. In the first quarter of 2016, we recorded income tax expense of $26 million resulting in an effective tax rate of 30.2%.

INCOME FROM DISCONTINUED OPERATIONS

Income from discontinued operations of $7 million reflected the results of L&W for the first quarter of 2016.

NON-CONFIDENTIAL

Segment Results of Operations

GYPSUM

Net sales and operating profit (loss) for the businesses comprising our Gypsum segment were as follows:

	Three months ended March 31:			
			Favorable (Unfavorable)	
(millions)	2017	2016	$	%
Net sales				
United States	$ 555	$ 536	$ 19	4 %
Canada	83	82	1	1 %
Mexico / Latin America	49	44	5	11 %
Canadian Mining	—	—	—	— %
Eliminations	(38)	(34)	(4)	(12)%
Total	$ 649	$ 628	$ 21	3 %
Operating profit (loss)				
United States	$ 90	$ 101	$ (11)	(11)%
Canada	1	6	(5)	(83)%
Mexico / Latin America	1	2	(1)	(50)%
Canadian Mining	(1)	(3)	2	67 %
Gypsum Transportation Limited	—	3	(3)	(100)%
Total	$ 91	$ 109	$ (18)	(17)%

United States: Net sales in the first quarter of 2017 were $555 million, up $19 million, or 4%, compared with the first quarter of 2016. The increase in net sales was due to the following:

			Volume		Price	
(millions)	$	%	$	%	$	%
Change to Q1 2017 from Q1 2016						
Sheetrock® brand gypsum wallboard	$ 2	1%	$ (10)	(4)%	$ 12	5 %
Sheetrock® brand joint compound	5	5%	6	6 %	(1)	(1)%
Other	12					
Total increase in net sales	$ 19	4%				

Sales for Sheetrock® brand gypsum wallboard increased $2 million from the first quarter of 2016 to the first quarter of 2017 due to higher average selling price offset by decreased shipments. The increase in average selling price reflected a price increase that was effective in late January 2017. The decrease in volumes reflected the timing of the price increase in 2016 with additional purchases in the first quarter of 2016 in anticipation of the March 2016 price increase. Our premium Sheetrock® brand UltraLight panels accounted for 66% of all of our wallboard shipments during the first quarter of 2017 which was consistent with the first quarter of 2016.

Sales of Sheetrock® brand joint compound increased $5 million on increased volume driven primarily by higher shipments to the big box retailers. Sales of Durock® brand cement board and Levelrock® brand gypsum underlayment were primarily flat over the comparative period. Included in the increase in Other was higher sales of other surfaces and substrates products of $4 million, including Fiberock® brand backerboard and Durock® brand glass-mat tile backerboard. Also included in Other was a $6 million increase in sales for inventory sold by Gypsum that was included in L&W's inventory as of March 31, 2016 and a $2 million increase for freight.

Operating profit of $90 million was recorded in the first quarter of 2017 compared to $101 million recorded in the first quarter of 2016. The decrease of $11 million in operating profit reflected the following:

(millions)	$	Volume $	Price $	Cost $
Change to Q1 2017 from Q1 2016				
Sheetrock® brand gypsum wallboard	$ (9)	$ (5)	$ 12	$ (16)
Sheetrock® brand joint compound	(1)	2	(1)	(2)
Other	(1)			
Total decrease in operating profit	$ (11)			

The decrease in operating profit reflected lower gross profit for Sheetrock® brand gypsum wallboard and Sheetrock® brand joint compound. The decrease in gross profit for Sheetrock® brand gypsum wallboard reflected higher cost per unit and lower volumes offset by higher average selling price. The higher per unit cost for Sheetrock® brand gypsum wallboard reflected an increase in per unit cost of 15% for raw materials driven primarily by waste paper, for which costs are typically highest in the first quarter, and synthetic gypsum, 6% for conversion costs driven by higher labor costs and 10% for fixed costs due to lower volumes.

The decrease in gross profit for Sheetrock® brand joint compound reflected higher per unit costs. Gross profit of Durock® brand cement board and Levelrock® brand gypsum underlayment were primarily flat over the comparative period.

Included in Other is the following:

- increase in gross profit of $2 million recorded on sales by Gypsum to L&W that were included in L&W's inventory at the end of the first quarter of 2016, offset by
- higher selling and administrative costs of $3 million in the first quarter of 2017 due primarily to higher compensation and benefit expenses and marketing costs.

Canada: Net sales in the first quarter of 2017 were $83 million, an increase of $1 million from $82 million in the first quarter of 2016. The change in sales reflected higher sales of gypsum wallboard of $4 million and favorable impact of currency translation of $3 million offset by a decrease in sales of joint compound of $1 million and lower freight of $5 million. The increase in sales of gypsum wallboard was driven by an increase of 18% in average selling price offset by a decrease of 9% in volume. The increase in average selling price reflected the final decisions of the Canadian authorities on the minimum pricing of gypsum board imported into Western Canada. The decisions were as a result of an anti-dumping proceeding initiated by a competing Canadian wallboard manufacturer. Operating profit in the first quarter of 2017 was $1 million, a decrease of $5 million from the first quarter of 2016. The decrease reflected a change of $3 million for an adjustment of an accrual for volume rebate incentives that was recorded in the first quarter of 2016, a $2 million increase for royalties and unfavorable impact of foreign currency of $1 million offset by higher gross profit of gypsum wallboard of $2 million.

Mexico / Latin America: Net sales for our gypsum businesses in Mexico and Latin America were $49 million for the first quarter of 2017, an increase of $5 million from the first quarter of 2016. The increase reflected higher sales of gypsum wallboard, joint treatment, Durock® brand cement tile backerboard and drywall steel offset by the unfavorable impact due to fluctuations in currency of $3 million. Operating profit decreased to $1 million in the first quarter of 2017 from $2 million in the first quarter of 2016 due primarily to unfavorable impact of foreign currency of $1 million and lower gross profit on other products of $3 million offset by improved gross margins on joint treatment of $3 million.

Canadian Mining: Our mining operation in Canada recorded no sales for both the first quarter of 2017 and the first quarter of 2016. Operating loss was $1 million for the first quarter of 2017 and $3 million for the first quarter of 2016. In the third quarter of 2016, we indefinitely idled our mining operations in Little Narrows, Nova Scotia, Canada which resulted in a decrease of operating costs.

Gypsum Transportation Limited: There were no sales for our shipping company, Gypsum Transportation Limited, or GTL, for the first quarter of 2017 or 2016 as we have exited this business. GTL recorded $3 million in operating profit in the first quarter of 2016 which reflected a recovery of a receivable of $3 million owed to GTL by its trading partner that was fully reserved for in 2014.

CEILINGS

Net sales and operating profit for the businesses comprising our Ceilings segment were as follows:

	Three months ended March 31:			
			Favorable (Unfavorable)	
(millions)	2017	2016	$	%
Net sales				
United States	$ 112	$ 115	$ (3)	(3)%
Canada	13	13	—	— %
Mexico / Latin America	7	8	(1)	(13)%
Eliminations	(12)	(15)	3	20 %
Total	$ 120	$ 121	$ (1)	(1)%
Operating profit				
United States	$ 21	$ 26	$ (5)	(19)%
Canada	1	1	—	— %
Mexico / Latin America	1	1	—	— %
Total	$ 23	$ 28	$ (5)	(18)%

United States: Net sales for our domestic ceilings business in the first quarter of 2017 were $112 million, a decrease of $3 million, or 3%, from the first quarter of 2016. The decrease reflected the following:

			Volume		Price	
(millions)	**$**	**%**	**$**	**%**	**$**	**%**
Change to Q1 2017 from Q1 2016						
Ceiling grid	$ (2)	(7)%	$ (2)	(7)%	$ —	—%
Ceiling tile	(4)	(6)%	(4)	(6)%	—	—%
Other	3					
Total decrease in net sales	$ (3)	(3)%				

The decrease in sales of both ceiling grid and ceiling tile reflected timing of projects. Also impacting sales was an increase in customer incentive programs offset by a price increase implemented in the first quarter of 2017. The favorable change in other reflected a $4 million increase in sales for inventory sold by Ceilings that was included in L&W's inventory as of March 31, 2016 offset by a decrease in freight of $1 million due to lower shipments.

Operating profit was $21 million for the first quarter of 2017, a decrease of $5 million, or 19%, from the first quarter of 2016. The decrease reflected the following:

		Volume	Price	Cost
(millions)	**$**	**$**	**$**	**$**
Change to Q1 2017 from Q1 2016				
Ceiling grid	$ (3)	$ (1)	$ —	$ (2)
Ceiling tile	(4)	(2)	—	(2)
Other	2			
Total decrease in operating profit	$ (5)			

The decrease in operating profit reflected a decrease in gross profit for both ceiling grid and ceiling tile driven by lower volumes and higher per unit cost. The higher per unit cost for ceiling grid reflected higher per unit raw material cost led by higher steel prices, higher per unit conversion cost due to increased labor costs and higher per unit fixed cost due to lower volumes. The higher per unit cost for ceiling tile primarily reflected higher per unit fixed cost due to lower volumes, higher expenditures for maintenance and, to a lesser extent, higher per unit conversion cost due to increased labor costs and higher per

unit raw material cost including higher costs for waste paper. Offsetting the decrease in gross profit was lower selling and administrative expenses of $1 million and gross profit of $1 million recorded on sales by Ceilings to L&W that were included in L&W's inventory as of March 31, 2016.

Canada: Net sales of $13 million for the first quarter of 2017 were flat as compared to the first quarter of 2016. Operating profit was $1 million for the first quarter of 2017 and unchanged from the first quarter of 2016.

Mexico / Latin America: Net sales of $7 million for the first quarter of 2017 decreased $1 million from the first quarter of 2016. Operating profit was $1 million for both the first quarter of 2017 and the first quarter of 2016.

USG BORAL BUILDING PRODUCTS

The following reflects the net sales and operating profit as recorded by UBBP and the equity income recorded by USG.

	Three months ended March 31:			
			Favorable (Unfavorable)	
(millions)	2017	2016	$	%
Net sales	$ 276	$ 229	$ 47	21%
Operating profit	35	23	12	52%
Income from equity method investments - UBBP	13	7	6	86%

Net sales for UBBP were $276 million in the first quarter of 2017 compared to $229 million for the first quarter of 2016. The increase of $47 million reflected increased plasterboard shipments in South Korea, India, Malaysia and Australia and favorable impact of currency translation of $7 million. The increase is offset by decreased sales in Indonesia and Vietnam. Plasterboard shipments increased 16% to 1.13 billion square feet for the first quarter of 2017 from 0.97 billion square feet for the first quarter of 2016. Additionally, volumes of metal studs increased 20%.

Operating profit increased $12 million to $35 million in the first quarter of 2017 compared to $23 million in the first quarter of 2016. Operating profit in 2016 reflected improved margins in South Korea and Australia, realized synergy savings and improved market acceptance of lightweight products offset by an increase in selling and administrative expenses. The increase also reflected favorable currency impact of $2 million.

Our share of net income of UBBP, which is recorded in income from equity method investment, increased $6 million in the first quarter of 2017 as compared to the first quarter of 2016. This increase reflected higher income recorded by UBBP and a favorable impact of foreign currency of $1 million.

CORPORATE

The operating loss for Corporate increased to $23 million in the first quarter of 2017 compared with $21 million in the first quarter of 2016 primarily due to higher costs for services, including those in support of growth platforms.

Liquidity and Capital Resources

As of March 31, 2017, we had $434 million of cash and cash equivalents and marketable securities compared with $518 million as of December 31, 2016. See discussion below under Cash Flows for explanation of the change in cash and cash equivalents. Our total liquidity as of March 31, 2017 was $559 million (including $125 million of borrowing availability under our credit facility) compared to $603 million as of December 31, 2016 (including $85 million of borrowing availability under our credit facility). The decrease in liquidity reflected payments for our share repurchase program and for incentives.

We invest in cash equivalents and marketable securities pursuant to an investment policy that has preservation of principal as its primary objective. The policy includes provisions regarding diversification, credit quality and maturity profile that are designed to minimize the overall risk profile of our investment portfolio. The securities in the portfolio are subject to normal market fluctuations. See Note 5 to the condensed consolidated financial statements for additional information regarding our investments in marketable securities.

Total debt, consisting of senior notes and industrial revenue bonds, amounted to $1.084 billion ($1.089 billion in aggregate principal amount less $5 million of debt issuance costs) as of March 31, 2017 and $1.083 billion ($1.089 billion in aggregate principal amount less $6 million of debt issuance costs) as of December 31, 2016. During the three months ended March 31, 2017, there were no borrowings under our revolving credit facility and no borrowings outstanding at period end.

Our senior notes and industrial revenue bonds are rated by the three major credit-rating agencies: Moody's Investors Service (Moody's), Standard & Poor's Global Ratings (S&P), and Fitch Ratings, Inc. (Fitch). The ratings are typically monitored by stockholders, creditors, or suppliers as an indicator of the company's viability. Additionally, the ratings of Moody's and S&P impact the interest rate on our 7.75% senior notes maturing in 2018. See Note 6 to the condensed consolidated financial statements in our Annual Report on Form 10-K for additional information regarding the impact of changes to our credit ratings on interest rates. Below is a summary of the ratings published by the three agencies as of the date indicated:

	S&P	Moody's	Fitch
Corporate/Family rating	BB+	Ba2	BB+
Outlook	Stable	Positive	Stable
Guaranteed senior notes	BB+	Ba2	BB+
All other notes and bonds	BB+	Ba3	BB+
Report date	November 10, 2016	November 22, 2016	April 19, 2017

We maintain a credit facility with a maximum borrowing limit of $180 million (including a $50 million borrowing sublimit for CGC) that is available to fund working capital needs and other general corporate purposes and matures on October 22, 2019. The facility is guaranteed by certain of our significant subsidiaries and secured by such parties' eligible trade receivables and inventory. The maximum borrowing limit under the credit agreement may be increased up to $650 million at our request and with our lenders' approval. The credit agreement contains other covenants and events of default that are customary for similar agreements and may limit our ability to take various actions including our ability to pay a dividend or repurchase our stock.

Although the maximum borrowing limit under the credit agreement is $180 million, the credit agreement specifies the maximum principal that may be borrowed by USG and CGC is impacted by any amounts outstanding under the credit agreement, outstanding letters of credit, a borrowing base comprised of eligible trade receivables and inventory, and the minimum excess availability that may be required due to the Covenant Trigger Threshold, described below, being applicable. As of March 31, 2017, the maximum principal we could borrow after taking into account the foregoing factors was approximately $125 million.

The credit agreement contains a covenant that would require us to maintain a minimum fixed charge coverage ratio of not less than 1.0-to-1.0 in the event that excess availability falls below the "Covenant Trigger Threshold" equal to 10% of the lesser of (a) the aggregate revolving commitment and (b) the aggregate of the USG and CGC borrowing base. As of March 31, 2017, our fixed charge coverage ratio was 0.38-to-1.0 and; therefore, we are required to maintain minimum excess availability of no less than the Covenant Trigger Threshold so that the financial covenant will remain inapplicable. Currently, that amount would be approximately $18 million.

Our undistributed foreign earnings as of March 31, 2017 are considered permanently reinvested with the exception of earnings associated with the former holding company of the Knauf-USG joint venture that was sold in December 2015. The amount of cash and cash equivalents held by our foreign subsidiaries was $177 million as of March 31, 2017 and would be subject to material repatriation tax effects.

CASH FLOWS

The following table presents a summary of our cash flows:

(millions)	Three months ended March 31, 2017	2016
Net cash provided by (used for):		
Operating activities from continuing operations	$ (29)	$ (46)
Investing activities from continuing operations	(41)	—
Financing activities from continuing operations	(25)	(65)
Discontinued operations	5	15
Effect of exchange rate changes on cash	4	1
Net decrease in cash and cash equivalents	$ (86)	$ (95)

Operating Activities: Net cash used for operating activities was lower for the first three months of 2017 compared to the first three months of 2016 due to lower payments to our pension and postretirement plans in the first quarter of 2017. We contributed $2 million and $61 million in the first three months of 2017 and 2016, respectively. Our net cash outflows were higher in 2017 compared to 2016, primarily because of an increase in accounts receivable of $23 million as a result of higher sales in the current quarter, an increase in inventories of $7 million due to increased costs for raw materials and a decrease in accrued expenses of $12 million due to higher incentive payments. These were offset by lower cash outflows for accounts payable of $11 million in 2017 as compared to 2016, which included an increase in capital expenditures that remained in accounts payable as of March 31, 2017.

As of March 31, 2017, working capital (current assets less current liabilities) amounted to $84 million, and the ratio of current assets to current liabilities was 1.10-to-1. As of December 31, 2016, working capital amounted to $527 million, and the ratio of current assets to current liabilities was 2.25-to-1. This decrease reflected the classification of $500 million of our 7.75% senior notes due 2018 as current as of March 31, 2017, which we intend to refinance to long-term in the near term.

Investing Activities: Net cash used for investing activities was $41 million for the first three months of 2017 compared to $0 million for the three months ended March 31, 2016. The net activity of purchases and sales or maturities of marketable securities was a cash outflow of $2 million for the three months ended March 31, 2017 as compared to a cash inflow of $5 million for the three months ended March 31, 2016.

The increase in capital expenditures to $39 million in the first three months of 2017 from $14 million in the first three months of 2016 reflected expenditures for the replacement, modernization and expansion of operations, including Advanced Manufacturing initiatives. Approved capital expenditures totaled $126 million as of March 31, 2017 compared with $121 million as of December 31, 2016.

Financing Activities: Net cash used for financing activities for the first three months of 2017 was $25 million compared to $65 million for the first three months of 2016. The cash used in 2017 reflected the repurchase of common stock under the approved stock repurchase program of $25 million. The cash used in 2016 reflected $64 million paid to repurchase $62 million of our 6.3% Notes in the open market.

Discontinued Operations: Net cash provided by discontinued operations for first three months of 2017 was $5 million compared to $15 million for the first three months of 2016. The cash inflow in 2017 reflected a working capital adjustment associated with the sale of L&W.

DEFINED BENEFIT PLANS

During the first three months of 2017, we made cash contributions of $2 million to our pension plan in Canada. We expect to make total contributions to our pension and postretirement plans in 2017 of approximately $74 million.

LIQUIDITY OUTLOOK

In the first three months of 2017, our investing cash outflows included $39 million of capital expenditures. In total for 2017, we plan to spend approximately $200 million on capital expenditures in the normal course of business, which includes up to $80 million allocated for Advanced Manufacturing projects to standardize and automate production across our Gypsum and Ceilings businesses. We expect to fund these expenditures with cash from operations or cash on hand.

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Interest payments, based on our current level of outstanding debt, are expected to remain at approximately $77 million in 2017 compared with $153 million in 2016 which reflects lower debt levels due to the repayment of $1.1 billion in debt in 2016. We intend to refinance our 7.75% senior notes due 2018, as well as our credit facility, in the near term.

On January 31, 2017, our Board of Directors approved a share repurchase program in which we may repurchase up to $250 million of our common stock. As of March 31, 2017, we purchased $25 million in shares under the program, and to date we have purchased $47 million in shares under the program, with $203 million remaining. The timing and the amount of any repurchases will be determined based on market conditions and other factors. Share repurchases will be funded with available cash on hand. See Part II, Item 2 for additional information.

Since formation, UBBP was funded from its net cash flow from operations and third-party financing, and it is our intent that as an ongoing operation, UBBP will continue to self-fund. UBBP is targeting the distribution of 50% of combined after tax profits to USG and Boral; however, this dividend may be adjusted by the UBBP Board with unanimous resolution.

In the event certain performance targets are satisfied by UBBP, we will be obligated to pay Boral an earnout payment in an amount up to $50 million in 2019, based on UBBP performance during the first five years. We have not recorded a liability for this earnout payment as we have concluded that it is currently not probable that the five-year performance target will be achieved.

We believe that cash on hand, cash equivalents, marketable securities, cash available from future operations and our credit facility will provide sufficient liquidity to fund our operations for at least the next 12 months. Cash requirements include, among other things, capital expenditures, working capital needs, employee retirement plans funding, interest payments and other contractual obligations.

Recently Issued Accounting Pronouncements

See Part 1, Item 1, Note 1 to the condensed consolidated financial statements for information related to new accounting standards.

Legal Contingencies

We are named as defendants in litigation arising from our operations, including lawsuits or claims arising from commercial disputes, product performance or warranties, products liability, and worksite or vehicular accidents.

In 2015, USG, United States Gypsum Company, L&W Supply Corporation, and seven other wallboard manufacturers were named as defendants in a lawsuit filed by twelve homebuilders alleging that the defendants conspired to fix the price of wallboard sold in the United States. Earlier, in 2013, class action lawsuits making similar allegations were filed in Canada on behalf of a class of purchasers of wallboard in Canada. We believe that the cost, if any, of resolving the homebuilders' lawsuit and Canadian class action litigation will not have a material effect on our results of operations, financial position or cash flows.

In the third quarter of 2015 United States Gypsum Company was served with a federal grand jury subpoena requesting the production of company records in connection with a federal investigation of the gypsum drywall industry. Two former employees of USG have also been served with subpoenas. We believe the investigation, although a separate proceeding, is related to the same events at issue in the litigation discussed above. We are fully cooperating with the grand jury investigation. We believe we acted in full compliance with the law, and we do not expect the resolution of this matter to result in any material effect on our business, financial position, liquidity or results of operations; however, we can provide no assurances as to the scope, timing, or outcome of any such investigation.

See Note 14 to the condensed consolidated financial statements for further information regarding the foregoing lawsuits and other legal matters.

Critical Accounting Policies

The preparation of our financial statements requires us to make estimates, judgments and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses during the periods presented. Our Annual Report on Form 10-K for the fiscal year ended December 31, 2016, which we filed with the Securities and Exchange Commission on February 8, 2017, includes a summary of the critical accounting policies we believe are the most important to aid in understanding our financial results. There have been no changes to those critical accounting policies that have had a material impact on our reported amounts of assets, liabilities, revenues or expenses during the first three months of 2017.

Forward-Looking Statements

This report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 related to management's expectations about future conditions. Any forward-looking statements represent our views only as of the date of this report and should not be relied upon as representing our views as of any subsequent date, and we undertake no obligation to update any forward-looking statement. Forward-looking statements include, but are not limited to, statements under the following headings: (1) "Management's Discussion and Analysis" about (a) market conditions and outlook, including anticipated growth in new residential and nonresidential construction, repair and remodel spending, and the construction industries in Canada and Mexico, and the anticipated growth or decline in countries in the UBBP territory and its effect on the cyclicality of our North American business, industry shipments of gypsum, demand for gypsum wallboard and industry capacity utilization rate, and our selling prices and margins; (b) expected contributions to our pension and postretirement plans; (c) our liquidity outlook, including our capital expenditure plans, expected interest payments, intended debt refinancings, share repurchase program, UBBP's dividend policy and ability to self-fund, and cash requirements and adequacy of resources to fund them; and (d) the outcome and effect of ongoing and future legal and governmental proceedings; and (2) "Legal Proceedings" about the outcome and effect of ongoing and future legal and governmental proceedings.

Some of the risk factors that affect our business and financial results are discussed under "Risk Factors" in our most recent Annual Report on Form 10-K. We wish to caution the reader that actual business, market or other conditions, including the "Risk Factors" discussed in our most recent Annual Report on Form 10-K or in our other Securities and Exchange Commission filings, could cause our actual results to differ materially from those stated in the forward-looking statements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

There have been no significant changes to our market risk since December 31, 2016.

ITEM 4. CONTROLS AND PROCEDURES

(a) Evaluation of disclosure controls and procedures.

Our Chief Executive Officer and Chief Financial Officer, after evaluating the effectiveness of our "disclosure controls and procedures" (as defined in Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, or the Act), have concluded that, as of the end of the quarter covered by this report, our disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by an issuer in the reports that it files or submits under the Act is accumulated and communicated to the issuer's management, including its principal executive and financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

(b) Changes in internal control over financial reporting.

There were no changes in our "internal control over financial reporting" (as defined in Rule 13a-15(f) promulgated under the Act) identified in connection with the evaluation required by Rule 13a-15(d) promulgated under the Act that occurred during the fiscal quarter ended March 31, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

See Part I, Item 1, Note 14 to the condensed consolidated financial statements and Part I, Item 2, Legal Contingencies for additional information regarding legal proceedings.

ITEM 1A. RISK FACTORS

There is no material change in the information reported under "Part I-Item 1A-Risk Factors" contained in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

(a) Pursuant to our Deferred Compensation Program for Non-Employee Directors, one of our non-employee directors deferred a portion of his quarterly retainer for service as a director that was payable on March 31, 2017 into a total of approximately 675 deferred stock units. These units will increase or decrease in value in direct proportion to the market value of our common stock and will be paid in cash or shares of common stock, at the director's option, following termination of service as a director. The issuance of these deferred stock units was effected through a private placement under Section 4(2) of the Securities Act of 1933, as amended, and was exempt from registration under Section 5 of that Act.

(b) Not applicable

(c) On February 1, 2017, we announced that our Board of Directors approved a $250 million share repurchase program. Under the program, we may repurchase shares from time to time in open market transactions or in privately-negotiated transactions in accordance with applicable securities laws. We may discontinue the program at any time and the program has no set expiration date. The timing and amount of any repurchase of shares is determined by our management, based on its evaluation of market conditions, cash on hand, applicable legal requirements and other factors. Under the repurchase program, shares may be repurchased from time to time in privately negotiated or open market transactions, including under plans complying with Rule 10b5-1 of the Exchange Act. The following table provides information about purchases we made during the three months ended March 31, 2017 of our common stock:

Issuer Purchases of Equity Securities

Period	Total number of shares purchased	Average price paid per share	Total number of shares repurchased as part of publicly announced plans or programs	Approximate dollar value of shares that may yet be purchased under the plans or programs *(millions)*
January 1, 2017 to January 31, 2017	—	$ —	—	$ 250
February 1, 2017 to February 28, 2017	162,301	$ 32.27	162,301	$ 245
March 1, 2017 to March 31, 2017	601,632	$ 33.43	601,632	$ 225
Total	763,933		763,933	

ITEM 4. MINE SAFETY DISCLOSURES

The information concerning mine safety violations or regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K promulgated by the SEC is included in Exhibit 95 to this report.

ITEM 6. EXHIBITS

The information in the Exhibit Index of this Quarterly Report on Form 10-Q is incorporated into this Item 6 by reference.

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SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

USG CORPORATION

By /s/ Jennifer F. Scanlon
Jennifer F. Scanlon,
Director, President and Chief Executive Officer

By /s/ Matthew F. Hilzinger
Matthew F. Hilzinger,
Executive Vice President and Chief Financial Officer

By /s/ Jeanette A. Press
Jeanette A. Press,
Vice President, Controller and Principal Accounting Officer

April 27, 2017

EXHIBIT INDEX

Exhibit Number	Exhibit
31.1	Rule 13a-14(a) Certifications of USG Corporation's Chief Executive Officer *
31.2	Rule 13a-14(a) Certifications of USG Corporation's Chief Financial Officer *
32.1	Section 1350 Certifications of USG Corporation's Chief Executive Officer *
32.2	Section 1350 Certifications of USG Corporation's Chief Financial Officer *
95	Mine Safety Disclosures *
101	The following financial information from USG Corporation's Quarterly Report on Form 10-Q for the three months ended March 31, 2017, formatted in XBRL (Extensible Business Reporting Language): (1) the condensed consolidated statements of income for the three months ended March 31, 2017 and 2016, (2) the condensed consolidated statements of comprehensive income (loss) for the three months ended March 31, 2017 and 2016, (3) the condensed consolidated balance sheets as of March 31, 2017 and December 31, 2016, (4) the condensed consolidated statements of cash flows for the three months ended March 31, 2017 and 2016 and (5) notes to the condensed consolidated financial statements. *

* Filed or furnished herewith

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

☑ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended June 30, 2017

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from __________ to __________

Commission File Number 1-8864

USG CORPORATION

(Exact name of registrant as specified in its charter)

Delaware	36-3329400
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
550 West Adams Street, Chicago, Illinois	60661-3676
(Address of principal executive offices)	(Zip code)

Registrant's telephone number, including area code (312) 436-4000

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☑ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of large accelerated filer, accelerated filer, smaller reporting company, and emerging growth company in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☑	Accelerated filer	☐
Non-accelerated filer	☐	(Do not check if a smaller reporting company)	
		Smaller reporting company	☐
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

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Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☑

The number of shares of the registrant's common stock outstanding as of June 30, 2017 was 143,409,835.

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Table of Contents

PART I. FINANCIAL INFORMATION
ITEM 1. FINANCIAL STATEMENTS

USG CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF INCOME
(Unaudited)

(millions, except per-share and share data)	Three months ended June 30, 2017	Three months ended June 30, 2016	Six months ended June 30, 2017	Six months ended June 30, 2016
Net sales	$ 811	$ 769	$ 1,578	$ 1,516
Cost of products sold	643	576	1,246	1,142
Gross profit	168	193	332	374
Selling and administrative expenses	72	71	145	139
Recovery of receivable	—	—	—	(3)
Operating profit	96	122	187	238
Income from equity method investments	14	16	27	23
Interest expense	(19)	(38)	(39)	(78)
Interest income	—	1	1	3
Loss on extinguishment of debt	(22)	(2)	(22)	(4)
Other (expense) income, net	(3)	2	(4)	5
Income from continuing operations before income taxes	66	101	150	187
Income tax expense	(20)	(34)	(49)	(60)
Income from continuing operations	46	67	101	127
(Loss) income from discontinued operations, net of tax	(10)	7	(10)	14
Net income	$ 36	$ 74	$ 91	$ 141
Earnings per average common share - basic:				
Income from continuing operations	$ 0.32	$ 0.46	$ 0.69	$ 0.87
(Loss) income from discontinued operations	(0.07)	0.04	(0.07)	0.09
Net income	$ 0.25	$ 0.50	$ 0.62	$ 0.96
Earnings per average common share - diluted:				
Income from continuing operations	$ 0.31	$ 0.46	$ 0.68	$ 0.86
(Loss) income from discontinued operations	(0.07)	0.04	(0.07)	0.09
Net income	$ 0.24	$ 0.50	$ 0.61	$ 0.95
Average common shares	144,526,900	145,933,165	145,753,098	145,856,220
Dilutive awards under long-term incentive plan	2,113,193	2,060,867	2,317,971	1,465,200
Deferred shares for non-employee directors	220,846	—	220,404	—
Average diluted common shares	146,860,939	147,994,032	148,291,473	147,321,420

See accompanying Notes to Condensed Consolidated Financial Statements.

USG CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(Unaudited)

(millions)	Three months ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016
Net income	$ 36	$ 74	$ 91	$ 141
Other comprehensive income (loss), net of tax:				
Derivatives qualifying as cash flow hedges:				
(Loss) gain on derivatives qualifying as cash flow hedges, net of tax (benefit) of ($2), $3, ($5) and $0, respectively	(2)	4	(8)	(4)
Less: Reclassification adjustment for loss on derivatives included in net income, net of tax (benefit) of $0, ($1), $0 and ($2), respectively	(1)	(2)	(1)	(4)
Net derivatives qualifying as cash flow hedges	(1)	6	(7)	—
Pension and postretirement benefits:				
Changes in pension and postretirement benefits, net of tax (benefit) of $2, ($2), $2 and ($3), respectively	4	(3)	3	(6)
Less: Amortization of prior service cost included in net periodic pension cost, net of tax (benefit) of ($7), ($1), ($7) and ($1), respectively	(12)	(1)	(12)	(1)
Net pension and postretirement benefits	16	(2)	15	(5)
Foreign currency translation:				
Changes in foreign currency translation, net of tax benefit of $0 in all periods	8	(36)	48	(12)
Other comprehensive income (loss), net of tax	$ 23	$ (32)	$ 56	$ (17)
Comprehensive income	$ 59	$ 42	$ 147	$ 124

See accompanying Notes to Condensed Consolidated Financial Statements.

NON-CONFIDENTIAL

USG CORPORATION
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited)

(millions, except share data)	June 30, 2017	December 31, 2016
Assets		
Cash and cash equivalents	$ 371	$ 427
Short-term marketable securities	59	62
Receivables (net of reserves 2017 - $8 and 2016 - $8)	234	183
Inventories	249	236
Income taxes receivable	1	1
Other current assets	35	40
Total current assets	949	949
Long-term marketable securities	33	29
Property, plant and equipment (net of accumulated depreciation and depletion - 2017 - $2,026 and 2016 - $1,960)	1,718	1,707
Deferred income taxes	469	492
Equity method investments	656	628
Other assets	62	64
Total assets	$ 3,887	$ 3,869
Liabilities and Stockholders' Equity		
Accounts payable	$ 242	$ 237
Accrued expenses	133	175
Income taxes payable	4	10
Total current liabilities	379	422
Long-term debt	1,077	1,083
Deferred income taxes	4	4
Pension and other postretirement benefits	272	290
Other liabilities	187	184
Total liabilities	1,919	1,983
Preferred stock – $1 par value, authorized 36,000,000 shares; outstanding - none	—	—
Common stock – $0.10 par value; authorized 200,000,000 shares; issued: 2017 - 143,410,000 shares and 2016 - 146,167,000 shares	15	15
Treasury stock at cost; 2017 - 3,103,000 shares and 2016 - 0 shares	(95)	—
Additional paid-in capital	3,043	3,038
Accumulated other comprehensive loss	(329)	(385)
Retained earnings (accumulated deficit)	(666)	(782)
Total stockholders' equity	1,968	1,886
Total liabilities and stockholders' equity	$ 3,887	$ 3,869

See accompanying Notes to Condensed Consolidated Financial Statements.

NON-CONFIDENTIAL

USG CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

(millions)	Six months ended June 30, 2017	Six months ended June 30, 2016
Operating Activities		
Net income	$ 91	$ 141
Less: (Loss) income from discontinued operations, net of tax	(10)	14
Income from continuing operations	101	127
Adjustments to reconcile net income from continuing operations to net cash:		
Depreciation, depletion and amortization	65	67
Loss on extinguishment of debt	22	4
Recovery of receivable	—	(3)
Share-based compensation expense	9	9
Deferred income taxes	48	58
Gain on asset dispositions	(1)	(10)
Income from equity method investments	(27)	(23)
Dividends received from equity method investments	23	18
Pension settlement	7	2
Change in operating assets and liabilities	(117)	(86)
Other, net	(1)	(12)
Net cash provided by operating activities of continuing operations	129	151
Net cash (used for) provided by operating activities of discontinued operations	(1)	13
Net cash provided by operating activities	$ 128	$ 164
Investing Activities		
Purchases of marketable securities	(54)	(167)
Sales or maturities of marketable securities	53	187
Capital expenditures	(72)	(26)
Net proceeds from asset dispositions	2	12
Return of capital	—	1
Insurance proceeds	1	—
Return of restricted cash	—	9
Net cash (used for) provided by investing activities of continuing operations	(70)	16
Net cash provided by (used for) investing activities of discontinued operations	6	(2)
Net cash (used for) provided by investing activities	$ (64)	$ 14
Financing Activities		
Issuance of debt	500	—
Repayment of debt	(520)	(141)
Payment of debt issuance fees	(8)	—
Issuance of common stock	3	2
Repurchase of common stock	(97)	—
Repurchases of common stock to satisfy employee tax withholding obligations	(4)	(2)
Net cash used for financing activities of continuing operations	$ (126)	$ (141)
Effect of exchange rate changes on cash from continuing operations	6	—
Net (decrease) increase in cash and cash equivalents from continuing operations	$ (61)	$ 26

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Net increase in cash and cash equivalents from discontinued operations	5	11
Net (decrease) increase in cash and cash equivalents	(56)	37
Cash and cash equivalents at beginning of period	427	442
Cash and cash equivalents at end of period	$ 371	$ 479
***Supplemental Cash Flow Disclosures*:**		
Interest paid, net of capitalized interest	$ 48	$ 76
Income taxes paid, net of refunds received	9	5
Noncash Investing and Financing Activities:		
Amount in accounts payable for capital expenditures	7	4
Reversal of USG Boral Building Products earnout	—	(24)

See accompanying Notes to Condensed Consolidated Financial Statements.

USG CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

In the following Notes to Condensed Consolidated Financial Statements, "USG," "we," "our" and "us" refer to USG Corporation, a Delaware corporation, and its subsidiaries included in the condensed consolidated financial statements, except as otherwise indicated or as the context otherwise requires.

1. Organization, Consolidation and Presentation of Financial Statements

PREPARATION OF FINANCIAL STATEMENTS
We prepared the accompanying unaudited condensed consolidated financial statements of USG Corporation in accordance with applicable United States Securities and Exchange Commission, or SEC, guidelines pertaining to interim financial information. The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. Actual results could differ materially from those estimates. In the opinion of our management, the financial statements reflect all adjustments, which are of a normal recurring nature, necessary for a fair presentation of our financial results for the interim periods. The results of operations for the three and six months ended June 30, 2017 are not necessarily indicative of the results of operations to be expected for the entire year.

Certain reclassifications have been made to prior year amounts in order to conform with current year presentation. On our condensed consolidated statements of cash flows, we condensed the increase/decrease in working capital, other assets, pension and postretirement benefits, and other liabilities into "Change in operating assets and liabilities".

In conjunction with the sale of L&W Supply Corporation, or L&W, which was completed on October 31, 2016 to American Builders & Contractors Supply Co., Inc., or ABC Supply, L&W is presented as discontinued operations. The results of L&W, which consisted of our Distribution segment, have been excluded from segment results. The 2016 results of our Gypsum and Ceilings segments have been revised to reflect only the sales of USG products from Gypsum and Ceilings to L&W that were sold by L&W to third party customers prior to June 30, 2016. All sales to L&W subsequent to the close of the transaction are included in net sales on our condensed consolidated statements of income. See Note 2 for further discussion.

Our segments are structured around our key products and business units: Gypsum, Ceilings and USG Boral Building Products, or UBBP.

Our Gypsum reportable segment is an aggregation of the operating segments of the gypsum businesses in the United States, Canada, Mexico, and Latin America and our mining operation in Canada, which we indefinitely idled in the third quarter of 2016. Gypsum manufactures products throughout the United States, Canada and Mexico. These products include USG Sheetrock® brand gypsum wallboard, Sheetrock® brand joint compound, Durock® brand cement board, Levelrock® brand gypsum underlayment, Fiberock® brand backerboard, Securock® brand glass mat sheathing used for building exteriors, Securock® brand gypsum fiber and glass mat panels used as roof cover board and USG Structural Panels.

Our Ceilings reportable segment is an aggregation of the operating segments of the ceilings businesses in the United States, Canada, Mexico, and Latin America. Ceilings manufactures ceiling tile in the United States and ceiling grid in the United States and Canada.

UBBP is our 50/50 joint ventures with Boral Limited, or Boral. UBBP manufactures, distributes and sells certain building products, mines raw gypsum and sells natural and synthetic gypsum throughout Asia, Australasia and the Middle East.

These condensed consolidated financial statements and notes are to be read in conjunction with the financial statements and notes included in USG's Annual Report on Form 10-K for the fiscal year ended December 31, 2016, which we filed with the SEC on February 8, 2017.

RECENTLY ADOPTED ACCOUNTING PRONOUNCEMENTS
We adopted Accounting Standards Update, or ASU, 2016-09, "Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting," on January 1, 2017. This ASU simplifies certain aspects of accounting for employee share-based payments. Upon adoption, we recorded to retained earnings a $25 million cumulative-effect adjustment for previously unrecognized excess tax benefits and an immaterial cumulative-effect adjustment for the reversal of cumulative forfeiture estimates to record forfeitures as they occur.

RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS
In March 2017, the Financial Accounting Standards Board, or FASB, issued ASU, 2017-07, "Compensation - Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost,"

which will require us to disaggregate and present current service cost along with other current compensation costs for employees while presenting other net benefit cost components below operating profit. In addition, under the new ASU, only the service cost component of net benefit cost is eligible for capitalization in our inventory and fixed assets. We will retrospectively adopt the standard on January 1, 2018 for the presentation of service cost and prospectively adopt the capitalization of only service cost into inventory and fixed assets. Select line items from our condensed consolidated statements of income for the three and six months ended June 30, 2017 and the year ended December 31, 2016 which reflect the changes in presentation of net benefit costs are as follows.

(millions)	Three months ended June 30, 2017		Six months ended June 30, 2017		Year ended December 31, 2016	
	After Adoption	As Reported	After Adoption	As Reported	After Adoption	As Reported
Gross profit	$ 166	$ 168	$ 324	$ 332	$ 700	$ 705
Operating profit	95	96	179	187	396	394
Other net periodic postretirement benefit (costs)	1	—	8	—	(2)	—
Net income	36	36	91	91	510	510

We do not expect the adoption of ASU 2017-07 to have a significant impact on our other financial statements.

In February 2016, the FASB issued ASU 2016-02, “Leases (Topic 842),” which supersedes existing lease guidance to require lessees to recognize assets and liabilities on the balance sheet for the rights and obligations created by long-term leases and to disclose additional quantitative and qualitative information about leasing arrangements. We will adopt the new standard on January 1, 2019 using the modified retrospective approach. As a result of the new standard, we will implement a new lease accounting system, new processes and accounting policies. Further, we anticipate the adoption of ASU 2016-02 will have a significant impact to our condensed consolidated balance sheets, condensed consolidated statements of income and disclosures; however, we are unable to quantify the financial statement impact at this time.

In May 2014, the FASB issued ASU 2014-09, “Revenue from Contracts with Customers (Topic 606),” which supersedes the revenue recognition requirements in “Revenue Recognition (Topic 605),” and requires entities to recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Subsequently, the FASB has issued various ASUs to provide further clarification around certain aspects of Topic 606. We will retrospectively adopt the standard on January 1, 2018 using practical expedients. The adoption will not have a significant impact to our condensed consolidated financial statements. However, the ASU will require us to include robust and disaggregated disclosures of revenue and how we satisfy our performance obligations in our notes.

2. Discontinued Operations

The sale of L&W was completed on October 31, 2016. The summarized financial information related to L&W that has been excluded from continuing operations and reported as a discontinued operation is as follows:

(millions)	Three months ended June 30,	Six months ended June 30,
	2016	2016
Net sales	$ 386	$ 743
Cost of products sold	367	710
Gross profit	19	33
Selling and administrative expenses	8	11
Operating profit	11	22
Income tax expense	(4)	(8)
Income from discontinued operations	$ 7	$ 14

For the three and six months ended June 30, 2017, we recorded a loss of $9 million for L&W and a loss of $1 million for our European operations which were sold in December 2012 to "Loss (income) from discontinued operations". The loss for L&W primarily reflected a pension settlement charge, net of tax, related to lump sum benefits paid to former employees of L&W.

Additionally, upon the close of the sale, we entered into a supply agreement with L&W, and for the three and six months ended June 30, 2017, we recorded sales of $134 million and $265 million, respectively, and cash inflows related to payments on trade receivables of $143 million and $252 million, respectively. For the comparable periods in 2016, the sales that were sold by L&W to third party customers through June 30, 2016 were $151 million and $296 million, respectively.

3. Equity Method Investments

Equity method investments as of June 30, 2017 and December 31, 2016, were as follows:

	June 30, 2017		December 31, 2016	
(dollars in millions)	Carrying Value	Ownership Percentage	Carrying Value	Ownership Percentage
USG Boral Building Products	$ 649	50%	$ 621	50%
Other equity method investments	7	33% - 50%	7	33% - 50%
Total equity method investments	$ 656		$ 628	

Investment in USG Boral Building Products

During the second quarter of 2017, UBBP paid cash dividends on its earnings through March 2017 of which our 50% share totaled $23 million. We recorded the cash dividend in operating activities on our statements of cash flows. As of June 30, 2017, the amount of our condensed consolidated retained earnings which represents undistributed earnings from UBBP is $47 million.

In the event certain U.S. Dollar denominated performance targets are satisfied by UBBP, we will be obligated to pay Boral an earnout payment of up to $50 million based on performance during the first five years after the closing on February 27, 2014. We have not recorded a liability for this earnout payment as we have concluded that it is currently not probable that the five-year performance target will be achieved. If our conclusion on the probability of achievement changes, we will record a liability representing the present value of the earnout payment with a corresponding increase to our investment. In the second quarter of 2016, we reversed a liability with a corresponding reduction to our investment for an earn-out payment that was based on a three-year performance target.

Our underlying net assets in our investments are denominated in a foreign currency, and translation gains or losses will impact the recorded value of our investments. Translation gains or losses recorded in other comprehensive income were as follows:

	Three months ended June 30,		Six months ended June 30,	
(millions)	2017	2016	2017	2016
Translation (loss) gain	$ (1)	$ (30)	$ 23	$ (13)

Summarized financial information is as follows:

	Three months ended June 30,		Six months ended June 30,	
(millions)	2017	2016	2017	2016
USG Boral Building Products				
Net sales	$ 287	$ 273	$ 563	$ 502
Gross profit	91	86	177	151
Operating profit	40	41	75	64
Income from continuing operations before income taxes	44	46	82	70
Net income	28	34	54	49
Net income attributable to USG Boral Building Products	28	32	53	46
USG share of income from investment accounted for using the equity method	14	16	27	23

TRANSACTIONS WITH UBBP

Our Gypsum segment sells products to UBBP. Total sales to UBBP for the three and six months ended June 30, 2017 and 2016 were immaterial.

In 2014, in connection with the formation of UBBP, we contributed our ownership interest in a joint venture in China to UBBP, but retained our loan receivable from this joint venture. As of June 30, 2017 and December 31, 2016, the loan receivable, including interest, totaled $14 million and $15 million, respectively, and is included in "Other assets" on our accompanying condensed consolidated balance sheets.

4. Segments

Our operations are organized into three reportable segments: Gypsum, Ceilings and UBBP. As discussed in Note 2, the results of L&W for the three and six months ended June 30, 2016 are presented as discontinued operations. Additionally, the results of our Gypsum and Ceilings segments for the three and six months ended June 30, 2016 have been revised to reflect only the sales of USG products from Gypsum and Ceilings to L&W that had been sold by L&W to third party customers prior to June 30, 2016. See Note 3 for segment results for UBBP. Segment results for our Gypsum and Ceilings segments were as follows:

	Three months ended June 30,		Six months ended June 30,	
(millions)	2017	2016	2017	2016
Net Sales:				
Gypsum	$ 688	$ 636	$ 1,337	$ 1,264
Ceilings	126	135	246	256
Eliminations	(3)	(2)	(5)	(4)
Total	$ 811	$ 769	$ 1,578	$ 1,516
Operating Profit (Loss):				
Gypsum	$ 90	$ 112	$ 181	$ 221
Ceilings	23	32	46	60
Corporate	(17)	(22)	(40)	(43)
Total	$ 96	$ 122	$ 187	$ 238

5. Marketable Securities

Marketable securities are classified as available-for-sale securities and reported at fair value, with unrealized gains and losses excluded from earnings and reported in "Accumulated other comprehensive loss", or AOCI, on our accompanying condensed consolidated balance sheets. Proceeds received from sales or maturities of marketable securities were as follows:

	Three months ended June 30,		Six months ended June 30,	
(millions)	2017	2016	2017	2016
Proceeds received	$ 31	$ 103	$ 53	$ 187

Our investments in marketable securities consisted of the following:

	As of June 30, 2017		As of December 31, 2016	
(millions)	Amortized Cost	Fair Value	Amortized Cost	Fair Value
Corporate debt securities	$ 62	$ 62	$ 69	$ 69
U.S. government and agency debt securities	10	10	14	14
Non-U.S. government debt securities	1	1	—	—
Asset-backed debt securities	8	8	2	2
Certificates of deposit	11	11	6	6
Total marketable securities	$ 92	$ 92	$ 91	$ 91

The realized and unrealized gains and losses for the three and six months ended June 30, 2017 and 2016 were immaterial. Cost basis for securities sold are determined on a first-in-first-out basis.

Contractual maturities of marketable securities as of June 30, 2017 were as follows:

(millions)	Amortized Cost	Fair Value
Due in 1 year or less	$ 59	$ 59
Due in 1-5 years	33	33
Total marketable securities	$ 92	$ 92

Actual maturities may differ from the contractual maturities because issuers of the securities may have the right to prepay them.

6. Debt

Total debt consisted of the following:

(millions)	June 30, 2017	December 31, 2016
4.875% senior notes due 2027	$ 500	$ —
5.5% senior notes due 2025	350	350
7.75% senior notes due 2018	—	500
Industrial revenue bonds (due 2028 through 2034)	239	239
Total	$ 1,089	$ 1,089
Less: Unamortized debt issuance costs	12	6
Total	$ 1,077	$ 1,083

ISSUANCE AND REPURCHASE OF SENIOR NOTES

During the second quarter of 2017, we issued $500 million of 4.875% Senior Notes due 2027, referred to as our 4.875% Notes. The net proceeds from the issuance of these notes and cash on hand were used to fund the repurchase of our 7.75% Senior Notes due 2018, referred to as our 7.75% Notes, and all related costs and expenses. We deferred $7 million of debt issuance costs that are being amortized to interest expense over the term of the 4.875% Notes.

Our obligations under the 4.875% Notes are guaranteed on a senior unsecured basis by certain of our domestic subsidiaries. The notes are redeemable in whole or in part at any time at our option prior to June 1, 2022 at the applicable "make-whole" redemption price or on or after June 1, 2022 at stated redemption prices beginning at 102.438% of the principal amount of the notes being redeemed plus any accrued and unpaid interest on the principal amount being redeemed through the redemption date.

The 4.875% Notes contain a provision the same as or similar to the provision in our other senior notes that requires us to offer to purchase the notes at 101% of their principal amount (plus accrued and unpaid interest) in the event of a change in control. The indenture governing the 4.875% Notes contains events of default, covenants and restrictions that are substantially the same as those governing our other senior notes, including a limitation on our ability and the ability of certain of our subsidiaries to create or incur secured indebtedness.

We repurchased the 7.75% Notes through both a cash tender offer and a subsequent notice of redemption for aggregate consideration of $536 million, including premiums of $20 million and accrued interest of $16 million. In the three and six months ended June 30, 2017, we recorded a pre-tax loss on the early extinguishment of debt of $21 million.

In the first six months of 2016, we repurchased $137 million of our 6.3% Senior Notes due 2016, or our 6.3% Notes, for aggregate consideration of $144 million, including premiums of $4 million and accrued interest of $3 million. We recorded a pre-tax loss on early extinguishment of debt of $4 million, of which $2 million occurred in the second quarter of 2016.

CREDIT FACILITY

In the second quarter of 2017, we amended and restated our credit facility agreement to, among other things, increase the maximum borrowing limit from $180 million to $220 million. As a result, we recorded a pre-tax loss on extinguishment of debt of $1 million in both the three and six months ended June 30, 2017. Our amended and restated agreement requires us to maintain a minimum fixed charge coverage ratio in the event excess availability falls below a minimum threshold. Because our excess borrowing availability as of June 30, 2017 of $189 million exceeds this threshold, the requirement to maintain the

minimum fixed charge coverage ratio is not applicable. As of June 30, 2017, we were in compliance with the covenants contained in our credit facility.

As of June 30, 2017 and during the quarter then-ended, there were no borrowings under the facility. Had there been any borrowings as of that date, the applicable interest rate would have been 2.30% for loans in the U.S. and 2.07% for loans in Canada. Outstanding letters of credit totaled $31 million as of June 30, 2017.

OTHER

(millions)	June 30, 2017	December 31, 2016
Fair value of debt	$ 1,125	$ 1,129
Accrued interest	13	31

The fair values of our debt were determined utilizing unadjusted prices from independent pricing services and are classified as Level 2. See Note 8 for further discussion on fair value measurements. The vendors' methodologies utilize various forms of market data, including but not limited to, trade data, yield, spreads, bids and offers. We review the values provided by the independent pricing service for reasonableness by comparing the valuations received from the independent pricing service to valuations from at least one other observable source.

7. Derivative Instruments

We use derivative instruments to manage selected commodity price and foreign currency exposures as described below. We do not use derivative instruments for speculative trading purposes, and we typically do not hedge beyond six years. Cash flows from derivative instruments are included in operating activities in our condensed consolidated statements of cash flows. Gains and losses on contracts designated as cash flow hedges are reclassified into earnings when the underlying forecasted transactions affect earnings. For contracts designated as cash flow hedges, we reassess the probability of the underlying forecasted transactions occurring on a quarterly basis.

Derivative Instruments	Type	Hedged Item	Aggregate Notional Amount	Contracts Maturing Through
Commodity	Natural gas swaps	Purchases of natural gas	38 million mmBTUs*	December 31, 2022
Foreign Exchange	Forward contracts	Purchases of products and services denominated in a foreign currency	$111 million	December 31, 2018

* - millions of British Thermal Units

COUNTERPARTY RISK, MASTER NETTING ARRANGEMENTS AND BALANCE SHEET OFFSETTING

We are exposed to credit losses in the event of nonperformance by the counterparties to our derivative instruments. As of June 30, 2017, our derivatives were in a $10 million net liability position. All of our counterparties have investment grade credit ratings; accordingly, we anticipate that they will be able to fully satisfy their obligations under the contracts.

All of our derivative contracts are governed by master netting agreements negotiated between us and the counterparties that reduce our counterparty credit exposure. The agreements outline the conditions (such as credit ratings and net derivative fair values) upon which we, or the counterparties, are required to post collateral. As required by certain of our agreements, we had $7 million of collateral posted with our counterparties related to our derivatives as of June 30, 2017. Amounts paid as cash collateral are included in "Receivables" on our accompanying condensed consolidated balance sheets.

We have not adopted an accounting policy to offset fair value amounts related to derivative contracts under our master netting arrangements; therefore, individual derivative contracts are reflected on a gross basis, as either assets or liabilities, on our accompanying condensed consolidated balance sheets, based on their fair value as of the balance sheet date.

FINANCIAL STATEMENT INFORMATION

The following are the pretax effects of derivative instruments on the condensed consolidated statements of income for the three months ended June 30, 2017 and 2016.

	Amount of Gain or (Loss) Recognized in Other Comprehensive Income on Derivatives (Effective Portion)		Location of Gain or (Loss) Reclassified from AOCI into Income (Effective Portion)	Amount of Gain or (Loss) Reclassified from AOCI into Income (Effective Portion)	
(millions)	2017	2016		2017	2016
Derivatives in Cash Flow Hedging Relationships					
Commodity contracts	$ (1)	$ 7	Cost of products sold	$ (1)	$ (5)
Foreign exchange contracts	(3)	—	Cost of products sold	—	2
Total	$ (4)	$ 7		$ (1)	$ (3)

	Location of Gain or (Loss) Recognized in Income on Derivatives	Amount of Gain or (Loss) Recognized in Income on Derivatives	
(millions)		2017	2016
Derivatives Not Designated as Hedging Instruments			
Commodity contracts	Cost of products sold	$ —	$ 1
Total		$ —	$ 1

The following are the pretax effects of derivative instruments on the condensed consolidated statements of income for the six months ended June 30, 2017 and 2016.

	Amount of Gain or (Loss) Recognized in Other Comprehensive Income on Derivatives (Effective Portion)		Location of Gain or (Loss) Reclassified from AOCI into Income (Effective Portion)	Amount of Gain or (Loss) Reclassified from AOCI into Income (Effective Portion)	
(millions)	2017	2016		2017	2016
Derivatives in Cash Flow Hedging Relationships					
Commodity contracts	$ (10)	$ 2	Cost of products sold	$ (1)	$ (10)
Foreign exchange contracts	(3)	(6)	Cost of products sold	—	4
Total	$ (13)	$ (4)		$ (1)	$ (6)

	Location of Gain or (Loss) Recognized in Income on Derivatives	Amount of Gain or (Loss) Recognized in Income on Derivatives	
(millions)		2017	2016
Derivatives Not Designated as Hedging Instruments			
Commodity contracts	Cost of products sold	$ (1)	$ —
Total		$ (1)	$ —

For both commodity contracts and foreign exchange contracts, no ineffectiveness was recorded in the three and six months ended June 30, 2017 and 2016.

NON-CONFIDENTIAL

The following are the fair values of derivative instruments and the location on our accompanying condensed consolidated balance sheets as of June 30, 2017 and December 31, 2016.

	Balance Sheet Location	Fair Value		Balance Sheet Location	Fair Value	
(millions)		6/30/17	12/31/16		6/30/17	12/31/16
Derivatives in Cash Flow Hedging Relationships						
Commodity contracts	Other current assets	$ 2	$ 8	Accrued expenses	$ 4	$ 4
Commodity contracts	Other assets	2	3	Other liabilities	7	5
Foreign exchange contracts	Other current assets	—	1	Accrued expenses	2	1
Foreign exchange contracts	Other assets	—	—	Other liabilities	1	—
Total derivatives in cash flow hedging relationships		$ 4	$ 12		$ 14	$ 10
Derivatives Not Designated as Hedging Instruments						
Commodity contracts	Other current assets	$ —	$ 1	Accrued expenses	$ —	$ —
Total derivatives not designated as hedging instruments		$ —	$ 1		$ —	$ —
Total derivatives	Total assets	$ 4	$ 13	Total liabilities	$ 14	$ 10

As of June 30, 2017, we had no derivatives designated as fair value hedges or net investment hedges.

8. Fair Value Measurements

Certain assets and liabilities are required to be recorded at fair value. There are three levels of inputs that may be used to measure fair value which are described below along with how USG derives fair value.

Level	Definition	USG
Level 1	Quoted prices for identical assets and liabilities in active markets	Cash equivalents and equity mutual funds consist of money market funds that are valued based on quoted prices in active markets.
Level 2	Quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in markets that are not active; and model-derived valuations in which all significant inputs and significant value drivers are observable in active markets	Marketable securities are valued using a "market value" approach. Values are based on quoted prices and other observable market inputs received from data providers.
		Derivatives are valued using the "income" approach such as discounted-cash-flow models and readily observable market data. The inputs for the valuation models are obtained from data providers and include end-of-period spot and forward natural gas prices, foreign currency exchange rates, natural gas price volatility and LIBOR and swap rates for discounting the cash flows implied from the derivative contracts.
Level 3	Valuations derived from valuation techniques in which one or more significant inputs or significant value drivers are unobservable	No level 3 investments.

Our assets and liabilities measured at fair value on a recurring basis were as follows:

	Level 1		Level 2		Level 3		Total	
(millions)	6/30/17	12/31/16	6/30/17	12/31/16	6/30/17	12/31/16	6/30/17	12/31/16
Cash equivalents	$ 36	$ 38	$ 30	$ 34	$ —	$ —	$ 66	$ 72
Equity mutual funds	5	5	—	—	—	—	5	5
Marketable securities:								
Corporate debt securities	—	—	62	69	—	—	62	69
U.S. government and agency debt securities	—	—	10	14	—	—	10	14
Non-U.S. government debt securities	—	—	1	—	—	—	1	—
Asset-backed debt securities	—	—	8	2	—	—	8	2
Certificates of deposit	—	—	11	6	—	—	11	6
Derivative assets	—	—	4	13	—	—	4	13
Derivative liabilities	—	—	(14)	(10)	—	—	(14)	(10)

9. Employee Retirement Plans

The components of net pension and postretirement benefit costs are summarized in the following table:

	Three months ended June 30,		Six months ended June 30,	
(millions)	2017	2016	2017	2016
Pension:				
Service cost of benefits earned	$ 11	$ 12	$ 21	$ 23
Interest cost on projected benefit obligation	15	17	31	34
Expected return on plan assets	(23)	(22)	(46)	(44)
Settlement [(a)]	20	—	20	2
Net amortization	5	4	10	9
Net pension cost [(b)]	$ 28	$ 11	$ 36	$ 24
Postretirement:				
Service cost of benefits earned	$ 1	$ —	$ 2	$ 1
Interest cost on projected benefit obligation	1	2	2	3
Net amortization	(6)	(7)	(12)	(14)
Net postretirement benefit[(c)]	$ (4)	$ (5)	$ (8)	$ (10)

(a) The settlement charge recorded for the three and six months ended June 30, 2017 related to lump sum benefits paid, primarily driven by the payments to former L&W employees.

(b) Net pension cost, excluding settlement costs, includes expenses allocated to (loss) income from discontinued operations for L&W totaling $2 million and $4 million for the three and six months ended June 30, 2016, respectively.

(c) Net postretirement benefit includes a net benefit allocated to (loss) income from discontinued operations for L&W totaling $1 million and $2 million for the three and six months ended June 30, 2016, respectively.

For the three and six months ended June 30, 2017, we recorded settlement expense of $20 million as the total lump sum distributions paid by the USG Corporation pension plan to both L&W employees and former USG employees during the first six months of 2017 exceeded the settlement threshold. Upon termination of their employment from USG, all L&W employees had the option to receive a lump sum benefit payment from the USG Corporation pension plan. For the benefits paid to terminated employees of L&W, we recorded a pre-tax loss of $13 million to "(Loss) income from discontinued operations." For the benefits paid to USG retirees, we recorded a pre-tax loss of $5 million to "Costs of products sold" and of $2 million to "Selling and administrative expenses".

During the first six months of 2017, we made cash contributions of $16 million to our domestic supplemental pension plan and $3 million to our pension plan in Canada. In July 2017, we made cash contributions of $50 million to the USG Corporation Retirement Plan Trust. We expect to make total contributions to our pension plans in 2017 of approximately $71 million.

10. Share-Based Compensation

During the first six months of 2017, we granted share-based compensation in the form of market share units, or MSUs, performance shares, and restricted stock units, or RSUs, to eligible participants under our 2016 Long-Term Incentive Plan. We recognize expense on all share-based grants over the service period, which is the shorter of the period until the employees' retirement eligibility dates and the service period of the award for awards expected to vest. We record forfeitures as they occur. Awards granted during the first six months of 2017, weighted average fair value, and assumptions used to determine fair value were as follows:

	MSUs	Performance Shares	RSUs
Awards granted	371,346	112,732	49,000
Weighted average fair value [(a)]	$ 35.79	$ 39.42	$ 31.36
Expected volatility [(b)]	32.10%	32.10%	N/A
Risk-free rate [(c)]	1.39%	1.39%	N/A
Expected term (in years) [(d)]	2.96	2.96	N/A
Expected dividends	—	—	N/A

(a) Fair value of MSUs and Performance Shares is estimated on the date of grant using the Monte Carlo simulation using the assumptions outlined above. Fair value of RSUs is equal to the closing price of our common stock on the date of grant.

(b) The expected volatility rate is based on stock price history immediately prior to grant for a period commensurate with the expected term.

(c) The risk-free rate is based on zero coupon U.S. government issues at the time of grant.

(d) The expected term represents the period from the valuation date to the end of the performance period.

Terms of the awards granted during the first six months of 2017 were as follows:

	MSUs	Performance Shares	RSUs
Maximum shares/units earned	Varies from 0% to 150% of the number of MSUs awarded depending on the actual performance of our stock price	Varies from 0% to 200% of the number of performance shares awarded depending on the performance of our total stockholder return relative to the performance of the Dow Jones U.S. Construction and Materials Index [(a)]	100%
Vesting Provisions	Three-year performance period	Three-year performance period	Specified number of years from the grant date
Vesting in the case of termination of employment due to death, disability, retirement or change in control during performance period [(b)]	Pro-rated based on the number of full months employed in 2017 with awards issued at the end of the three-year period	Pro-rated based on the number of full months employed during the performance period with awards issued at the end of the three-year period	Varies
Settlement	Settled in common stock at the end of the performance or vesting period		

(a) Adjustments to the performance of the Dow Jones U.S. Construction and Materials Index may be made in certain circumstances.

(b) Early vesting for MSUs, performance shares and RSUs in situations where there is a change in control also requires a related loss of employment or diminution of duties.

OTHER

MSUs, performance shares, RSUs, and stock options and deferred shares associated with our deferred compensation program for non-employee directors that were not included in the computation of diluted earnings per share for those periods because their inclusion would be anti-dilutive were as follows:

	Three months ended June 30,		Six months ended June 30,	
(millions)	2017	2016	2017	2016
MSUs, performance shares, RSUs and stock options	0.7	1.7	0.9	1.7
Deferred shares associated with a deferred compensation program for non-employee directors	—	0.2	—	0.2

11. Supplemental Balance Sheet Information

INVENTORIES

Total inventories consisted of the following:

(millions)	June 30, 2017	December 31, 2016
Finished goods	$ 137	$ 132
Work in progress	40	37
Raw materials	72	67
Total	$ 249	$ 236

ACCRUED EXPENSES

Accrued expenses consisted of the following:

(millions)	June 30, 2017	December 31, 2016
Self-insurance reserves	$ 12	$ 12
Employee compensation	12	35
Interest	13	31
Derivatives	6	5
Pension and other postretirement benefits	24	24
Environmental	17	18
Other	49	50
Total	$ 133	$ 175

ASSET RETIREMENT OBLIGATIONS

Changes in the liability for asset retirement obligations consisted of the following:

	Six months ended June 30,	
(millions)	2017	2016
Balance as of January 1	$ 113	$ 119
Accretion expense	3	4
Liabilities settled	—	(2)
Foreign currency translation	1	1
Balance as of June 30	$ 117	$ 122

ASSET DISPOSITIONS

In the second quarter of 2016, we recorded a gain of $11 million, or $7 million net of tax, on the sale of a surplus property. The sale relieved the Company of an asset retirement obligation of $2 million. The pre-tax gain was recorded in cost of products sold within our Gypsum segment.

12. Stockholders' Equity

TREASURY STOCK

Changes in treasury stock for the six months ended June 30, 2017 and 2016 were as follows:

	2017		2016	
(millions, except share data)	Treasury Shares (000)	Treasury Stock	Treasury Shares (000)	Treasury Stock
Balance as of January 1	—	$ —	—	$ —
Stock issuances	165	5	77	1
Repurchase of common stock for tax withholdings related to stock-based compensation	(107)	(3)	(77)	(1)
Repurchase of common stock under share repurchase program	(3,161)	(97)	—	—
Balance as of June 30	(3,103)	$ (95)	—	$ —

ACCUMULATED OTHER COMPREHENSIVE LOSS

Changes in the balances of each component of AOCI for the six months ended June 30, 2017 and 2016 were as follows:

	Derivatives		Defined Benefit Plans		Foreign Currency Translation		AOCI	
(millions)	2017	2016	2017	2016	2017	2016	2017	2016
Balance as of January 1	$ 27	$ 20	$ (246)	$ (221)	$ (166)	$ (113)	$ (385)	$ (314)
Other comprehensive income (loss) before reclassifications, net of tax	(8)	(4)	3	(6)	48	(12)	43	(22)
Less: Amounts reclassified from AOCI, net of tax	(1)	(4)	(12)	(1)	—	—	(13)	(5)
Net other comprehensive income (loss)	(7)	—	15	(5)	48	(12)	56	(17)
Balance as of June 30	$ 20	$ 20	$ (231)	$ (226)	$ (118)	$ (125)	$ (329)	$ (331)

Amounts reclassified from AOCI, net of tax, for the three and six months ended June 30, 2017 and 2016, were as follows:

	Three months ended June 30,		Six months ended June 30,	
(millions)	2017	2016	2017	2016
Derivatives				
Net reclassification from AOCI for cash flow hedges included in cost of products sold	$ (1)	$ (3)	$ (1)	$ (6)
Less: Income tax benefit on reclassification from AOCI included in income tax expense	—	(1)	—	(2)
Net amount reclassified from AOCI	$ (1)	$ (2)	$ (1)	$ (4)
Defined Benefit Plans				
Net reclassification from AOCI for amortization of prior service cost included in cost of products sold	$ (4)	$ (2)	$ (4)	$ (4)
Net reclassification from AOCI for amortization of prior service cost included in selling and administrative expenses	(3)	—	(3)	2
Net reclassification from AOCI for amortization of prior service cost included in (loss) income from discontinued operations, net of tax	(8)	—	(8)	—
Less: Income tax benefit on reclassification from AOCI included in income tax expense	(3)	(1)	(3)	(1)
Net amount reclassified from AOCI	$ (12)	$ (1)	$ (12)	$ (1)

We estimate that we will reclassify a net $3 million after-tax loss on derivatives from AOCI to earnings within the next 12 months.

13. Income Taxes

Our income tax expense and effective tax rate was as follows:

	Three months ended June 30,		Six months ended June 30,	
(dollars in millions)	2017	2016	2017	2016
Income tax expense	$ 20	$ 34	$ 49	$ 60
Effective tax rate	30.3%	33.7%	32.7%	32.1%

The income tax expense for all periods presented reflected taxes from federal, foreign, state and local jurisdictions. Our effective tax rates were lower than the U.S. statutory rate primarily because of earnings realized in countries that had lower statutory tax rates and our equity method income. Our effective tax rate in the future will depend on the portion of our profits earned within and outside the United States.

As of June 30, 2017, we had federal net operating loss, or NOL, carryforwards of approximately $791 million that are available to offset future federal taxable income and will expire in the years 2029 through 2032, none of which are currently subject to Internal Revenue Code limitations under Section 382. In addition, as of that date, we had federal alternative minimum tax, or AMT, credit carryforwards of approximately $45 million that are available to reduce future regular federal income taxes over an indefinite period and foreign tax credit carryforwards of $146 million that are available to offset future federal taxable income and expire in the years 2022 through 2026. As of December 31, 2016, the foreign tax credits were $143 million and are attributable to tax planning strategies to optimize foreign tax credit utilization and management's intention to amend its tax returns for the tax years 2012 through 2014 in order to claim credits for previously deducted foreign tax. In order to fully realize these U.S. federal net deferred tax assets, taxable income of approximately $1.336 billion would need to be generated during the period before their expiration.

As of June 30, 2017, we had a gross deferred tax asset of $167 million related to our state NOLs and tax credit carryforwards. The NOLs will expire if unused in years 2018 through 2032. To the extent that we do not generate sufficient state taxable income within the statutory carryforward periods to utilize the NOL and tax credit carryforwards in these states, they will expire unused.

During the first six months of 2017, the valuation allowance against our deferred tax assets was $51 million, which was unchanged from December 31, 2016.

The Internal Revenue Code imposes limitations on a corporation's ability to utilize NOLs if it experiences an "ownership change" which can result from transactions increasing the ownership of certain stockholders in the stock of a corporation by more than 50 percentage points over a three-year period. If we were to experience an ownership change, utilization of our NOLs would be subject to an annual limitation that may be carried over to later years within the allowed NOL carryforward period. Over the entire carryforward period, we may not be able to use all our NOLs due to the aforementioned annual limitation. If an ownership change had occurred as of June 30, 2017, our annual U.S. federal NOL utilization would have been limited to approximately $87 million per year.

14. Litigation

WALLBOARD PRICING LAWSUITS

In the first quarter of 2015, USG, United States Gypsum Company, L&W Supply Corporation, and 7 other wallboard manufacturers were named as defendants in a lawsuit filed in federal court in California by 12 homebuilders alleging that since at least September 2011, U.S. wallboard manufacturers conspired to fix and raise the price of gypsum wallboard sold in the United States and to effectuate the alleged conspiracy by ending the practice of providing job quotes on wallboard. The lawsuit was transferred to the United States District Court for the Eastern District of Pennsylvania under the title In re: Domestic Drywall Antitrust Litigation, MDL No. 2437. In the second quarter of 2016, the Court dismissed with prejudice the portions of the homebuilders' complaint alleging a conspiracy in 2014 and 2015, ruling that there were insufficient factual allegations to allow such a claim to go forward. The homebuilders' claims alleging a conspiracy prior to 2014 have not been dismissed, and the case proceeds as to those claims. USG has agreed to defend and indemnify L&W Supply Corporation with regard to this matter.

Beginning in the third quarter of 2013, class action lawsuits making similar allegations with regard to Canada were filed in Quebec, Ontario and British Columbia courts on behalf of purchasers of wallboard in Canada and naming USG Corporation, United States Gypsum Company, CGC Inc., and other wallboard manufacturers as defendants.

We believe that the cost, if any, of resolving the homebuilders' lawsuit and Canadian class action litigation will not have a material effect on our results of operations, financial position or cash flows.

ENVIRONMENTAL LITIGATION

We have been notified by state and federal environmental protection agencies of possible involvement as one of numerous "potentially responsible parties" in certain Superfund sites in the United States. As a potentially responsible party, we may be responsible to pay for some part of the cleanup of hazardous waste at those sites. In most of these sites, our involvement is expected to be minimal. In addition, we are involved in environmental cleanups of other property that we own or owned. As of June 30, 2017 and December 31, 2016, we had accruals of $17 million and $18 million, respectively, for our probable and reasonably estimable liability in connection with these matters. Our accruals take into account all known or estimated undiscounted costs associated with these sites, including site investigations and feasibility costs, site cleanup and remediation, certain legal costs, and fines and penalties, if any. However, we continue to review these accruals as additional information becomes available and revise them as appropriate. Based on the information known to us, we believe these environmental matters will not have a material effect on our results of operations, financial position or cash flows.

15. Gypsum Transportation Limited

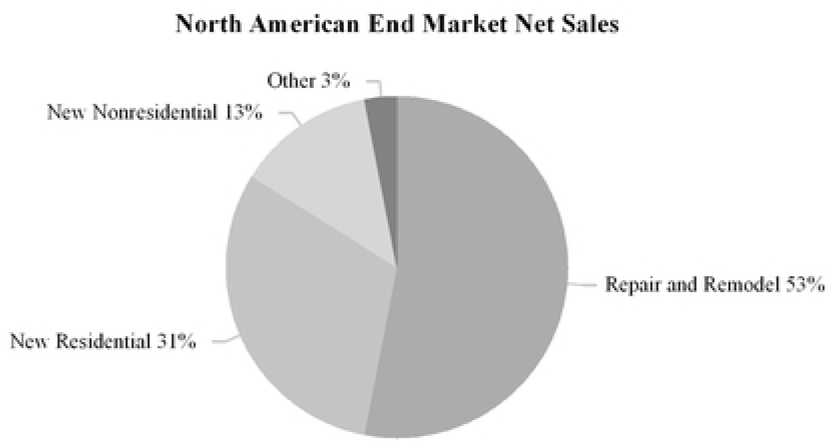
We exited our shipping operations in the second quarter of 2015. In November 2015, we entered into a release and debt settlement agreement to recover a portion of our loss incurred when our former trading partner ceased performing under the contract. We recorded a recovery of receivable of $8 million in the first quarter of 2016, which is presented as $3 million within "Recovery of receivable", $1 million within "Interest income" and $4 million within "Other (expense) income, net" on our condensed consolidated statement of income.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

In the following Management's Discussion and Analysis of Financial Condition and Results of Operations, "USG," "we," "our" and "us" refer to USG Corporation, a Delaware corporation, and its subsidiaries included in the condensed consolidated financial statements, except as otherwise indicated or as the context otherwise requires.

Overview

We are a leading manufacturer of building products and innovative building solutions. We produce a wide range of products for use in new residential, new nonresidential, and residential and nonresidential repair and remodel construction as well as products used in certain industrial processes. The following chart reflects our estimation of our North American net sales during the first six months of 2017.



SEGMENTS

Our operations are organized into three segments: Gypsum, Ceilings and USG Boral Building Products, or UBBP. In conjunction with the sale of L&W Supply Corporation, or L&W, which was completed on October 31, 2016 to American Builders & Contractors Supply Co., Inc., or ABC Supply, L&W is presented as discontinued operations. The results of L&W, which consisted of our Distribution segment, have been excluded from segment results and the 2016 results of our Gypsum and Ceilings segments have been revised to reflect only the sales of USG products from Gypsum and Ceilings to L&W that were sold to third party customers prior to June 30, 2016. All L&W sales subsequent to the close of the transaction, including those under a supply agreement that governs the sales of wallboard and certain other products from USG to L&W, are included in net sales on our condensed consolidated statements of income.

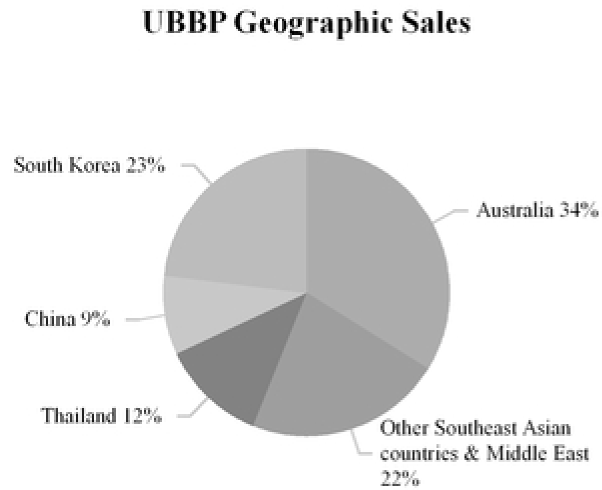
Gypsum: Our Gypsum segment manufactures and markets gypsum and related products in the United States, Canada, Mexico and Latin America. It includes United States Gypsum Company, or U.S. Gypsum, in the United States, CGC Inc., or CGC, in Canada, USG Mexico, S.A. de C.V., or USG Mexico, and subsidiaries in Latin America and our mining operation in Canada, which we indefinitely idled in the third quarter of 2016. Gypsum's products are used in a variety of building applications to construct walls, ceilings, roofs and floors of residential, commercial and institutional buildings, as well as in certain industrial applications. The major product lines within the Gypsum segment are:

Wallboard	Sheetrock® brand gypsum wallboard and Securock® brand glass mat sheathing portfolios
Surfaces	Sheetrock® brand joint compound portfolio, as well as corner bead, joint tape and plaster
Substrates	Durock® brand cement board, Fiberock® brand backerboard, Levelrock® brand systems of poured gypsum flooring, Securock® brand roof board, ExoAir® 430 brand air-water barrier system, industrial gypsum, and construction plaster products

Ceilings: Our Ceilings segment manufactures and markets interior ceilings systems products in the United States, Canada, Mexico and Latin America. Ceilings includes USG Interiors, LLC, or USG Interiors, in the United States, CGC, and USG Mexico and subsidiaries in Latin America. Ceilings is a leading supplier of interior ceilings products used primarily in commercial or nonresidential applications. Ceilings manufactures ceiling tile in the United States and ceiling grid in the United States and Canada. It markets ceiling tile and ceiling grid in the United States, Canada, Mexico, and Latin America.

USG Boral Building Products: USG Boral Building Products, or UBBP, is our 50/50 joint ventures with Boral Limited, or Boral. UBBP manufactures, distributes and sells certain building products, mines raw gypsum and sells natural and synthetic gypsum throughout Asia, Australasia and the Middle East. UBBP manufactures and distributes products for wall, ceiling, floor lining and exterior systems that utilize gypsum wallboard, referred to as plasterboard in the region in which UBBP operates, mineral fiber ceiling tiles, steel grid and joint compound.

Geographic Information: For the first six months of 2017, we recorded $1.578 billion of net sales in our condensed consolidated statements of income, and net sales for UBBP, which are not included in our condensed consolidated statement of income, were $563 million. The following charts reflect the geographic breakdown of net sales during the first six months of 2017.



MARKET CONDITIONS AND OUTLOOK
Our businesses are cyclical in nature and sensitive to changes in general economic conditions, including, in particular, conditions in the housing and construction-based markets in North America and in Asia and Australasia. Our expansion via UBBP into the markets of Asia, Australasia, and the Middle East has significantly increased our exposure to the economic conditions in those areas. However, the UBBP investment has helped diversify USG's overall exposure to changes in the North American economic conditions.

The following table summarizes the current market conditions and outlook for our primary end markets in North America.

End Market	Lead time	Metric	Source	Market Condition/Outlook
New Residential	Installation of gypsum products into a single family home typically follows a housing start by 90-120 days	Housing starts (seasonally adjusted)	U.S. Census Bureau	6/30/2017 - 1.215 million 12/31/2016 - 1.226 million 6/30/2016 - 1.195 million
			Industry forecast (Blue Chip Economic Indicators)	2017 - 1.19 million to 1.29 million [a]
			USG forecast	2017 estimated - 1.20 million units
New Nonresidential	Installation of gypsum and ceilings products typically follows signing of construction contracts by about 12 to 18 months	Change in floor space for which contracts are signed	Dodge Data & Analytics	2016 from 2015 - No change
			Industry forecast (Dodge Data & Analytics) [b]	2017 from 2016 - 5% increase
			USG forecast	2017 estimated to increase by low to mid single digits
Repair and Remodel [c]	Remodels typically begin within two years from purchase	Sales of existing homes (seasonally adjusted)	National Association of Realtors	June 2017 - 5.52 million June 2016 - 5.48 million Actual 2016 - 5.45 million
		Overall repair and remodel spending for gypsum products	USG forecast	2017 spending estimated to increase by mid single digits

(a) Forecast based on the average of the bottom ten and top ten forecasts included in the report, respectively.

(b) Dodge Data & Analytics' forecast includes several building types, which do not generate significant demand for our products.

(c) The repair and remodel market includes renovation of both residential and nonresidential buildings.

The rate of recovery in the new residential construction market, new nonresidential construction market and the repair and remodel market still remains uncertain and will depend on broader economic circumstances, including employment, household formation, the home ownership rate, existing home price trends, availability of mortgage financing, interest rates, consumer confidence, job growth and discretionary business investment. An increase in interest rates, high levels of unemployment, restrictive lending practices, a decrease in consumer confidence or other adverse economic conditions could have a material adverse effect on our business, financial condition, operating results and cash flows. Our businesses are also affected by a variety of other factors beyond our control, including the inventory of unsold homes, the level of foreclosures, home resale rates, housing affordability, office and retail vacancy rates and foreign currency exchange rates. Since we operate in a variety of geographic markets, our businesses are subject to the economic conditions in each of these geographic markets. General economic downturns or localized downturns or financial concerns in the regions where we have operations may have a material adverse effect on our business, financial condition, results of operations and cash flows.

We expect modest improvement over the next twelve months in the construction industries of Canada and Mexico. Other international markets, including those that are within the UBBP territory, provide opportunities for our operations to serve the demand in these regions. Australia is expected to experience a decline in housing starts; however, these housing starts are expected to remain above the long-term average. South Korea has experienced recent rapid growth in its housing market; however, the overall construction industry is expected to slow over the next twelve months. Several emerging markets which are within the UBBP territory are forecast to experience steady growth. The international markets within the UBBP territory are beginning to adopt Western building practices, which provide more opportunities. We anticipate that the results from UBBP will enable us to counteract some of the potential cyclicality in our North American business.

Sales within our Gypsum segment have generally improved with the modest recovery in residential housing, although the segment continues to be adversely affected by the low level of residential and other construction activity compared to historical averages. Our Ceilings segment, which primarily serves the commercial markets, has shown some improvement. However, it continues to be adversely affected by the low levels of new commercial construction activity as compared to historical averages. Our Ceilings segment is also adversely affected by changing construction preferences such as open plenum.

The following table summarizes the industry information on wallboard shipments and capacity.

U.S. Industry Information	Metric	Source	Market Condition/Outlook
U.S. industry shipments of gypsum board [a]	Billion of square feet (bsf)	Gypsum Association	First six months 2017 - 12.4 bsf First six months 2016 - 12.2 bsf
		USG forecast	2017 expected to increase low single digits from 25 bsf in 2016
U.S. wallboard capacity	Billion of square feet (bsf)	USG estimate	1/1/2017 - 33.4 bsf
U.S. industry capacity utilization rate	Annualized shipments as a percentage of industry capacity	USG estimate	First six months 2017 - 73% First six months 2016 - 74%

(a) Includes gypsum wallboard, other gypsum-related paneling products and imports

Based on current industry trends and forecasts, demand for gypsum wallboard is expected to increase in 2017, but the magnitude of any increase will depend on the levels of housing starts and repair and remodel activity, among other factors. We project that the industry capacity utilization rate will experience a modest increase in 2017 compared to 2016.

We could experience pressure on gypsum wallboard selling prices and our gross margins at these levels of capacity utilization. U.S. Gypsum has informed its U.S. customers that we will be increasing prices on our wallboard products effective in August 2017. However, it is uncertain that we will be able to obtain or maintain the proposed increase. If we are unable to maintain or implement price increases, our net sales, operating results and cash flows may be materially and adversely impacted.

CURRENCY IMPACT

Currency impact on consolidated and segment results has been derived by translating current period results at the quarter-to-date and year-to-date average foreign currency rates for the quarter and six months ended June 30, 2016.

Consolidated Results of Operations

(dollars in millions, except per-share data)	2017	2016	$ Favorable (Unfavorable)	% Favorable (Unfavorable)
Three months ended June 30:				
Net sales	$ 811	$ 769	$ 42	5 %
Cost of products sold	643	576	(67)	(12)%
Gross profit	168	193	(25)	(13)%
Selling and administrative expenses	72	71	(1)	(1)%
Operating profit	96	122	(26)	(21)%
Income from equity method investments	14	16	(2)	(13)%
Interest expense	(19)	(38)	19	50 %
Interest income	—	1	(1)	(100)%
Loss on extinguishment of debt	(22)	(2)	(20)	*
Other (expense) income, net	(3)	2	(5)	*
Income from continuing operations before income taxes	66	101	(35)	(35)%
Income tax expense	(20)	(34)	14	41 %
Income from continuing operations	46	67	(21)	(31)%
(Loss) income from discontinued operations, net of tax	(10)	7	(17)	*
Net income	$ 36	$ 74	$ (38)	(51)%
Diluted earnings per share - net income	$ 0.24	$ 0.50	$ (0.26)	(52)%
Six months ended June 30:				
Net sales	$ 1,578	$ 1,516	$ 62	4 %
Cost of products sold	1,246	1,142	(104)	(9%)
Gross profit	332	374	(42)	(11)%
Selling and administrative expenses	145	139	(6)	(4)%
Recovery of receivable	—	(3)	(3)	(100)%
Operating profit	187	238	(51)	(21)%
Income from equity method investments	27	23	4	17 %
Interest expense	(39)	(78)	39	50 %
Interest income	1	3	(2)	(67)%
Loss on extinguishment of debt	(22)	(4)	(18)	*
Other (expense) income, net	(4)	5	(9)	*
Income before continuing operations before income taxes	150	187	(37)	(20%)
Income tax expense	(49)	(60)	11	18 %
Income from continuing operations	101	127	(26)	(20%)
(Loss) income from discontinued operations, net of tax	(10)	14	(24)	*
Net income	$ 91	$ 141	$ (50)	(35%)
Diluted earnings per share - net income	$ 0.61	$ 0.95	$ (0.34)	(36%)

*not meaningful

NET SALES

Consolidated net sales for the second quarter of 2017 increased $42 million, or 5%, compared with the second quarter of 2016. This reflected higher net sales for our Gypsum segment offset by lower net sales for our Ceilings segment. Sales for our Gypsum segment increased 8% which reflected an increase in shipments of both gypsum wallboard and joint compound offset by lower average selling price for both products. The decrease in net sales of 7% for our Ceilings segment was driven by decreased shipments of ceiling grid and lower average selling price for ceiling tile. On a consolidated basis for the comparative periods, we estimate that our net sales were negatively impacted by foreign currency translation of $5 million.

Consolidated net sales for the first six months of 2017 increased $62 million, or 4%, compared with the first six months of 2016. The increase reflects higher sales for our Gypsum segment of 6% offset by a decrease in sales for our Ceilings segment of 4%. The higher levels of net sales for our Gypsum segment reflected higher volume and higher average selling price for gypsum wallboard. The decrease in sales for our Ceilings segment reflected lower volumes of both ceiling grid and ceiling tile and lower average selling price for ceiling tile. On a consolidated basis for the comparative periods, we estimate that our net sales were negatively impacted by foreign currency translation of $5 million.

GROSS PROFIT

Gross profit for the second quarter of 2017 decreased $25 million, or 13%, compared with the second quarter of 2016. Gross profit as a percentage of net sales was 20.7% for the second quarter of 2017, compared with 25.1% for the second quarter of 2016. The lower gross margin was driven by increased manufacturing costs in both our Gypsum and Ceilings segments and a pension settlement charge of $5 million in the second quarter of 2017. The decrease in gross margin for our Gypsum segment reflected higher average per unit cost for gypsum wallboard due to higher raw material costs, primarily waste paper partially offset by lower per unit fixed costs due to higher volumes. The decrease in gross margin for our Ceilings segment also reflected higher per unit costs for ceiling grid due to higher average per unit cost for raw materials reflective of higher steel prices. Gross profit in the second quarter of 2016 also included a gain of $11 million for the sale of surplus property.

Gross profit for the first six months of 2017 decreased $42 million, or 11%, compared with the first six months of 2016. Gross profit as a percentage of net sales was 21.0% for the first six months of 2017, compared with 24.7% for the first six months of 2016. The decrease reflected lower margins due to increased manufacturing costs in both our Gypsum and Ceilings segments and a pension settlement charge of $5 million in the second quarter of 2017. The lower gross margin for our Gypsum segment was driven primarily by increased per unit costs for gypsum products due to higher average per unit cost for raw materials, primarily waste paper and to a lesser extent synthetic gypsum. The lower gross margin for our Ceilings segment reflected higher per unit costs for ceiling grid due to higher average per unit fixed cost due to lower volumes. Gross profit for the first six months of 2016 also included a gain of $11 million for the sale of surplus property.

SELLING AND ADMINISTRATIVE EXPENSES

Selling and administrative expenses totaled $72 million in the second quarter of 2017 compared to $71 million in the second quarter of 2016. As a percentage of net sales, selling and administrative expenses decreased to 8.9% for the second quarter of 2017 from 9.2% for the second quarter of 2016. The increase in selling and administrative expenses included a $2 million pension settlement charge.

Selling and administrative expenses totaled $145 million in the first six months of 2017 compared to $139 million in the first six months of 2016. As a percentage of net sales, selling and administrative expenses remained unchanged at 9.2% for each of the comparative periods. The increase in selling and administrative expenses reflected higher costs for marketing and services, including those in support of growth platforms.

RECOVERY ON RECEIVABLE

In the first quarter of 2016, we received the remaining payments under a settlement agreement with our former shipping trading partner of which $3 million represented a recovery of a previously deemed uncollectible receivable. The remaining payments received under the settlement agreement were recorded in "Interest income" and "Other (expense) income, net."

INCOME FROM EQUITY METHOD INVESTMENTS

Income from equity method investments, primarily UBBP, in the second quarter of 2017 was $14 million, a decrease of $2 million, or 13%, from the second quarter of 2016. This reflected lower income recorded by UBBP due to higher selling and administrative expenses and higher tax expense for withholding taxes partially offset by higher margins in South Korea and Vietnam.

Income from equity method investments in the first six months of 2017 was $27 million, an increase of $4 million from the first six months of 2016. The improved results for UBBP were driven by higher margins in South Korea and Australia partially offset by an increase in selling and administrative expenses and higher withholding taxes. The increase also reflected favorable currency impact of $1 million.

INTEREST EXPENSE

Interest expense was $19 million in the second quarter of 2017, down $19 million, or 50%, from the second quarter of 2016 and was $39 million in the first six months of 2017, down $39 million, or 50%, from the first six months of 2016. The decrease in interest expense in both comparative periods reflected lower debt levels and lower interest rates.

LOSS ON EXTINGUISHMENT OF DEBT

In the second quarter of 2017, we recorded a loss of $22 million on the extinguishment of debt. This included $21 million primarily for premiums paid as a result of a tender offer and repurchase of our 7.75% Notes and $1 million for deferred fees

upon the amendment of our credit facility. In the second quarter and first six months of 2016, we recorded a loss of $2 million and $4 million, respectively, on the extinguishment of debt, including premiums, in connection with the open market purchases of our 6.3% Notes. See Note 6 to the condensed consolidated financial statements for additional information.

OTHER (EXPENSE) INCOME, NET

In the second quarter and the first six months of 2017, we recorded $3 million and $4 million, respectively, of net other expense, which primarily reflected net losses on foreign currency transactions. In the second quarter and the first six months of 2016, we recorded $2 million and $5 million, respectively, of net other income, which included net gains on foreign currency transactions. Also included in net other income for the first six months of 2016 was the receipt of payments in conjunction with a settlement agreement with our former shipping trading partner of which $4 million was recorded as other income. See Note 15 to the condensed consolidated financial statements for additional information.

INCOME TAX EXPENSE

We recorded income tax expense of $20 million in the second quarter of 2017 from federal, foreign, state and local jurisdictions. Our effective tax rate was 30.3% for the second quarter of 2017. In the second quarter of 2016, we recorded income tax expense of $34 million resulting in an effective tax rate of 33.7%.

We recorded income tax expense for the first six months of 2017 of $49 million from federal, foreign, state and local jurisdictions. Our effective tax rate was 32.7% for the first six months of 2017. In the first six months of 2016, we recorded income tax expense of $60 million for an effective tax rate of 32.1%.

(LOSS) INCOME FROM DISCONTINUED OPERATIONS

In the second quarter and first six months of 2017, we recorded a loss of $10 million to discontinued operations which primarily reflected a pension settlement charge related to lump sum benefits paid to former employees of L&W and also included a loss of $1 million for our European operations which were sold in December 2012. For the second quarter and first six months of 2016, income from discontinued operations was $7 million and $14 million, respectively, and reflected the results of L&W.

Segment Results of Operations

GYPSUM

Net sales and operating profit (loss) for the businesses comprising our Gypsum segment were as follows:

	Three months ended June 30:				Six months ended June 30:			
			Favorable (Unfavorable)				Favorable (Unfavorable)	
(millions)	2017	2016	$	%	2017	2016	$	%
Net sales								
United States	$ 582	$ 539	$ 43	8 %	$ 1,137	$ 1,075	$ 62	6 %
Canada	92	86	6	7 %	175	168	7	4 %
Mexico / Latin America	52	49	3	6 %	101	93	8	9 %
Canadian Mining	—	—	—	— %	—	—	—	— %
Eliminations	(38)	(38)	—	— %	(76)	(72)	(4)	(6)%
Total	$ 688	$ 636	$ 52	8 %	$ 1,337	$ 1,264	$ 73	6 %
Operating profit (loss)								
United States	$ 87	$ 106	$ (19)	(18)%	$ 177	$ 207	$ (30)	(14)%
Canada	2	5	(3)	(60)%	3	11	(8)	(73)%
Mexico / Latin America	2	4	(2)	(50)%	3	6	(3)	(50)%
Canadian Mining	(1)	(3)	2	67 %	(2)	(6)	4	67 %
Gypsum Transportation Limited	—	—	—	— %	—	3	(3)	(100)%
Total	$ 90	$ 112	$ (22)	(20)%	$ 181	$ 221	$ (40)	(18)%

United States: Net sales in the second quarter of 2017 were $582 million, up $43 million, or 8%, compared with the second quarter of 2016. The increase in net sales was due to the following:

			Volume		Price	
(millions)	$	%	$	%	$	%
Change to Q2 2017 from Q2 2016						
Sheetrock® brand gypsum wallboard	$ 22	9%	$ 25	10%	$ (3)	(1)%
Sheetrock® brand joint compound	3	4%	5	5%	(2)	(1)%
Durock® brand cement board	1	2%	1	2%	—	— %
Other	17					
Total increase in net sales	$ 43	8%				

Sales for Sheetrock® brand gypsum wallboard increased $22 million from the second quarter of 2016 compared to the second quarter of 2017 due to increased shipments offset by lower average selling price. The increased volumes were driven by higher shipments to big box retailers, pro dealers and specialty dealers. The increased volumes were also driven by the timing of a price increase, which in 2017 occurred in late January and in 2016 occurred in March. During 2016, additional purchases by customers were made in the first quarter in anticipation of the price increase. The decrease in the average selling price reflected some competitive pricing pressures as we balance price and volume across the country with new customers and the continued transition under the L&W supply agreement.

Sales of Sheetrock® brand joint compound increased $3 million on increased volume offset by decreased average selling price. The higher volume was driven by higher shipments to big box retailers, pro dealers and specialty dealers. The lower average selling price reflected the continued transition under the supply agreement with L&W. Sales of Durock® brand cement board increased $1 million. Included in the increase in Other was higher sales of other gypsum sales of $5 million. Also included in Other was a $1 million increase in sales for inventory sold by Gypsum that was included in L&W's inventory as of June 30, 2016, a $9 million increase for freight and an adjustment in the second quarter of 2016 of $2 million to customer reserves.

Operating profit of $87 million was recorded in the second quarter of 2017 compared to $106 million recorded in the second quarter of 2016. The decrease of $19 million in operating profit reflected the following:

(millions)	$	Volume $	Price $	Cost $
Change to Q2 2017 from Q2 2016				
Sheetrock® brand gypsum wallboard	$ —	$ 11	$ (3)	$ (8)
Sheetrock® brand joint compound	(2)	1	(2)	(1)
Other	(17)			
Total decrease in operating profit	$ (19)			

The decrease in operating profit reflected flat gross profit for Sheetrock® brand gypsum wallboard and lower gross profit for Sheetrock® brand joint compound. The unchanged gross profit for Sheetrock® brand gypsum wallboard reflected higher cost per unit and lower average selling price offset by higher volumes. The higher per unit cost for Sheetrock® brand gypsum wallboard reflected an increase in per unit cost of 11% for raw materials driven primarily by waste paper offset by a decrease in per unit cost of 4% for conversion costs and 9% for fixed costs due to higher volumes. The drivers of the lower average selling price and higher volumes are discussed above in our analysis over the increase in sales.

The decrease in gross profit for Sheetrock® brand joint compound reflected lower average selling price and higher per unit costs. The higher cost per unit for joint treatment reflected higher per unit costs for raw materials. Gross profit of Durock® brand cement board was primarily flat over the comparative period.

Included in Other is the following:

- the absence of $9 million for items recorded in the second quarter of 2016 which included a gain of $11 million for the sale of surplus property offset by a $2 million adjustment to customer reserves,
- a pension settlement charge of $5 million,
- lower gross profit of $3 million on other surfaces and substrates products,
- higher selling and administrative expenses of $1 million, offset by
- the increase in gross profit of $1 million recorded on sales by Gypsum to L&W that were included in L&W's inventory at the end of the second quarter of 2016.

Canada: Net sales for our gypsum business in Canada in the second quarter of 2017 were $92 million, an increase of $6 million from $86 million in the second quarter of 2016. The change in sales reflected higher sales of gypsum wallboard of $9 million and higher freight of $1 million offset by an unfavorable impact of currency translation of $4 million. The increase in sales of gypsum wallboard was driven by an increase of 13% in average selling price and an increase of 6% in volume. The increase in average selling price reflected the final decisions of the Canadian authorities on the minimum pricing of gypsum board imported into Western Canada. The decisions were as a result of an anti-dumping proceeding initiated by a competing Canadian wallboard manufacturer.

Operating profit in the second quarter of 2017 was $2 million, a decrease of $3 million from the second quarter of 2016. The decrease reflected an increase for royalties of $2 million, the unfavorable impact due to currency fluctuations of $2 million and lower gross profit on joint compound of $1 million offset by higher gross profit of gypsum wallboard of $2 million.

Mexico / Latin America: Net sales for our gypsum businesses in Mexico and Latin America were $52 million for the second quarter of 2017, an increase of $3 million from the second quarter of 2016. The increase reflected higher sales of gypsum wallboard, joint treatment, Durock® brand cement tile backerboard and drywall steel offset by unfavorable currency translation of $1 million. Operating profit decreased to $2 million in the second quarter of 2017 from $4 million in the second quarter of 2016 due primarily to an increase in selling and administrative expenses and lower gross profit on other products offset by lower miscellaneous costs. The impact due to foreign currency translation was immaterial.

Canadian Mining: Our mining operation in Canada recorded no sales for both the second quarter of 2017 and the second quarter of 2016. Operating loss was $1 million for the second quarter of 2017 and $3 million for the second quarter of 2016. In the third quarter of 2016, we indefinitely idled our mining operations in Little Narrows, Nova Scotia, Canada which resulted in a decrease of operating costs.

Gypsum Transportation Limited: Our shipping company, Gypsum Transportation Limited, or GTL, recorded no sales or operating profit for the second quarter of 2017 or 2016 as we have exited this business.

CEILINGS

Net sales and operating profit for the businesses comprising our Ceilings segment were as follows:

	Three months ended June 30:				Six months ended June 30:			
			Favorable (Unfavorable)				Favorable (Unfavorable)	
(millions)	2017	2016	$	%	2017	2016	$	%
Net sales								
United States	$ 118	$ 124	$ (6)	(5)%	$ 230	$ 239	$ (9)	(4)%
Canada	12	14	(2)	(14)%	25	27	(2)	(7)%
Mexico / Latin America	7	8	(1)	(13)%	14	16	(2)	(13)%
Eliminations	(11)	(11)	—	— %	(23)	(26)	3	12 %
Total	$ 126	$ 135	$ (9)	(7)%	$ 246	$ 256	$ (10)	(4)%
Operating profit								
United States	$ 23	$ 29	$ (6)	(21)%	$ 44	$ 55	$ (11)	(20)%
Canada	—	2	(2)	(100)%	1	3	(2)	(67)%
Mexico / Latin America	—	1	(1)	(100)%	1	2	(1)	(50)%
Total	$ 23	$ 32	$ (9)	(28)%	$ 46	$ 60	$ (14)	(23)%

United States: Net sales for our domestic ceilings business in the second quarter of 2017 were $118 million, a decrease of $6 million, or 5%, from the second quarter of 2016. The decrease reflected the following:

			Volume		Price	
(millions)	$	%	$	%	$	%
Change to Q2 2017 from Q2 2016						
Ceiling grid	$ (3)	(4)%	$ (3)	(4)%	$ —	— %
Ceiling tile	(3)	(3)%	(1)	(1)%	(2)	(2)%
Total decrease in net sales	$ (6)	(5)%				

Sales of both ceiling grid and ceiling tile decreased in the second quarter of 2017 compared with the second quarter of 2016 due to changes in product mix. The decrease in ceiling grid reflected lower volumes due to the timing of shipments and projects. The decrease in ceiling tile reflected lower average selling price which reflected the competitive market and lower volumes due to timing of shipments. Net sales also included a decrease of $1 million in freight offset by a $1 million increase in sales for inventory sold by Ceilings that was included in L&W's inventory as of June 30, 2016.

Operating profit was $23 million for the second quarter of 2017, a decrease of $6 million, or 21%, from the second quarter of 2016. The decrease reflected the following:

		Volume	Price	Cost
(millions)	$	$	$	$
Change to Q2 2017 from Q2 2016				
Ceiling grid	$ (4)	$ (1)	$ —	$ (3)
Ceiling tile	(2)	—	(2)	—
Total decrease in operating profit	$ (6)			

The decrease in operating profit reflected a decrease in gross profit for both ceiling grid and ceiling tile due to changes in product mix. The lower gross profit for ceiling grid reflected higher per unit cost and lower volumes. The higher per unit cost w

as driven primarily by higher raw material cost led by higher steel prices. The decrease in gross profit for ceiling tile reflected lower average selling price due to the competitive market.

Operating profit included a $1 million pension settlement charge offset by $1 million in gross profit recorded on sales by Ceilings to L&W that were included in L&W's inventory as of June 30, 2016.

Canada: Net sales for the second quarter of 2017 were $12 million, a decrease of $2 million from the second quarter of 2016. The decrease in sales reflected lower sales of $1 million for both ceiling tile and ceiling grid due to lower volumes and lower freight of $1 million. Operating profit decreased $2 million for the second quarter of 2017 to $0 million from the second quarter of 2016 and reflected lower gross profit of both ceiling tile and ceiling grid due to lower volumes and higher input costs.

Mexico / Latin America: Net sales of $7 million for the second quarter of 2017 decreased $1 million from the second quarter of 2016. Operating profit decreased $1 million to $0 million for the second quarter of 2017 from the second quarter of 2016. The decrease in sales and operating profit primarily reflected lower sales and operating profit in our Latin America region.

USG BORAL BUILDING PRODUCTS

The following reflects the net sales and operating profit as recorded by UBBP and the equity income recorded by USG.

	Three months ended June 30:				Six months ended June 30:			
			Favorable (Unfavorable)				Favorable (Unfavorable)	
(millions)	2017	2016	$	%	2017	2016	$	%
Net sales	$ 287	$ 273	$ 14	5 %	$ 563	$ 502	$ 61	12%
Operating profit	40	41	(1)	(2)%	75	64	11	17%
Income from equity method investments - UBBP	14	16	(2)	(13)%	27	23	4	17%

Net sales for UBBP were $287 million in the second quarter of 2017 compared to $273 million for the second quarter of 2016. The increase of $14 million reflected increased plasterboard shipments in South Korea, Vietnam, India and Oman and favorable impact of currency translation of $2 million. The increase is offset by decreased sales in Indonesia. Plasterboard shipments increased to 1.20 billion square feet for the second quarter of 2017 from 1.19 billion square feet for the second quarter of 2016. Shipments of certain adjacent products, including mineral fiber ceiling tiles, also increased in the second quarter of 2017 from the second quarter of 2016.

Operating profit decreased to $40 million in the second quarter of 2017 compared to $41 million in the second quarter of 2016. Operating profit in 2017 reflected lower margins in Indonesia and China and higher selling and administrative expenses offset by higher margins in South Korea and Vietnam, continued improved market acceptance of lightweight products and a favorable currency impact of $1 million.

Our share of net income of UBBP decreased $2 million in the second quarter of 2017 as compared to the second quarter of 2016. This decrease reflected lower income recorded by UBBP due to lower operating profit and higher tax expense due to $2 million recorded for withholding taxes on intercompany dividends.

CORPORATE

The operating loss for Corporate decreased to $17 million in the second quarter of 2017 compared with $22 million in the second quarter of 2016 primarily due to lower expense for incentive compensation.

Liquidity and Capital Resources

As of June 30, 2017, we had $463 million of cash and cash equivalents and marketable securities compared with $518 million as of December 31, 2016. See discussion below under Cash Flows for explanation of the change in cash and cash equivalents. Our total liquidity as of June 30, 2017 was $652 million compared to $603 million as of December 31, 2016 (including $189 million and $85 million, respectively, of borrowing availability under our credit facility). The increase in liquidity reflected higher borrowing availability offset by payments for our share repurchase program, premiums paid for the refinancing of our 7.75% Notes and for incentives.

We invest in cash equivalents and marketable securities pursuant to an investment policy that has preservation of principal as its primary objective. The policy includes provisions regarding diversification, credit quality and maturity profile

that are designed to minimize the overall risk profile of our investment portfolio. The securities in the portfolio are subject to normal market fluctuations. See Note 5 to the condensed consolidated financial statements for additional information regarding our investments in marketable securities.

Total debt, consisting of senior notes and industrial revenue bonds, amounted to $1.077 billion ($1.089 billion in aggregate principal amount less $12 million of debt issuance costs) as of June 30, 2017 and $1.083 billion ($1.089 billion in aggregate principal amount less $6 million of debt issuance costs) as of December 31, 2016. During the six months ended June 30, 2017, there were no borrowings under our revolving credit facility and no borrowings outstanding at period-end.

During the second quarter of 2017, we amended and restated our credit facility agreement. Our amended and restated agreement increased the maximum borrowing limit from $180 million to $220 million (including a $50 million borrowing sublimit for CGC) that is available to fund working capital needs and other general corporate purposes and matures on May 1, 2022. The facility is guaranteed by certain of our significant subsidiaries and secured by such parties' eligible trade receivables and inventory. The maximum borrowing limit under the credit agreement may be increased up to $450 million at our request and with our lenders' approval. The credit agreement contains other covenants and events of default that are customary for similar agreements and may limit our ability to take various actions including our ability to pay a dividend or repurchase our stock.

The maximum borrowing limit under the credit agreement is $220 million. The credit agreement also specifies that the maximum principal that may be borrowed is impacted by any outstanding borrowings and letters of credit under the credit agreement, by a borrowing base (comprised of eligible trade receivables and inventory), and the minimum excess availability that may be required due to the Covenant Trigger Threshold, described below, being applicable. As of June 30, 2017, the maximum principal we could borrow after taking into account the foregoing factors was approximately $189 million.

The credit agreement contains a covenant that would require us to maintain a minimum fixed charge coverage ratio of not less than 1.0-to-1.0 in the event that excess availability falls below the Covenant Trigger Threshold equal to 10% of the lesser of (a) the aggregate revolving commitment and (b) the aggregate of the USG and CGC borrowing base. As of June 30, 2017, our fixed charge coverage ratio was 1.46-to-1.0; and therefore, we are not required to maintain minimum excess availability of no less than the Covenant Trigger Threshold so that the financial covenant will remain inapplicable.

Our undistributed foreign earnings as of June 30, 2017 are considered permanently reinvested with the exception of earnings associated with the former holding company of the Knauf-USG joint venture that was sold in December 2015. The amount of cash and cash equivalents held by our foreign subsidiaries was $166 million as of June 30, 2017 and would be subject to material repatriation tax effects.

CASH FLOWS

The following table presents a summary of our cash flows:

	Six months ended June 30,	
(millions)	2017	2016
Net cash provided by (used for):		
Operating activities from continuing operations	$ 129	$ 151
Investing activities from continuing operations	(70)	16
Financing activities from continuing operations	(126)	(141)
Discontinued operations	5	11
Effect of exchange rate changes on cash	6	—
Net (decrease) increase in cash and cash equivalents	$ (56)	$ 37

Operating Activities: Net cash provided by operating activities was lower for the first six months of 2017 compared to the first six months of 2016 due to lower operating profit. Also driving the decrease was a higher net cash outflow in the first six months of 2017 for working capital of $102 million as compared to the cash outflow of $35 million for the first six months of 2016. The increase in cash outflows reflected an increase in accounts receivable of $37 million due to higher sales in the current quarter, an increase in inventories of $5 million due to increased costs for raw materials and a decrease in accrued expenses of $23 million due to higher payments on incentive accruals and timing of interest payments. These were offset by lower cash outflows for accounts payable of $5 million in the first six months of 2017 as compared to 2016, which included an increase in capital expenditures which remained in accounts payable at June 30, 2017.

As of June 30, 2017, working capital (current assets less current liabilities) amounted to $570 million, and the ratio of current assets to current liabilities was 2.50-to-1. As of December 31, 2016, working capital amounted to $527 million, and the ratio of current assets to current liabilities was 2.25-to-1.

Investing Activities: Net cash used for investing activities was $70 million for the first six months of 2017 compared to $16 million of net cash provided by investing activities for the six months ended June 30, 2016. The increase in the use of cash reflected lower cash inflows for marketable securities and higher cash outflows for capital expenditures. The net activity of purchases and sales or maturities of marketable securities was a cash outflow of $1 million for the six months ended June 30, 2017 as compared to a cash inflow of $20 million for the six months ended June 30, 2016.

The increase in capital expenditures to $72 million in the first six months of 2017 from $26 million in the first six months of 2016 reflected expenditures for the replacement, modernization and expansion of operations, including Advanced Manufacturing initiatives. Approved capital expenditures totaled $148 million as of June 30, 2017 compared with $121 million as of December 31, 2016.

Financing Activities: Net cash used for financing activities for the first six months of 2017 was $126 million compared to $141 million for the first six months of 2016. The cash used in 2017 reflected the $520 million paid to redeem $500 million of our 7.75% Notes including tender premiums and the repurchase of common stock under the approved share repurchase program of $97 million. This was offset by the issuance of $500 million of our 4.875% Notes, net of debt issuance fees. The cash used in 2016 reflected $141 million paid to repurchase $137 million of our 6.3% Notes.

Discontinued Operations: Net cash provided by discontinued operations for first six months of 2017 was $5 million compared to $11 million for the first six months of 2016. The net cash inflow in 2017 primarily reflected a working capital adjustment associated with the sale of L&W.

DEFINED BENEFIT PLANS

During the first six months of 2017, we made cash contributions of $16 million to our domestic supplemental pension plan and $3 million to our pension plan in Canada. In July 2017, we made cash contributions of $50 million to the USG Corporation Retirement Plan Trust. We expect to make total contributions to our pension and postretirement plans in 2017 of approximately $71 million.

LIQUIDITY OUTLOOK

In the first six months of 2017, our investing cash outflows included $72 million of capital expenditures. In total for 2017, we plan to spend approximately $200 million on capital expenditures, which includes up to $80 million allocated for Advanced Manufacturing projects to standardize and automate production across our Gypsum and Ceilings businesses. We expect to fund these expenditures with cash from operations or cash on hand.

Interest payments, based on our current level of outstanding debt, are expected to decrease to $87 million in 2017 compared with $153 million in 2016 which reflects lower debt levels due to the repayment of $1.1 billion in debt in 2016 and the refinancing of our 7.75% Notes to our 4.875% Notes.

On January 31, 2017, our Board of Directors approved a share repurchase program in which we may repurchase up to $250 million of our common stock. As of June 30, 2017, we have purchased $97 million in shares of common stock under the program. The timing and the amount of any repurchases will be determined based on market conditions and other factors. Share repurchases will be funded with available cash on hand. See Part II, Item 2 for additional information.

Since formation, UBBP was funded from its net cash flow from operations and third-party financing, and it is our intent that as an ongoing operation, UBBP will continue to self-fund. UBBP targets the distribution of 50% of combined after tax profits to USG and Boral; however, this dividend may be adjusted by the UBBP Board with unanimous resolution. During the second quarter of 2017, UBBP paid cash dividends on earnings through March 2017, of which our 50% share totaled $23 million.

In the event certain performance targets are satisfied by UBBP, we will be obligated to pay Boral an earnout payment in an amount up to $50 million in 2019, based on UBBP performance during the first five years. We have not recorded a liability for this earnout payment as we have concluded that it is currently not probable that the five-year performance target will be achieved.

We believe that cash on hand, cash equivalents, marketable securities, cash available from future operations and our credit facility will provide sufficient liquidity to fund our operations for at least the next 12 months. Cash requirements include, among other things, capital expenditures, working capital needs, employee retirement plans funding, interest payments and other contractual obligations.

Recently Issued Accounting Pronouncements

See Part 1, Item 1, Note 1 to the condensed consolidated financial statements for information related to new accounting standards.

Legal Contingencies

We are named as defendants in litigation arising from our operations, including lawsuits or claims arising from commercial disputes, product performance or warranties, products liability, and worksite or vehicular accidents.

In 2015, USG, United States Gypsum Company, L&W Supply Corporation, and seven other wallboard manufacturers were named as defendants in a lawsuit filed by twelve homebuilders alleging that the defendants conspired to fix the price of wallboard sold in the United States. Earlier, in 2013, class action lawsuits making similar allegations were filed in Canada on behalf of a class of purchasers of wallboard in Canada. We believe that the cost, if any, of resolving the homebuilders' lawsuit and Canadian class action litigation will not have a material effect on our results of operations, financial position or cash flows.

In the third quarter of 2015 United States Gypsum Company was served with a federal grand jury subpoena requesting the production of company records in connection with a federal investigation of the gypsum drywall industry. Two former employees of USG have also been served with subpoenas. We believe the investigation, although a separate proceeding, is related to the same events at issue in the litigation discussed above. We are fully cooperating with the grand jury investigation. We believe we acted in full compliance with the law, and we do not expect the resolution of this matter to result in any material effect on our business, financial position, liquidity or results of operations; however, we can provide no assurances as to the scope, timing, or outcome of any such investigation.

See Note 14 to the condensed consolidated financial statements for further information regarding the foregoing lawsuits and other legal matters.

Critical Accounting Policies

The preparation of our financial statements requires us to make estimates, judgments and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses during the periods presented. Our Annual Report on Form 10-K for the fiscal year ended December 31, 2016, which we filed with the Securities and Exchange Commission on February 8, 2017, includes a summary of the critical accounting policies we believe are the most important to aid in understanding our financial results. There have been no changes to those critical accounting policies that have had a material impact on our reported amounts of assets, liabilities, revenues or expenses during the first six months of 2017.

Forward-Looking Statements

This report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 related to management's expectations about future conditions. Any forward-looking statements represent our views only as of the date of this report and should not be relied upon as representing our views as of any subsequent date, and we undertake no obligation to update any forward-looking statement. Forward-looking statements include, but are not limited to, statements under the following headings: (1) "Management's Discussion and Analysis" about (a) market conditions and outlook, including anticipated growth in new residential and nonresidential construction, repair and remodel spending, and the construction industries in Canada and Mexico, and the anticipated growth or decline in countries in the UBBP territory and its effect on the cyclicality of our North American business, industry shipments of gypsum, demand for gypsum wallboard and industry capacity utilization rate, and our selling prices and margins; (b) expected contributions to our pension and postretirement plans; (c) our liquidity outlook, including our capital expenditure plans, expected interest payments, share repurchase program, UBBP's dividend policy and ability to self-fund, and cash requirements and adequacy of resources to fund them; and (d) the outcome and effect of ongoing and future legal and governmental proceedings; and (2) "Legal Proceedings" about the outcome and effect of ongoing and future legal and governmental proceedings.

Some of the risk factors that affect our business and financial results are discussed under "Risk Factors" in our most recent Annual Report on Form 10-K. We wish to caution the reader that actual business, market or other conditions, including the "Risk Factors" discussed in our most recent Annual Report on Form 10-K or in our other Securities and Exchange Commission filings, could cause our actual results to differ materially from those stated in the forward-looking statements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

There have been no significant changes to our market risk since December 31, 2016.

ITEM 4. CONTROLS AND PROCEDURES

(a) Evaluation of disclosure controls and procedures.

Our Chief Executive Officer and Chief Financial Officer, after evaluating the effectiveness of our "disclosure controls and procedures" (as defined in Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, or the Act), have concluded that, as of the end of the quarter covered by this report, our disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by an issuer in the reports that it files or submits under the Act is accumulated and communicated to the issuer's management, including its principal executive and financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

(b) Changes in internal control over financial reporting.

There were no changes in our "internal control over financial reporting" (as defined in Rule 13a-15(f) promulgated under the Act) identified in connection with the evaluation required by Rule 13a-15(d) promulgated under the Act that occurred during the quarter ended June 30, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

See Part I, Item 1, Note 14 to the condensed consolidated financial statements and Part I, Item 2, Legal Contingencies for additional information regarding legal proceedings.

ITEM 1A. RISK FACTORS

There is no material change in the information reported under "Part I-Item 1A-Risk Factors" contained in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

(a) Pursuant to our Deferred Compensation Program for Non-Employee Directors, one of our non-employee directors deferred a portion of his quarterly retainer for service as a director that was payable on June 30, 2017 into a total of approximately 745 deferred stock units. These units will increase or decrease in value in direct proportion to the market value of our common stock and will be paid in cash or shares of common stock, at the director’s option, following termination of service as a director. The issuance of these deferred stock units was effected through a private placement under Section 4(2) of the Securities Act of 1933, as amended, and was exempt from registration under Section 5 of that Act.

(b) Not applicable

(c) On February 1, 2017, we announced that our Board of Directors approved a $250 million share repurchase program. Under the program, we may repurchase shares from time to time in open market transactions or in privately-negotiated transactions in accordance with applicable securities laws, including under plans complying with Rule 10b5-1 of the Exchange Act. We may discontinue the program at any time and the program has no set expiration date. The timing and amount of any repurchase of shares is determined by our management, based on its evaluation of market conditions, cash on hand, applicable legal requirements and other factors. The following table provides information about purchases of our common stock we made during the three months ended June 30, 2017:

Issuer Purchases of Equity Securities

Period	Total number of shares purchased	Average price paid per share	Total number of shares repurchased as part of publicly announced plans or programs	Approximate dollar value of shares that may yet be purchased under the plans or programs *(millions)*
April 1, 2017 to April 30, 2017	718,191	$ 31.48	718,191	$ 202
May 1, 2017 to May 31, 2017	823,863	$ 29.47	823,863	$ 178
June 1, 2017 to June 30, 2017	855,218	$ 28.87	855,218	$ 153
Total	2,397,272		2,397,272	

ITEM 4. MINE SAFETY DISCLOSURES

The information concerning mine safety violations or regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K promulgated by the SEC is included in Exhibit 95 to this report.

ITEM 6. EXHIBITS

The information in the Exhibit Index of this Quarterly Report on Form 10-Q is incorporated into this Item 6 by reference.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

USG CORPORATION

By /s/ Jennifer F. Scanlon

Jennifer F. Scanlon,
Director, President and Chief Executive Officer

By /s/ Matthew F. Hilzinger

Matthew F. Hilzinger,
Executive Vice President and Chief Financial Officer

By /s/ Jeanette A. Press

Jeanette A. Press,
Vice President, Controller and Principal Accounting Officer

July 26, 2017

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EXHIBIT INDEX

Exhibit Number	Exhibit
3.1	Amendment to Restated Certificate of Incorporation of USG Corporation (incorporated by reference to Exhibit 3.1 to USG Corporation's Current Report on Form 8-K (File No. 001-08864) dated May 11, 2017)
4.1	Supplemental Indenture No. 7, dated as of May 15, 2017, by and among USG Corporation, each of United States Gypsum Company, USG Foreign Investments, Ltd. and USG Interiors, LLC, as guarantors, and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.1 to USG Corporation's Current Report on Form 8-K (File No. 001-08864) dated May 15, 2017)
10.1	Fifth Amendment and Restatement Agreement, dated as of May 1, 2017, among USG Corporation, certain of its wholly-owned domestic and Canadian subsidiaries, JPMorgan Chase Bank, N.A., as administrative agent and as an issuing bank, JPMorgan Chase Bank, N.A., Toronto Branch, as Canadian agent, and the lenders and issuing banks party thereto (incorporated by reference to Exhibit 10.1 to USG Corporation's Current Report on Form 8-K (File No. 001-08864) dated May 1, 2017)
10.2	Fifth Amended and Restated Credit Agreement, dated as of May 1, 2017, among USG Corporation, as the “U.S. Borrower,” CGC Inc., a New Brunswick corporation and wholly-owned indirect subsidiary of USG Corporation, as the “Canadian Borrower,” JPMorgan Chase Bank, N.A., as administrative agent, JPMorgan Chase Bank, N.A., Toronto Branch, as Canadian agent, the lenders and issuing banks party thereto and Bank of America, N.A. and Wells Fargo Bank, National Association, as co-syndication agents (incorporated by reference to Exhibit 10.2 to USG Corporation's Current Report on Form 8-K (File No. 001-08864) dated May 1, 2017)
10.3	Canadian Amendment and Reaffirmation Agreement, dated as of May 1, 2017, by and between CGC Inc. and JPMorgan Chase Bank, N.A. (incorporated by reference to Exhibit 10.3 to USG Corporation's Current Report on Form 8-K (File No. 001-08864) dated May 1, 2017)
31.1	Rule 13a-14(a) Certifications of USG Corporation’s Chief Executive Officer *
31.2	Rule 13a-14(a) Certifications of USG Corporation’s Chief Financial Officer *
32.1	Section 1350 Certifications of USG Corporation’s Chief Executive Officer *
32.2	Section 1350 Certifications of USG Corporation’s Chief Financial Officer *
95	Mine Safety Disclosures *
101	The following financial information from USG Corporation’s Quarterly Report on Form 10-Q for the three and six months ended June 30, 2017, formatted in XBRL (Extensible Business Reporting Language): (1) the condensed consolidated statements of income for the three and six months ended June 30, 2017 and 2016, (2) the condensed consolidated statements of comprehensive income (loss) for the three and six months ended June 30, 2017 and 2016, (3) the condensed consolidated balance sheets as of June 30, 2017 and December 31, 2016, (4) the condensed consolidated statements of cash flows for the six months ended June 30, 2017 and 2016 and (5) notes to the condensed consolidated financial statements. *

* Filed or furnished herewith

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

☑ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended September 30, 2017

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from __________ to __________

Commission File Number 1-8864

USG CORPORATION
(Exact name of registrant as specified in its charter)

Delaware	36-3329400
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
550 West Adams Street, Chicago, Illinois	60661-3676
(Address of principal executive offices)	(Zip code)

Registrant's telephone number, including area code (312) 436-4000

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☑ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of large accelerated filer, accelerated filer, smaller reporting company, and emerging growth company in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☑	Accelerated filer	☐
Non-accelerated filer	☐	(Do not check if a smaller reporting company)	
		Smaller reporting company	☐
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

0438

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☑

The number of shares of the registrant’s common stock outstanding as of September 30, 2017 was 141,474,530.

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PART I. FINANCIAL INFORMATION
ITEM 1. FINANCIAL STATEMENTS

USG CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF INCOME
(Unaudited)

(millions, except per-share and share data)	Three months ended September 30, 2017	Three months ended September 30, 2016	Nine months ended September 30, 2017	Nine months ended September 30, 2016
Net sales	$ 795	$ 767	$ 2,373	$ 2,283
Cost of products sold	632	586	1,878	1,728
Gross profit	163	181	495	555
Selling and administrative expenses	70	74	215	213
Long-lived asset impairment charges	—	10	—	10
Recovery of receivable	—	—	—	(3)
Operating profit	93	97	280	335
Income from equity method investments	15	14	42	37
Interest expense	(15)	(37)	(54)	(115)
Interest income	1	—	2	3
Loss on extinguishment of debt	—	(1)	(22)	(5)
Other (expense) income, net	(1)	1	(5)	6
Income from continuing operations before income taxes	93	74	243	261
Income tax expense	(27)	(18)	(76)	(78)
Income from continuing operations	66	56	167	183
(Loss) income from discontinued operations, net of tax	—	6	(10)	20
Net income	$ 66	$ 62	$ 157	$ 203
Earnings per average common share - basic:				
Income from continuing operations	$ 0.47	$ 0.39	$ 1.16	$ 1.26
(Loss) income from discontinued operations	—	0.04	(0.07)	0.13
Net income	$ 0.47	$ 0.43	$ 1.09	$ 1.39
Earnings per average common share - diluted:				
Income from continuing operations	$ 0.46	$ 0.38	$ 1.14	$ 1.25
(Loss) income from discontinued operations	—	0.04	(0.07)	0.13
Net income	$ 0.46	$ 0.42	$ 1.07	$ 1.38
Average common shares	142,103,717	146,043,791	145,054,965	145,892,390
Dilutive awards under long-term incentive plan	2,389,428	2,147,176	2,312,816	1,628,501
Deferred shares for non-employee directors	188,546	196,670	216,242	—
Average diluted common shares	144,681,691	148,387,637	147,584,023	147,520,891

See accompanying Notes to Condensed Consolidated Financial Statements.

USG CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(Unaudited)

(millions)	Three months ended September 30, 2017	Three months ended September 30, 2016	Nine months ended September 30, 2017	Nine months ended September 30, 2016
Net income	$ 66	$ 62	$ 157	$ 203
Other comprehensive (loss) income, net of tax:				
Derivatives qualifying as cash flow hedges:				
Loss on derivatives qualifying as cash flow hedges, net of tax (benefit) of ($2), ($1), ($7) and ($1), respectively	(3)	(2)	(11)	(6)
Less: Reclassification adjustment for loss on derivatives included in net income, net of tax (benefit) of ($1), ($1), ($1) and ($3), respectively	—	(2)	(1)	(6)
Net derivatives qualifying as cash flow hedges	(3)	—	(10)	—
Pension and postretirement benefits:				
Changes in pension and postretirement benefits, net of tax (benefit) of ($10), ($4), ($8) and ($7), respectively	(15)	(3)	(12)	(9)
Less: Amortization of prior service cost included in net periodic pension cost, net of tax (benefit) of ($2), ($1), ($9) and ($2), respectively	(1)	—	(13)	(1)
Net pension and postretirement benefits	(14)	(3)	1	(8)
Foreign currency translation:				
Changes in foreign currency translation, net of tax benefit of $0 in all periods	10	3	58	(9)
Other comprehensive (loss) income, net of tax	$ (7)	$ —	$ 49	$ (17)
Comprehensive income	$ 59	$ 62	$ 206	$ 186

See accompanying Notes to Condensed Consolidated Financial Statements.

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USG CORPORATION
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited)

(millions, except share data)	September 30, 2017	December 31, 2016
Assets		
Cash and cash equivalents	$ 347	$ 427
Short-term marketable securities	61	62
Receivables (net of reserves 2017 - $9 and 2016 - $8)	237	183
Inventories	252	236
Other current assets	38	41
Total current assets	935	949
Long-term marketable securities	37	29
Property, plant and equipment (net of accumulated depreciation and depletion - 2017 - $2,046 and 2016 - $1,960)	1,733	1,707
Deferred income taxes	450	492
Equity method investments	676	628
Other assets	61	64
Total assets	$ 3,892	$ 3,869
Liabilities and Stockholders' Equity		
Accounts payable	$ 253	$ 237
Accrued expenses	140	175
Income taxes payable	1	10
Total current liabilities	394	422
Long-term debt	1,077	1,083
Deferred income taxes	4	4
Pension and other postretirement benefits	250	290
Other liabilities	185	184
Total liabilities	1,910	1,983
Preferred stock – $1 par value, authorized 36,000,000 shares; outstanding - none	—	—
Common stock – $0.10 par value; authorized 200,000,000 shares; issued: 2017 - 141,475,000 shares and 2016 - 146,167,000 shares	15	15
Treasury stock at cost; 2017 - 5,038,000 shares and 2016 - 0 shares	(150)	—
Additional paid-in capital	3,053	3,038
Accumulated other comprehensive loss	(336)	(385)
Retained earnings (accumulated deficit)	(600)	(782)
Total stockholders' equity	1,982	1,886
Total liabilities and stockholders' equity	$ 3,892	$ 3,869

See accompanying Notes to Condensed Consolidated Financial Statements.

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USG CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

(millions)	Nine months ended September 30,	
	2017	2016
Operating Activities		
Net income	$ 157	$ 203
Less: (Loss) income from discontinued operations, net of tax	(10)	20
Income from continuing operations	167	183
Adjustments to reconcile net income from continuing operations to net cash:		
Depreciation, depletion and amortization	98	100
Loss on extinguishment of debt	22	5
Long-lived asset impairment charges	—	10
Recovery of receivable	—	(3)
Share-based compensation expense	13	14
Deferred income taxes	75	85
Gain on asset dispositions	—	(10)
Income from equity method investments	(42)	(37)
Dividends received from equity method investments	23	18
Pension settlement	10	3
Change in operating assets and liabilities	(164)	(95)
Other, net	1	12
Net cash provided by operating activities of continuing operations	203	285
Net cash (used for) provided by operating activities of discontinued operations	(1)	12
Net cash provided by operating activities	$ 202	$ 297
Investing Activities		
Purchases of marketable securities	(75)	(183)
Sales or maturities of marketable securities	69	310
Capital expenditures	(109)	(44)
Net proceeds from asset dispositions	2	12
Return of capital	—	1
Insurance proceeds	1	—
Return of restricted cash	—	9
Net cash (used for) provided by investing activities of continuing operations	(112)	105
Net cash provided by (used for) investing activities of discontinued operations	6	(1)
Net cash (used for) provided by investing activities	$ (106)	$ 104
Financing Activities		
Issuance of debt	500	—
Repayment of debt	(520)	(205)
Payment of debt issuance fees	(8)	—
Issuance of common stock	3	3
Repurchase of common stock	(153)	—
Repurchases of common stock to satisfy employee tax withholding obligations	(4)	(2)
Net cash used for financing activities of continuing operations	$ (182)	$ (204)
Effect of exchange rate changes on cash from continuing operations	6	(3)

Net (decrease) increase in cash and cash equivalents from continuing operations	$	(85)	$	183
Net increase in cash and cash equivalents from discontinued operations		5		11
Change in cash balance included in discontinued operations		—		(2)
Net (decrease) increase in cash and cash equivalents		(80)		192
Cash and cash equivalents at beginning of period		427		442
Cash and cash equivalents at end of period	$	347	$	634
***Supplemental Cash Flow Disclosures*:**				
Interest paid, net of capitalized interest	$	66	$	124
Income taxes paid, net of refunds received		13		6
Noncash Investing and Financing Activities:				
Amount in accounts payable for capital expenditures		12		8
Reversal of USG Boral Building Products earnout		—		(24)

See accompanying Notes to Condensed Consolidated Financial Statements.

USG CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

In the following Notes to Condensed Consolidated Financial Statements, "USG," "we," "our" and "us" refer to USG Corporation, a Delaware corporation, and its subsidiaries included in the condensed consolidated financial statements, except as otherwise indicated or as the context otherwise requires.

1. Organization, Consolidation and Presentation of Financial Statements

PREPARATION OF FINANCIAL STATEMENTS

We prepared the accompanying unaudited condensed consolidated financial statements of USG Corporation in accordance with applicable United States Securities and Exchange Commission, or SEC, guidelines pertaining to interim financial information. The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. Actual results could differ materially from those estimates. In the opinion of our management, the financial statements reflect all adjustments, which are of a normal recurring nature, necessary for a fair presentation of our financial results for the interim periods. The results of operations for the three and nine months ended September 30, 2017 are not necessarily indicative of the results of operations to be expected for the entire year.

Certain reclassifications have been made to prior year amounts in order to conform with current year presentation. On our condensed consolidated balance sheets, we condensed "Income tax receivable" into "Other current assets." On our condensed consolidated statements of cash flows, we condensed the increase/decrease in working capital, other assets, pension and postretirement benefits, and other liabilities into "Change in operating assets and liabilities".

In conjunction with the sale of L&W Supply Corporation, or L&W, which was completed on October 31, 2016 to American Builders & Contractors Supply Co., Inc., or ABC Supply, L&W is presented as discontinued operations. All sales to L&W subsequent to the close of the transaction are included in net sales on our condensed consolidated statements of income. See Note 2 for further discussion.

Our segments are structured around our key products and business units: Gypsum, Ceilings and USG Boral Building Products, or UBBP. Our Gypsum reportable segment is an aggregation of the operating segments of the gypsum businesses in the United States, Canada, Mexico, and Latin America and our mining operation in Canada, which we indefinitely idled in the third quarter of 2016. Gypsum manufactures products throughout the United States, Canada and Mexico. Our Ceilings reportable segment is an aggregation of the operating segments of the ceilings businesses in the United States, Canada, Mexico, and Latin America. Ceilings manufactures ceiling tile in the United States and ceiling grid in the United States and Canada. UBBP is our 50/50 joint ventures with Boral Limited, or Boral. UBBP manufactures, distributes and sells certain building products, mines raw gypsum and sells natural and synthetic gypsum throughout Asia, Australasia and the Middle East.

These condensed consolidated financial statements and notes are to be read in conjunction with the financial statements and notes included in USG's Annual Report on Form 10-K for the fiscal year ended December 31, 2016, which we filed with the SEC on February 8, 2017.

RECENTLY ADOPTED ACCOUNTING PRONOUNCEMENTS

We adopted Accounting Standards Update, or ASU, 2016-09, "Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting," on January 1, 2017. This ASU simplifies certain aspects of accounting for employee share-based payments. Upon adoption, we recorded to retained earnings a $25 million cumulative-effect adjustment for previously unrecognized excess tax benefits and an immaterial cumulative-effect adjustment for the reversal of cumulative forfeiture estimates to record forfeitures as they occur.

RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS

In August 2017, the Financial Accounting Standards Board, or FASB, issued ASU 2017-12, "Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities," which expands and refines hedge accounting for both non-financial and financial risk components and aligns the recognition and presentation of the effects of the hedging instrument and the hedged item in the financial statements. The new standard will be effective for us on January 1, 2019. We do not expect the adoption of ASU 2017-12 to have significant impact to our consolidated financial statements or disclosures.

In March 2017, the FASB issued ASU 2017-07, "Compensation - Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost," which will require us to disaggregate and present current service cost along with other current compensation costs for employees while presenting other net benefit

cost components below operating profit. In addition, only the service cost component of net benefit cost is eligible for capitalization in our inventory and fixed assets. We will retrospectively adopt the standard on January 1, 2018 for the presentation of service cost and prospectively adopt the capitalization of only service cost into inventory and fixed assets. Select line items from our condensed consolidated statements of income for the three and nine months ended September 30, 2017 and the year ended December 31, 2016 which reflect the changes in presentation of net benefit costs are as follows.

(millions)	Three months ended September 30, 2017		Nine months ended September 30, 2017		Year ended December 31, 2016	
	After Adoption	As Reported	After Adoption	As Reported	After Adoption	As Reported
Gross profit	$ 161	$ 163	$ 485	$ 495	$ 700	$ 705
Operating profit	90	93	269	280	396	394
Other net periodic postretirement benefit (costs)	3	—	11	—	(2)	—
Net income	66	66	157	157	510	510

We do not expect the adoption of ASU 2017-07 to have a significant impact on our other financial statements.

In February 2016, the FASB issued ASU 2016-02, “Leases (Topic 842),” which supersedes existing lease guidance to require lessees to recognize assets and liabilities on the balance sheet for the rights and obligations created by long-term leases and to disclose additional quantitative and qualitative information about leasing arrangements. We will adopt the new standard on January 1, 2019 using the modified retrospective approach. As a result of the new standard, we will implement a new lease accounting system, new processes and accounting policies. Further, we anticipate the adoption of ASU 2016-02 will have a significant impact to our consolidated balance sheets and disclosures. We are currently finalizing our accounting policies and analyzing our lease population and, thus, we are unable to quantify the financial statement impact at this time.

In May 2014, the FASB issued ASU 2014-09, “Revenue from Contracts with Customers (Topic 606),” which supersedes the revenue recognition requirements in “Revenue Recognition (Topic 605),” and requires entities to recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Subsequently, the FASB has issued various ASUs to provide further clarification around certain aspects of Topic 606. We will adopt, via the modified retrospective approach, the standard on January 1, 2018 using practical expedients. The adoption will not have a significant impact to our consolidated financial statements. However, we will expand our disclosure in our notes to include disaggregation of revenue and discussion on the satisfaction of our performance obligations.

2. Discontinued Operations

The sale of L&W was completed on October 31, 2016. The summarized financial information related to L&W that has been excluded from continuing operations and reported as a discontinued operation is as follows:

(millions)	Three months ended September 30,		Nine months ended September 30,	
	2016		2016	
Net sales	$	388	$	1,131
Cost of products sold		370		1,080
Gross profit		18		51
Selling and administrative expenses		7		18
Operating profit		11		33
Income tax expense		(5)		(13)
Income from discontinued operations	$	6	$	20

For the nine months ended September 30, 2017, we recorded a net loss of $10 million to "(Loss) income from discontinued operations," which reflected a $9 million loss for L&W primarily due to a pension settlement and a loss of $1 million for our European operations which were sold in December 2012.

Additionally, upon the close of the sale, we entered into a supply agreement with L&W, and for the three and nine months ended September 30, 2017, we recorded sales of $122 million and $387 million, respectively, and cash inflows related to payments on trade receivables during those same periods of $112 million and $364 million, respectively. For the comparable periods in 2016, the sales that were sold by L&W to third party customers were $143 million and $439 million, respectively.

3. Equity Method Investments

Equity method investments as of September 30, 2017 and December 31, 2016, were as follows:

	September 30, 2017			December 31, 2016		
(dollars in millions)	Carrying Value		Ownership Percentage	Carrying Value		Ownership Percentage
USG Boral Building Products	$	669	50%	$	621	50%
Other equity method investments		7	33% - 50%		7	33% - 50%
Total equity method investments	$	676		$	628	

Investment in USG Boral Building Products

Through the first nine months of 2017, UBBP paid cash dividends on its earnings through March 2017 of which our 50% share totaled $23 million. We recorded the cash dividend in operating activities on our statements of cash flows. As of September 30, 2017, the amount of our condensed consolidated retained earnings which represents undistributed earnings from UBBP is $62 million. In October, the UBBP Board approved a cash dividend on earnings through September 2017, of which our 50% share is $19 million, to be paid in the fourth quarter of 2017.

In the event certain U.S. Dollar denominated performance targets are satisfied by UBBP, we will be obligated to pay Boral an earnout payment of up to $50 million based on performance during the first five years after the closing on February 27, 2014. We have not recorded a liability for this earnout payment as we have concluded that it is currently not probable that the five-year performance target will be achieved. If our conclusion on the probability of achievement changes, we will record a liability representing the present value of the earnout payment with a corresponding increase to our investment. In the second quarter of 2016, we reversed a liability with a corresponding reduction to our investment for an earn-out payment that was based on a three-year performance target.

Our underlying net assets in our investments are denominated in a foreign currency, and translation gains or losses will impact the recorded value of our investments. Translation gains or losses recorded in other comprehensive income were as follows:

	Three months ended September 30,		Nine months ended September 30,	
(millions)	2017	2016	2017	2016
Translation gain	$ 5	$ 13	$ 28	$ —

Summarized financial information is as follows:

	Three months ended September 30,		Nine months ended September 30,	
(millions)	2017	2016(a)	2017	2016(a)
USG Boral Building Products				
Net sales	$ 324	$ 276	$ 887	$ 778
Gross profit	98	90	275	241
Operating profit	43	41	118	105
Income from continuing operations before income taxes	47	42	129	112
Net income	32	29	86	78
Net income attributable to USG Boral Building Products	30	28	83	74
USG share of income from investment accounted for using the equity method	15	14	42	37

(a) The results for the three and nine months ended September 30, 2016 include impairment charges of $8 million, net of tax of $0, for certain assets in China.

TRANSACTIONS WITH UBBP

Our Gypsum segment sells products to UBBP. Total sales to UBBP for the three and nine months ended September 30, 2017 and 2016 were immaterial.

In 2014, in connection with the formation of UBBP, we contributed our ownership interest in a joint venture in China to UBBP, but retained our loan receivable from this joint venture. As of September 30, 2017 and December 31, 2016, the loan receivable, including interest, totaled $14 million and $15 million, respectively, and is included in "Other assets" on our accompanying condensed consolidated balance sheets.

4. Segments

Our operations are organized into three reportable segments: Gypsum, Ceilings and UBBP. Results for our Gypsum and Ceilings segments were as follows:

	Three months ended September 30,		Nine months ended September 30,	
(millions)	2017	2016	2017	2016
Net Sales:				
Gypsum	$ 665	$ 635	$ 2,002	$ 1,899
Ceilings	133	135	379	391
Eliminations	(3)	(3)	(8)	(7)
Total	$ 795	$ 767	$ 2,373	$ 2,283
Operating Profit (Loss):				
Gypsum	$ 85	$ 89	$ 266	$ 310
Ceilings	28	33	74	93
Corporate	(20)	(25)	(60)	(68)
Total	$ 93	$ 97	$ 280	$ 335

5. Marketable Securities

Marketable securities are classified as available-for-sale securities and reported at fair value, with unrealized gains and losses excluded from earnings and reported in "Accumulated other comprehensive loss", or AOCI, on our accompanying condensed consolidated balance sheets. Proceeds received from sales or maturities of marketable securities were as follows:

	Three months ended September 30,		Nine months ended September 30,	
(millions)	2017	2016	2017	2016
Proceeds received	$ 16	$ 123	$ 69	$ 310

Our investments in marketable securities consisted of the following:

	As of September 30, 2017		As of December 31, 2016	
(millions)	Amortized Cost	Fair Value	Amortized Cost	Fair Value
Corporate debt securities	$ 65	$ 65	$ 69	$ 69
U.S. government and agency debt securities	10	10	14	14
Non-U.S. government debt securities	1	1	—	—
Asset-backed debt securities	12	12	2	2
Certificates of deposit	10	10	6	6
Total marketable securities	$ 98	$ 98	$ 91	$ 91

The realized and unrealized gains and losses for the three and nine months ended September 30, 2017 and 2016 were immaterial. Cost basis for securities sold are determined on a first-in-first-out basis.

Contractual maturities of marketable securities as of September 30, 2017 were as follows:

(millions)	Amortized Cost	Fair Value
Due in 1 year or less	$ 61	$ 61
Due in 1-5 years	37	37
Total marketable securities	$ 98	$ 98

Actual maturities may differ from the contractual maturities because issuers of the securities may have the right to prepay them.

6. Debt

Total debt consisted of the following:

(millions)	September 30, 2017	December 31, 2016
4.875% senior notes due 2027	$ 500	$ —
5.5% senior notes due 2025	350	350
7.75% senior notes due 2018	—	500
Industrial revenue bonds (due 2028 through 2034)	239	239
Total	$ 1,089	$ 1,089
Less: Unamortized debt issuance costs	12	6
Total	$ 1,077	$ 1,083

ISSUANCE AND REPURCHASE OF SENIOR NOTES

During the second quarter of 2017, we issued $500 million of 4.875% Senior Notes due 2027, referred to as our 4.875% Notes. The net proceeds from the issuance of these notes and cash on hand were used to fund the repurchase of our 7.75% Senior Notes due 2018, referred to as our 7.75% Notes, and all related costs and expenses. We deferred $7 million of debt issuance costs that are being amortized to interest expense over the term of the 4.875% Notes.

Our obligations under the 4.875% Notes are guaranteed on a senior unsecured basis by certain of our domestic subsidiaries. The notes are redeemable in whole or in part at any time at our option prior to June 1, 2022 at the applicable "make-whole" redemption price or on or after June 1, 2022 at stated redemption prices beginning at 102.438% of the principal

amount of the notes being redeemed plus any accrued and unpaid interest on the principal amount being redeemed through the redemption date.

The 4.875% Notes contain a provision the same as or similar to the provision in our other senior notes that requires us to offer to purchase the notes at 101% of their principal amount (plus accrued and unpaid interest) in the event of a change in control. The indenture governing the 4.875% Notes contains events of default, covenants and restrictions that are substantially the same as those governing our other senior notes, including a limitation on our ability and the ability of certain of our subsidiaries to create or incur secured indebtedness.

We repurchased the 7.75% Notes through both a cash tender offer and a subsequent notice of redemption for aggregate consideration of $536 million, including premiums of $20 million and accrued interest of $16 million. In the nine months ended September 30, 2017, we recorded a pre-tax loss on the early extinguishment of debt of $21 million.

In the first nine months of 2016, we repurchased $200 million of our 6.3% Senior Notes due 2016, or our 6.3% Notes, for aggregate consideration of $209 million, including premiums of $5 million and accrued interest of $4 million. We recorded a pre-tax loss on early extinguishment of debt of $5 million, of which $1 million occurred in the third quarter of 2016.

CREDIT FACILITY

In the second quarter of 2017, we amended and restated our credit facility agreement to, among other things, increase the maximum borrowing limit from $180 million to $220 million. As a result, we recorded a pre-tax loss on extinguishment of debt of $1 million in the nine months ended September 30, 2017 and incurred $1 million of debt issuance costs. Our amended and restated agreement requires us to maintain a minimum fixed charge coverage ratio in the event excess availability falls below a minimum threshold. Because our excess borrowing availability as of September 30, 2017 of $189 million exceeds this threshold, the requirement to maintain the minimum fixed charge coverage ratio is not applicable. As of September 30, 2017, we were in compliance with the covenants contained in our credit facility.

As of September 30, 2017 and during the quarter then-ended, there were no borrowings under the facility. Had there been any borrowings as of that date, the applicable interest rate would have been 2.23% for loans in the U.S. and 2.31% for loans in Canada. Outstanding letters of credit totaled $31 million as of September 30, 2017.

OTHER

(millions)	September 30, 2017	December 31, 2016
Fair value of debt	$ 1,133	$ 1,129
Accrued interest	14	31

The fair values of our debt were determined utilizing unadjusted prices from independent pricing services and are classified as Level 2. See Note 8 for further discussion on fair value measurements. The vendors' methodologies utilize various forms of market data, including but not limited to, trade data, yield, spreads, bids and offers. We review the values provided by the independent pricing service for reasonableness by comparing the valuations received from the independent pricing service to valuations from at least one other observable source.

7. Derivative Instruments

We use derivative instruments to manage selected commodity price and foreign currency exposures as described below. We do not use derivative instruments for speculative trading purposes, and we typically do not hedge beyond six years. Cash flows from derivative instruments are included in operating activities in our condensed consolidated statements of cash flows. Gains and losses on contracts designated as cash flow hedges are reclassified into earnings when the underlying forecasted transactions affect earnings. For contracts designated as cash flow hedges, we reassess the probability of the underlying forecasted transactions occurring on a quarterly basis.

Derivative Instruments	Type	Hedged Item	Aggregate Notional Amount	Contracts Maturing Through
Commodity	Natural gas swaps	Purchases of natural gas	36 million mmBTUs*	December 31, 2022
Foreign Exchange	Forward contracts	Purchases of products and services denominated in a foreign currency	$115 million	December 31, 2018

* - millions of British Thermal Units

COUNTERPARTY RISK, MASTER NETTING ARRANGEMENTS AND BALANCE SHEET OFFSETTING

We are exposed to credit losses in the event of nonperformance by the counterparties to our derivative instruments. As of September 30, 2017, our derivatives were in a $13 million net liability position. All of our counterparties have investment grade credit ratings; accordingly, we anticipate that they will be able to fully satisfy their obligations under the contracts.

All of our derivative contracts are governed by master netting agreements negotiated between us and the counterparties that reduce our counterparty credit exposure. The agreements outline the conditions (such as credit ratings and net derivative fair values) upon which we, or the counterparties, are required to post collateral. As required by certain of our agreements, we had $6 million of collateral posted with our counterparties related to our derivatives as of September 30, 2017. Amounts paid as cash collateral are included in "Receivables" on our accompanying condensed consolidated balance sheets.

We have not adopted an accounting policy to offset fair value amounts related to derivative contracts under our master netting arrangements; therefore, individual derivative contracts are reflected on a gross basis, as either assets or liabilities, on our accompanying condensed consolidated balance sheets, based on their fair value as of the balance sheet date.

FINANCIAL STATEMENT INFORMATION

The following are the pretax effects of derivative instruments on the condensed consolidated statements of income for the three months ended September 30, 2017 and 2016.

	Amount of Gain or (Loss) Recognized in Other Comprehensive Income on Derivatives (Effective Portion)		Location of Gain or (Loss) Reclassified from AOCI into Income (Effective Portion)	Amount of Gain or (Loss) Reclassified from AOCI into Income (Effective Portion)	
(millions)	2017	2016		2017	2016
Derivatives in Cash Flow Hedging Relationships					
Commodity contracts	$ (2)	$ (4)	Cost of products sold	$ (1)	$ (3)
Foreign exchange contracts	(3)	1	Cost of products sold	—	—
Total	$ (5)	$ (3)		$ (1)	$ (3)

	Location of Gain or (Loss) Recognized in Income on Derivatives	Amount of Gain or (Loss) Recognized in Income on Derivatives	
(millions)		2017	2016
Derivatives Not Designated as Hedging Instruments			
Commodity contracts	Cost of products sold	$ —	$ —
Total		$ —	$ —

The following are the pretax effects of derivative instruments on the condensed consolidated statements of income for the nine months ended September 30, 2017 and 2016.

	Amount of Gain or (Loss) Recognized in Other Comprehensive Income on Derivatives (Effective Portion)		Location of Gain or (Loss) Reclassified from AOCI into Income (Effective Portion)	Amount of Gain or (Loss) Reclassified from AOCI into Income (Effective Portion)	
(millions)	2017	2016		2017	2016
Derivatives in Cash Flow Hedging Relationships					
Commodity contracts	$ (12)	$ (2)	Cost of products sold	$ (2)	$ (13)
Foreign exchange contracts	(6)	(5)	Cost of products sold	—	4
Total	$ (18)	$ (7)		$ (2)	$ (9)

	Location of Gain or (Loss) Recognized in Income on Derivatives	Amount of Gain or (Loss) Recognized in Income on Derivatives	
(millions)		2017	2016
Derivatives Not Designated as Hedging Instruments			
Commodity contracts	Cost of products sold	$ (1)	$ —
Total		$ (1)	$ —

For both commodity contracts and foreign exchange contracts, no ineffectiveness was recorded in the three and nine months ended September 30, 2017 and 2016.

The following are the fair values of derivative instruments and the location on our accompanying condensed consolidated balance sheets as of September 30, 2017 and December 31, 2016.

	Balance Sheet Location	Fair Value		Balance Sheet Location	Fair Value	
(millions)		9/30/17	12/31/16		9/30/17	12/31/16
Derivatives in Cash Flow Hedging Relationships						
Commodity contracts	Other current assets	$ 2	$ 8	Accrued expenses	$ 4	$ 4
Commodity contracts	Other assets	1	3	Other liabilities	7	5
Foreign exchange contracts	Other current assets	—	1	Accrued expenses	4	1
Foreign exchange contracts	Other assets	—	—	Other liabilities	1	—
Total derivatives in cash flow hedging relationships		$ 3	$ 12		$ 16	$ 10
Derivatives Not Designated as Hedging Instruments						
Commodity contracts	Other current assets	$ —	$ 1	Accrued expenses	$ —	$ —
Total derivatives not designated as hedging instruments		$ —	$ 1		$ —	$ —
Total derivatives	Total assets	$ 3	$ 13	Total liabilities	$ 16	$ 10

As of September 30, 2017, we had no derivatives designated as fair value hedges or net investment hedges.

8. Fair Value Measurements

Certain assets and liabilities are required to be recorded at fair value. There are three levels of inputs that may be used to measure fair value which are described below along with how USG derives fair value.

Level	Definition	USG
Level 1	Quoted prices for identical assets and liabilities in active markets	Cash equivalents and equity mutual funds consist of money market funds that are valued based on quoted prices in active markets.
Level 2	Quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in markets that are not active; and model-derived valuations in which all significant inputs and significant value drivers are observable	Marketable securities, including certain cash equivalents, are valued using a "market value" approach. Values are based on quoted prices and other observable market inputs received from data providers.
		Derivatives are valued using the "income" approach such as discounted-cash-flow models and readily observable market data. The inputs for the valuation models are obtained from data providers and include end-of-period spot and forward natural gas prices, foreign currency exchange rates, natural gas price volatility and LIBOR and swap rates for discounting the cash flows implied from the derivative contracts.
Level 3	Valuations derived from valuation techniques in which one or more significant inputs or significant value drivers are unobservable	No level 3 investments.

Our assets and liabilities measured at fair value on a recurring basis were as follows:

	Level 1		Level 2		Level 3		Total	
(millions)	9/30/17	12/31/16	9/30/17	12/31/16	9/30/17	12/31/16	9/30/17	12/31/16
Cash equivalents	$ 116	$ 38	$ 27	$ 34	$ —	$ —	$ 143	$ 72
Equity mutual funds	6	5	—	—	—	—	6	5
Marketable securities:								
Corporate debt securities	—	—	65	69	—	—	65	69
U.S. government and agency debt securities	—	—	10	14	—	—	10	14
Non-U.S. government debt securities	—	—	1	—	—	—	1	—
Asset-backed debt securities	—	—	12	2	—	—	12	2
Certificates of deposit	—	—	10	6	—	—	10	6
Derivative assets	—	—	3	13	—	—	3	13
Derivative liabilities	—	—	(16)	(10)	—	—	(16)	(10)

Certain assets and liabilities are measured at fair value on a nonrecurring basis rather than on an ongoing basis, but are subject to fair value adjustments in certain circumstances, such as when there is evidence of impairment or when a new liability is being established that requires fair value measurement. During the third quarter of 2016, we indefinitely idled our mining operations in Little Narrows, Nova Scotia, Canada. We reviewed the property, plant and equipment at Little Narrows for potential impairment by comparing the carrying values of those assets with their fair values as estimated using the future undiscounted cash flows for their remaining useful lives. We measured the fair value of the machinery, equipment and buildings using measurements classified as Level 3, and, as disclosed in Note 14, we recorded long-lived asset impairment charges of $10 million.

9. Employee Retirement Plans

The components of net pension and postretirement benefit costs are summarized in the following table:

	Three months ended September 30,		Nine months ended September 30,	
(millions)	2017	2016	2017	2016
Pension:				
Service cost of benefits earned	$ 11	$ 11	$ 32	$ 34
Interest cost on projected benefit obligation	15	17	46	51
Expected return on plan assets	(23)	(22)	(69)	(66)
Settlement [(a)]	3	1	23	3
Net amortization	6	5	16	14
Net pension cost [(b)]	$ 12	$ 12	$ 48	$ 36
Postretirement:				
Service cost of benefits earned	$ —	$ 1	$ 2	$ 2
Interest cost on projected benefit obligation	2	1	4	4
Net amortization	(6)	(7)	(18)	(21)
Net postretirement benefit[(c)]	$ (4)	$ (5)	$ (12)	$ (15)

(a) During 2017, lump sum benefits paid exceeded the settlement threshold primarily driven by payments to former L&W employees as a result of the disposition of L&W, which resulted in settlement charges recorded for the three and nine months ended September 30, 2017.

(b) Net pension cost, excluding settlement costs, includes amounts allocated to (loss) income from discontinued operations for L&W totaling a benefit of $1 million for the three and nine months ended September 30, 2017 and expense of $2 million and $6 million for the three and nine months ended September 30, 2016, respectively.

(c) Net postretirement benefit includes a net benefit allocated to (loss) income from discontinued operations for L&W totaling $1 million and $3 million for the three and nine months ended September 30, 2016, respectively.

For the three and nine months ended September 30, 2017, we recorded settlement expense of $3 million and $23 million, respectively, as the total lump sum distributions paid by the USG Corporation pension plan to both L&W employees and former USG employees during the first nine months of 2017 exceeded the settlement threshold. Upon termination of their employment from USG, all L&W employees had the option to receive a lump sum benefit payment from the USG Corporation pension plan. For the benefits paid to terminated employees of L&W, we recorded a pre-tax loss of $13 million to "(Loss) income from discontinued operations" for the nine months ended September 30, 2017. For the benefits paid to USG retirees, we recorded a pre-tax loss of $3 million and $8 million to "Costs of products sold" for the three and nine months ended September 30, 2017, respectively, and of $0 million and $2 million to "Selling and administrative expenses" for the three and nine months ended September 30, 2017, respectively.

During the first nine months of 2017, we made cash contributions of $50 million to the USG Corporation Retirement Plan Trust, $16 million to our domestic supplemental pension plan and $3 million to our pension plans in Canada. We expect to make total contributions to our pension plans in 2017 of approximately $71 million.

10. Share-Based Compensation

During the first nine months of 2017, we granted share-based compensation in the form of market share units, or MSUs, performance shares, and restricted stock units, or RSUs, to eligible participants under our 2016 Long-Term Incentive Plan. We recognize expense on all share-based grants over the service period, which is the shorter of the period until the employees' retirement eligibility dates and the service period of the award for awards expected to vest. We record forfeitures as they occur. Awards granted during the first nine months of 2017, weighted average fair value, and assumptions used to determine fair value were as follows:

	MSUs	Performance Shares	RSUs
Awards granted	371,346	112,732	93,000
Weighted average fair value [(a)]	$ 35.79	$ 39.42	$ 30.14
Expected volatility [(b)]	32.10%	32.10%	N/A
Risk-free rate [(c)]	1.39%	1.39%	N/A
Expected term (in years) [(d)]	2.96	2.96	N/A
Expected dividends	—	—	N/A

(a) Fair value of MSUs and Performance Shares is estimated on the date of grant using the Monte Carlo simulation using the assumptions outlined above. Fair value of RSUs is equal to the closing price of our common stock on the date of grant.

(b) The expected volatility rate is based on stock price history immediately prior to grant for a period commensurate with the expected term.

(c) The risk-free rate is based on zero coupon U.S. government issues at the time of grant.

(d) The expected term represents the period from the valuation date to the end of the performance period.

Terms of the awards granted during the first nine months of 2017 were as follows:

	MSUs	Performance Shares	RSUs
Maximum shares/units earned	Varies from 0% to 150% of the number of MSUs awarded depending on the actual performance of our stock price	Varies from 0% to 200% of the number of performance shares awarded depending on the performance of our total stockholder return relative to the performance of the Dow Jones U.S. Construction and Materials Index [(a)]	100%
Vesting Provisions	Three-year performance period	Three-year performance period	Specified number of years from the grant date
Vesting in the case of termination of employment due to death, disability, retirement or change in control during performance period [(b)]	Pro-rated based on the number of full months employed in 2017 with awards issued at the end of the three-year period	Pro-rated based on the number of full months employed during the performance period with awards issued at the end of the three-year period	Varies
Settlement	Settled in common stock at the end of the performance or vesting period		

(a) Adjustments to the performance of the Dow Jones U.S. Construction and Materials Index may be made in certain circumstances.

(b) Early vesting for MSUs, performance shares and RSUs in situations where there is a change in control also requires a related loss of employment or diminution of duties.

OTHER

MSUs, performance shares, RSUs, and stock options and deferred shares associated with our deferred compensation program for non-employee directors that were not included in the computation of diluted earnings per share for those periods because their inclusion would be anti-dilutive were as follows:

	Three months ended September 30,		Nine months ended September 30,	
(millions)	2017	2016	2017	2016
MSUs, performance shares, RSUs and stock options	0.6	1.0	0.8	1.6
Deferred shares associated with a deferred compensation program for non-employee directors	—	—	—	0.2

11. Supplemental Balance Sheet Information

INVENTORIES

Total inventories consisted of the following:

(millions)	September 30, 2017	December 31, 2016
Finished goods	$ 141	$ 132
Work in progress	42	37
Raw materials	69	67
Total	$ 252	$ 236

ACCRUED EXPENSES

Accrued expenses consisted of the following:

(millions)	September 30, 2017	December 31, 2016
Self-insurance reserves	$ 13	$ 12
Employee compensation	13	35
Interest	14	31
Derivatives	8	5
Pension and other postretirement benefits	24	24
Environmental	17	18
Other	51	50
Total	$ 140	$ 175

ASSET RETIREMENT OBLIGATIONS

Changes in the liability for asset retirement obligations, which are included in "Other liabilities" on our condensed consolidated balance sheet, consisted of the following:

	Nine months ended September 30,	
(millions)	2017	2016
Balance as of January 1	$ 113	$ 119
Accretion expense	5	6
Liabilities incurred	3	—
Changes in estimated cash flows [a]	(4)	(11)
Liabilities settled	(1)	(2)
Foreign currency translation	2	1
Balance as of September 30	$ 118	$ 113

(a) Changes in estimated cash flows for the nine months ended September 30, 2016 included an $8 million reduction related to one of our quarries.

ASSET DISPOSITIONS

In the second quarter of 2016, we recorded a gain of $11 million, or $7 million net of tax, on the sale of a surplus property. The sale relieved the Company of an asset retirement obligation of $2 million. The pre-tax gain was recorded in "Cost of products sold" within our Gypsum segment.

12. Stockholders' Equity

TREASURY STOCK

Changes in treasury stock for the nine months ended September 30, 2017 and 2016 were as follows:

(millions, except share data)	2017 Treasury Shares (000)	2017 Treasury Stock	2016 Treasury Shares (000)	2016 Treasury Stock
Balance as of January 1	—	$ —	—	$ —
Repurchase of common stock for tax withholdings related to stock-based compensation	(115)	(4)	(84)	(2)
Repurchase of common stock under share repurchase program	(5,150)	(153)	—	—
Stock reissuances	227	7	84	2
Balance as of September 30	(5,038)	$ (150)	—	$ —

ACCUMULATED OTHER COMPREHENSIVE LOSS

Changes in the balances of each component of AOCI for the nine months ended September 30, 2017 and 2016 were as follows:

	Derivatives		Defined Benefit Plans		Foreign Currency Translation		AOCI	
(millions)	2017	2016	2017	2016	2017	2016	2017	2016
Balance as of January 1	$ 27	$ 20	$ (246)	$ (221)	$ (166)	$ (113)	$ (385)	$ (314)
Other comprehensive income (loss) before reclassifications, net of tax	(11)	(6)	(12)	(9)	58	(9)	35	(24)
Less: Amounts reclassified from AOCI, net of tax	(1)	(6)	(13)	(1)	—	—	(14)	(7)
Net other comprehensive income (loss)	(10)	—	1	(8)	58	(9)	49	(17)
Balance as of September 30	$ 17	$ 20	$ (245)	$ (229)	$ (108)	$ (122)	$ (336)	$ (331)

Amounts reclassified from AOCI, net of tax, for the three and nine months ended September 30, 2017 and 2016, were as follows:

	Three months ended September 30,		Nine months ended September 30,	
(millions)	2017	2016	2017	2016
Derivatives				
Net reclassification from AOCI for cash flow hedges included in cost of products sold	$ (1)	$ (3)	$ (2)	$ (9)
Less: Income tax benefit on reclassification from AOCI included in income tax expense	(1)	(1)	(1)	(3)
Net amount reclassified from AOCI	$ —	$ (2)	$ (1)	$ (6)
Defined Benefit Plans				
Net reclassification from AOCI for amortization of prior service cost included in cost of products sold	$ (3)	$ (2)	$ (7)	$ (5)
Net reclassification from AOCI for amortization of prior service cost included in selling and administrative expenses	—	1	(3)	2
Net reclassification from AOCI for amortization of prior service cost included in (loss) income from discontinued operations, net of tax	—	—	(8)	—
Less: Income tax benefit on reclassification from AOCI included in income tax expense	(2)	(1)	(5)	(2)
Net amount reclassified from AOCI	$ (1)	$ —	$ (13)	$ (1)

We estimate that we will reclassify a net $5 million after-tax loss on derivatives from AOCI to earnings within the next 12 months.

13. Income Taxes

Our income tax expense and effective tax rate was as follows:

(dollars in millions)	Three months ended September 30, 2017	Three months ended September 30, 2016	Nine months ended September 30, 2017	Nine months ended September 30, 2016
Income tax expense	$ 27	$ 18	$ 76	$ 78
Effective tax rate	29.0%	24.3%	31.3%	29.9%

The income tax expense for all periods presented reflects taxes from federal, foreign, state and local jurisdictions. Our effective tax rates were lower than the U.S. statutory rate primarily because of earnings realized in countries that had lower statutory tax rates and our equity method income, which is presented net of tax. Our effective tax rate in the future will depend on the portion of our profits earned within and outside the United States.

As of September 30, 2017, we had federal net operating loss, or NOL, carryforwards of approximately $724 million that are available to offset future federal taxable income and will expire in the years 2029 through 2032, none of which are currently subject to Internal Revenue Code limitations under Section 382. In addition, as of that date, we had federal alternative minimum tax, or AMT, credit carryforwards of approximately $45 million that are available to reduce future regular federal income taxes over an indefinite period and foreign tax credit carryforwards of $148 million that are available to offset future federal taxable income and expire in the years 2022 through 2026. As of December 31, 2016, the foreign tax credits were $143 million and are attributable to tax planning strategies to optimize foreign tax credit utilization and management's intention to amend its tax returns for the tax years 2012 through 2014 in order to claim credits for previously deducted foreign tax. In order to fully realize these U.S. federal net deferred tax assets, taxable income of approximately $1.275 billion would need to be generated during the period before their expiration.

As of September 30, 2017, we had a deferred tax asset of $165 million related to our state NOLs and tax credit carryforwards. The NOLs will expire if unused in years 2018 through 2032. To the extent that we do not generate sufficient state taxable income within the statutory carryforward periods to utilize the NOL and tax credit carryforwards in these states, they will expire unused.

As of September 30, 2017, the valuation allowance against our deferred tax assets was $51 million, which was unchanged from December 31, 2016.

The Internal Revenue Code imposes limitations on a corporation's ability to utilize NOLs if it experiences an "ownership change" which can result from transactions increasing the ownership of certain stockholders in the stock of a corporation by more than 50 percentage points over a three-year period. If we were to experience an ownership change, utilization of our NOLs would be subject to an annual limitation that may be carried over to later years within the allowed NOL carryforward period. Over the entire carryforward period, we may not be able to use all our NOLs due to the aforementioned annual limitation. If an ownership change had occurred as of September 30, 2017, our annual U.S. federal NOL utilization would have been limited to approximately $89 million per year.

NON-CONFIDENTIAL

14. Long-Lived Asset Impairment Charges

In the third quarter of 2016, we indefinitely idled our mining operations in Little Narrows, Nova Scotia, Canada after completing a review of our gypsum sourcing needs. As a result, for the three and nine months ended September 30, 2016, we recorded impairment charges of $10 million, which are included in our condensed consolidated statements of income in "Long-lived asset impairment charges" and severance and other charges of $2 million for the termination of employees at the Little Narrows location, which are included in "Costs of products sold". Both the impairment and severance charges relate to our Gypsum segment.

15. Litigation

WALLBOARD PRICING LAWSUITS
In 2015, USG, United States Gypsum Company, L&W Supply Corporation, and seven other wallboard manufacturers were named as defendants in a lawsuit filed in federal court in California by twelve homebuilders alleging that since at least September 2011, U.S. wallboard manufacturers conspired to fix and raise the price of gypsum wallboard sold in the United States and to effectuate the alleged conspiracy by ending the practice of providing job quotes on wallboard. The lawsuit was transferred to the United States District Court for the Eastern District of Pennsylvania under the title In re: Domestic Drywall Antitrust Litigation, MDL No. 2437. In the second quarter of 2016, the Court dismissed with prejudice the portions of the homebuilders' complaint alleging a conspiracy in 2014 and 2015, ruling that there were insufficient factual allegations to allow such a claim to go forward. The homebuilders' claims alleging a conspiracy prior to 2014 have not been dismissed, and the case proceeds as to those claims. USG has agreed to defend and indemnify L&W Supply Corporation with regard to this matter.

Beginning in the third quarter of 2013, class action lawsuits making similar allegations with regard to Canada were filed in Quebec, Ontario and British Columbia courts on behalf of purchasers of wallboard in Canada and naming USG Corporation, United States Gypsum Company, CGC Inc., and other wallboard manufacturers as defendants.

We believe that the cost, if any, of resolving the homebuilders' lawsuit and Canadian class action litigation will not have a material effect on our results of operations, financial position or cash flows.

ENVIRONMENTAL LITIGATION
We are involved in environmental cleanups of property that we own or have owned. In addition, we have previously been notified by state and federal environmental protection agencies of possible involvement as one of numerous "potentially responsible parties" in certain Superfund sites in the United States to pay for some part of the cleanup of hazardous waste. In most of these sites, our involvement is expected to be minimal. As of September 30, 2017 and December 31, 2016, we had accruals of $17 million and $18 million, respectively, for our probable and reasonably estimable liability in connection with these matters. Our accruals take into account all known or estimated undiscounted costs associated with these sites, including site investigations and feasibility costs, site cleanup and remediation, certain legal costs, and fines and penalties, if any. However, we continue to review these accruals as additional information becomes available and revise them as appropriate. Based on the information known to us, we believe these environmental matters will not have a material effect on our results of operations, financial position or cash flows.

16. Gypsum Transportation Limited

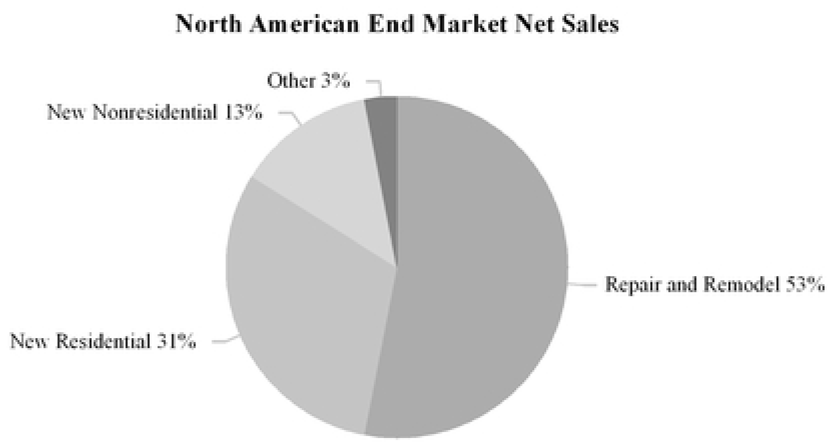
We exited our shipping operations in the second quarter of 2015. In November 2015, we entered into a release and debt settlement agreement to recover a portion of our loss incurred when our former trading partner ceased performing under the contract. We recorded a recovery of receivable of $8 million in the first quarter of 2016, which is presented as $3 million within "Recovery of receivable", $1 million within "Interest income" and $4 million within "Other (expense) income, net" on our condensed consolidated statement of income.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

In the following Management's Discussion and Analysis of Financial Condition and Results of Operations, "USG," "we," "our" and "us" refer to USG Corporation, a Delaware corporation, and its subsidiaries included in the condensed consolidated financial statements, except as otherwise indicated or as the context otherwise requires.

Overview

We are a leading manufacturer of building products and innovative building solutions. We produce a wide range of products for use in new residential, new nonresidential, and residential and nonresidential repair and remodel construction as well as products used in certain industrial processes. The following chart reflects our estimation of our North American net sales during the first nine months of 2017.



SEGMENTS

Our operations are organized and aggregated into three reportable segments: Gypsum, Ceilings and USG Boral Building Products, or UBBP. In conjunction with the sale of L&W Supply Corporation, or L&W, which was completed on October 31, 2016 to American Builders & Contractors Supply Co., Inc., or ABC Supply, L&W is presented as discontinued operations. All L&W sales subsequent to the close of the transaction are under a supply agreement that governs the sales of wallboard and certain other products from USG to L&W and are included in net sales on our condensed consolidated statements of income.

Gypsum: Our Gypsum segment manufactures and markets gypsum and related products in the United States, Canada, Mexico and Latin America. It includes United States Gypsum Company, or U.S. Gypsum, in the United States, CGC Inc., or CGC, in Canada, USG Mexico, S.A. de C.V., or USG Mexico, and subsidiaries in Latin America and our mining operation in Nova Scotia, Canada, which we indefinitely idled in the third quarter of 2016. Gypsum's products are used in a variety of building applications to construct walls, ceilings, roofs and floors of residential and nonresidential buildings, as well as in certain industrial applications. The major product lines within the Gypsum segment are:

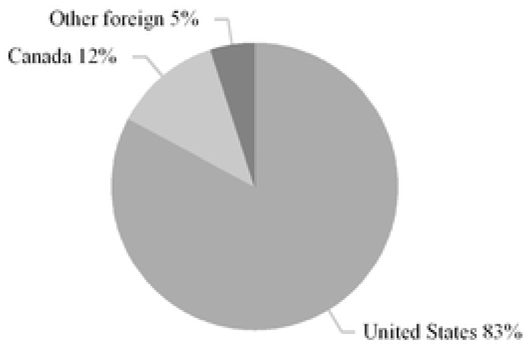
Wallboard	Sheetrock® brand gypsum wallboard and Securock® brand glass mat sheathing portfolios
Surfaces	Sheetrock® brand joint compound portfolio, as well as corner bead, joint tape and plaster
Substrates	Durock® brand cement board, Fiberock® brand backerboard, Levelrock® brand systems of poured gypsum flooring, Securock® brand roof board, ExoAir® 430 brand air-water barrier system, industrial gypsum, and construction plaster products

Ceilings: Our Ceilings segment manufactures and markets interior ceilings systems products in the United States, Canada, Mexico and Latin America. Ceilings includes USG Interiors, LLC, or USG Interiors, in the United States, CGC, and USG Mexico and subsidiaries in Latin America. Ceilings is a leading supplier of interior ceilings products used primarily in nonresidential applications. Ceilings manufactures ceiling tile in the United States and ceiling grid in the United States and Canada. It markets ceiling tile and ceiling grid in the United States, Canada, Mexico, and Latin America.

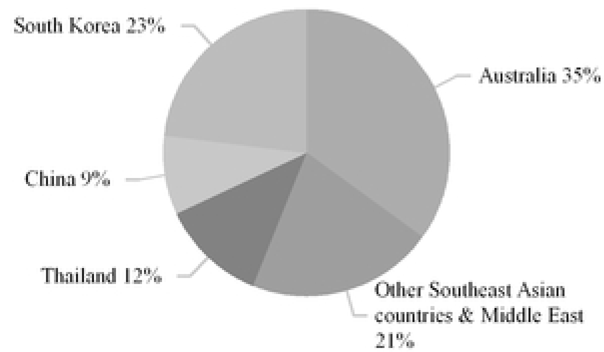
USG Boral Building Products: UBBP is our 50/50 joint ventures with Boral Limited, or Boral. UBBP manufactures, distributes and sells certain building products, mines raw gypsum and sells natural and synthetic gypsum throughout Asia, Australasia and the Middle East. UBBP manufactures and distributes products for wall, ceiling, floor lining and exterior systems that utilize gypsum wallboard, referred to as plasterboard in the region in which UBBP operates, mineral fiber ceiling tiles, steel grid and joint compound.

Geographic Information: For the first nine months of 2017, we recorded $2.373 billion of net sales in our condensed consolidated statement of income, and net sales for UBBP, which are not included in our condensed consolidated statement of income, were $887 million. The following charts reflect the geographic breakdown of net sales during the first nine months of 2017.

USG Consolidated Geographic Sales



UBBP Geographic Sales



MARKET CONDITIONS AND OUTLOOK

Our businesses are cyclical in nature and sensitive to changes in general economic conditions, including, in particular, conditions in the housing and construction-based markets in North America, Asia and Australasia. Our expansion via UBBP into the markets of Asia, Australasia, and the Middle East has significantly increased our exposure to the economic conditions in those areas. However, the UBBP investment has helped diversify USG's overall exposure to changes in the North American economic conditions.

The following table summarizes the current market conditions and outlook for our primary end markets in North America.

End Market	Lead time	Metric	Source	Market Condition/Outlook
New Residential	Installation of gypsum products into a single family home typically follows a housing start by 90-120 days	Housing starts (seasonally adjusted)	U.S. Census Bureau	9/30/2017 - 1.127 million 2016 - 1.226 million 9/30/2016 - 1.052 million
			Industry forecast (Blue Chip Economic Indicators)	2017 - 1.19 million to 1.25 million [(a)]
			USG forecast	2017 estimated - 1.13 million [(b)]
New Nonresidential	Installation of gypsum and ceilings products typically follows signing of construction contracts by about 12 to 18 months	Change in floor space for which contracts are signed	Dodge Data & Analytics	2016 from 2015 - 4% increase
			Industry forecast (Dodge Data & Analytics) [(c)]	2017 from 2016 - 2% increase
			USG forecast	2017 estimated to increase by low to mid single digits
Repair and Remodel [(d)]	Remodels typically begin within two years from purchase	Sales of existing homes (seasonally adjusted)	National Association of Realtors	9/30/2017 - 5.39 million 2016 - 5.45 million
		Overall repair and remodel spending for gypsum products	USG forecast	2017 spending estimated to increase by mid single digits

(a) Forecast based on the average of the bottom ten and top ten forecasts included in the report, respectively.

(b) USG estimate is based on the seasonally adjusted annual rate of housing starts.

(c) Dodge Data & Analytics' forecast includes several building types which do not generate significant demand for our products.

(d) The repair and remodel market includes renovation of both residential and nonresidential buildings.

The rate of recovery in the new residential construction market, new nonresidential construction market and the repair and remodel market still remains uncertain and will depend on broader economic circumstances, including employment, household formation, the home ownership rate, existing home price trends, availability of mortgage financing, interest rates, consumer confidence, job growth and discretionary business investment. An increase in interest rates, high levels of unemployment, restrictive lending practices, a decrease in consumer confidence or other adverse economic conditions could have a material adverse effect on our business, financial condition, operating results and cash flows. Our businesses are also affected by a variety of other factors beyond our control, including the inventory of unsold homes, the level of foreclosures, home resale rates, housing affordability, office and retail vacancy rates and foreign currency exchange rates. Since we operate in a variety of geographic markets, our businesses are subject to the economic conditions in each of these geographic markets. General economic downturns or localized downturns or financial concerns in the regions where we have operations may have a material adverse effect on our business, financial condition, results of operations and cash flows.

We expect modest improvement over the next twelve months in the construction industries of Canada and Mexico. Other international markets, including those that are within the UBBP territory, provide opportunities for our operations to serve the demand in these regions. Australia is expected to experience a decline in housing starts; however, these housing starts are expected to remain above the long-term average. South Korea has experienced recent rapid growth in its housing market; however, the overall construction industry is expected to slow over the next twelve months. Several emerging markets which are within the UBBP territory are forecast to experience steady growth. The international markets within the UBBP territory are beginning to adopt Western building practices, which provide more opportunities. We anticipate that the results from UBBP will enable us to counteract some of the potential cyclicality in our North American business.

Sales within our Gypsum segment have generally improved with the modest recovery in residential housing, although the segment continues to be adversely affected by the low level of residential and other construction activity compared to historical averages. Our Ceilings segment, which primarily serves the nonresidential markets, has shown some improvement. However, it continues to be adversely affected by the low levels of new nonresidential construction activity as compared to historical averages. Our Ceilings segment is also adversely affected by changing construction preferences such as the growth in specialty ceilings and open plenum.

The following table summarizes the industry information on wallboard shipments and capacity.

U.S. Industry Information	Metric	Source	Market Condition/Outlook
U.S. industry shipments of gypsum board [a]	Billion of square feet (bsf)	Gypsum Association	First nine months 2017 - 18.8 bsf First nine months 2016 - 18.6 bsf
		USG forecast	2017 expected to increase low single digits from 25 bsf in 2016
U.S. wallboard capacity	Billion of square feet (bsf)	USG estimate	1/1/2017 - 33.4 bsf
U.S. industry capacity utilization rate	Annualized shipments as a percentage of industry capacity	USG estimate	First nine months 2017 - 74% First nine months 2016 - 74%

(a) Includes gypsum wallboard, other gypsum-related paneling products and imports.

Based on current industry trends and forecasts, demand for gypsum wallboard is expected to increase in 2017, but the magnitude of any increase will depend on the levels of housing starts and repair and remodel activity, among other factors. Our volumes of gypsum wallboard increased 5% in the third quarter of 2017. We project that the industry capacity utilization rate will experience a modest increase in 2017 compared to 2016.

We could experience pressure on gypsum wallboard selling prices and our gross margins at these levels of capacity utilization. In the third quarter of 2017, U.S. Gypsum informed its U.S. customers that it would be increasing prices on our wallboard products effective August 2017. We were not able to implement this price increase, and U.S. Gypsum's average selling price declined slightly from the third quarter of 2016. If we are unable to maintain our wallboard selling prices or implement price increases, our net sales, operating results and cash flows may be materially and adversely impacted.

CURRENCY IMPACT

Currency impact on consolidated and segment results has been derived by translating current period results at the quarter-to-date and year-to-date average foreign currency rates for the quarter and nine months ended September 30, 2016.

Consolidated Results of Operations

(dollars in millions, except per-share data)	2017	2016	$ Favorable (Unfavorable)	% Favorable (Unfavorable)
Three months ended September 30:				
Net sales	$ 795	$ 767	$ 28	4 %
Cost of products sold	632	586	(46)	(8)%
Gross profit	163	181	(18)	(10)%
Selling and administrative expenses	70	74	4	5 %
Long-lived asset impairment charges	—	10	10	*
Operating profit	93	97	(4)	(4)%
Income from equity method investments	15	14	1	7 %
Interest expense	(15)	(37)	22	59 %
Interest income	1	—	1	*
Loss on extinguishment of debt	—	(1)	1	*
Other (expense) income, net	(1)	1	(2)	*
Income from continuing operations before income taxes	93	74	19	26 %
Income tax expense	(27)	(18)	(9)	(50)%
Income from continuing operations	66	56	10	18 %
Income from discontinued operations, net of tax	—	6	(6)	*
Net income	$ 66	$ 62	$ 4	6 %
Diluted earnings per share - net income	$ 0.46	$ 0.42	$ 0.04	10 %
Nine months ended September 30:				
Net sales	$ 2,373	$ 2,283	$ 90	4 %
Cost of products sold	1,878	1,728	(150)	(9%)
Gross profit	495	555	(60)	(11)%
Selling and administrative expenses	215	213	(2)	(1)%
Long-lived asset impairment charges	—	10	10	*
Recovery of receivable	—	(3)	(3)	*
Operating profit	280	335	(55)	(16)%
Income from equity method investments	42	37	5	14 %
Interest expense	(54)	(115)	61	53 %
Interest income	2	3	(1)	(33)%
Loss on extinguishment of debt	(22)	(5)	(17)	*
Other (expense) income, net	(5)	6	(11)	*
Income before continuing operations before income taxes	243	261	(18)	(7%)
Income tax expense	(76)	(78)	2	3 %
Income from continuing operations	167	183	(16)	(9%)
(Loss) income from discontinued operations, net of tax	(10)	20	(30)	*
Net income	$ 157	$ 203	$ (46)	(23%)
Diluted earnings per share - net income	$ 1.07	$ 1.38	$ (0.31)	(22%)

*not meaningful

NET SALES

Consolidated net sales for the third quarter of 2017 increased $28 million, or 4%, compared with the third quarter of 2016 and reflected higher net sales for our Gypsum segment offset slightly by lower net sales for our Ceilings segment. Sales for our Gypsum segment increased 5% which reflected an increase in shipments of gypsum wallboard in the United States and joint compound offset by a decrease in shipments of gypsum wallboard in Canada. Also driving the increase in sales was higher average selling price for gypsum wallboard in Canada and for joint compound offset by lower average selling price for gypsum wallboard in the United States. The decrease in net sales of 1% for our Ceilings segment was driven primarily by lower average selling price for ceiling grid. On a consolidated basis for the comparative periods, we estimate that our net sales were positively impacted by foreign currency translation of $5 million.

Consolidated net sales for the first nine months of 2017 increased $90 million, or 4%, compared with the first nine months of 2016. The increase reflected higher sales for our Gypsum segment of 5% offset by a decrease in sales for our Ceilings segment of 3%. The higher levels of net sales for our Gypsum segment reflected higher volume and higher average selling price for gypsum wallboard. The decrease in sales for our Ceilings segment reflected lower volumes and lower average selling price for both ceiling grid and ceiling tile. On a consolidated basis for the comparative periods, the impact of foreign currency was immaterial.

GROSS PROFIT

Gross profit for the third quarter of 2017 decreased $18 million, or 10%, compared with the third quarter of 2016. Gross profit as a percentage of net sales was 20.5% for the third quarter of 2017, compared with 23.6% for the third quarter of 2016. The lower gross margin was driven by increased manufacturing costs in both our Gypsum and Ceilings segments and a pension settlement charge of $3 million in the third quarter of 2017 and a $3 million less favorable adjustment to our asset retirement obligation due to changes in cash flow estimates offset by $2 million of severance and other charges recorded in the third quarter of 2016 related to the decision to indefinitely idle our mining operations in Little Narrows, Nova Scotia, Canada. The decrease in gross margin for our Gypsum segment reflected higher average per unit cost for gypsum wallboard due to higher raw material costs, primarily waste paper, partially offset by lower per unit fixed costs due to higher volumes and lower per unit energy costs. The decrease in gross margin for our Ceilings segment also reflected higher per unit costs for ceiling grid and ceiling tile due to higher raw materials costs.

Gross profit for the first nine months of 2017 decreased $60 million, or 11%, compared with the first nine months of 2016. Gross profit as a percentage of net sales was 20.9% for the first nine months of 2017, compared with 24.3% for the first nine months of 2016. The decrease reflected lower margins due to increased manufacturing costs in both our Gypsum and Ceilings segments, a pension settlement charge of $8 million in the first nine months of 2017 and a $3 million less favorable adjustment to our asset retirement obligation due to changes in cash flow estimates offset by $2 million of severance and other charges recorded in the third quarter of 2016. The lower gross margin for our Gypsum segment was driven primarily by increased per unit costs for gypsum products due to higher raw materials costs, primarily waste paper, and, to a lesser extent, synthetic gypsum. The lower gross margin for our Ceilings segment reflected higher per unit costs for ceiling grid due to higher raw materials costs, primarily steel, and higher average per unit fixed cost due to lower volumes and reflected higher per unit costs for ceiling tile due primarily to higher average per unit cost for raw materials. Gross profit for the first nine months of 2016 also included a gain of $11 million for the sale of surplus property.

SELLING AND ADMINISTRATIVE EXPENSES

Selling and administrative expenses totaled $70 million in the third quarter of 2017 compared to $74 million in the third quarter of 2016. As a percentage of net sales, selling and administrative expenses decreased to 8.8% for the third quarter of 2017 from 9.6% for the third quarter of 2016. The decrease reflected lower expense for incentive compensation.

Selling and administrative expenses totaled $215 million in the first nine months of 2017 compared to $213 million in the first nine months of 2016. The increase reflects higher costs for marketing and services, including those in support of growth platforms, offset by lower expense for incentive compensation. As a percentage of net sales, selling and administrative expenses decreased to 9.1% for the first nine months of 2017 from 9.3% for the first nine months of 2016.

LONG-LIVED ASSET IMPAIRMENT CHARGES

In the third quarter of 2016, we recorded long-lived asset impairment charges of $10 million associated with the decision to indefinitely idle our mining operations in Little Narrows. See Note 14 to the condensed consolidated financial statements for additional information.

RECOVERY ON RECEIVABLE

In the first quarter of 2016, we received the remaining payments under a settlement agreement with our former shipping trading partner of which $3 million represented a recovery of a previously deemed uncollectible receivable. The remaining payments received under the settlement agreement were recorded in "Interest income" and "Other (expense) income, net."

INCOME FROM EQUITY METHOD INVESTMENTS

Income from equity method investments, primarily UBBP, in the third quarter of 2017 was $15 million, an increase of $1 million, or 7%, from the third quarter of 2016. This reflected an increase in income recorded by UBBP, which reflected higher margins in South Korea, Oman, and Australia partially offset by lower margins in Thailand and Vietnam, unfavorable operational reserve adjustments in India and higher selling and administrative expenses. The impact of foreign currency is immaterial. Income from equity method investments for the third quarter of 2016 also included our share of an asset impairment charge of long-lived assets of $4 million in China.

Income from equity method investments in the first nine months of 2017 was $42 million, an increase of $5 million from the first nine months of 2016. The improved results for UBBP were driven by higher margins in South Korea and Australia partially offset by lower margins in Thailand, Indonesia, and China, unfavorable operational reserve adjustments in India, an increase in selling and administrative expenses and higher withholding taxes. The increase also reflected favorable currency impact of $1 million. Income from equity method investments for the first nine months of 2016 also included our share of an asset impairment charge of long-lived assets of $4 million in China.

INTEREST EXPENSE

Interest expense was $15 million in the third quarter of 2017, down $22 million, or 59%, from the third quarter of 2016 and was $54 million in the first nine months of 2017, down $61 million, or 53%, from the first nine months of 2016. The decrease in interest expense in both comparative periods reflected lower debt levels and lower interest rates.

LOSS ON EXTINGUISHMENT OF DEBT

In the first nine months of 2017, we recorded a loss of $22 million on the extinguishment of debt. This included $21 million primarily for premiums paid as a result of a tender offer and repurchase of our 7.75% Notes and write-off of $1 million for deferred fees upon the amendment of our credit facility. In the third quarter and first nine months of 2016, we recorded a loss of $1 million and $5 million, respectively, on the extinguishment of debt, including premiums, in connection with the open market purchases of our 6.3% Notes. See Note 6 to the condensed consolidated financial statements for additional information.

OTHER (EXPENSE) INCOME, NET

In the third quarter and the first nine months of 2017, we recorded $1 million and $5 million, respectively, of net other expense, which primarily reflected net losses on foreign currency transactions. In the third quarter and the first nine months of 2016, we recorded $1 million and $6 million, respectively, of net other income, which included net gains on foreign currency transactions. Also included in net other income for the first nine months of 2016 was the receipt of payments in conjunction with a settlement agreement with our former shipping trading partner of which $4 million was recorded as other income. See Note 16 to the condensed consolidated financial statements for additional information.

INCOME TAX EXPENSE

We recorded income tax expense of $27 million in the third quarter of 2017 from federal, foreign, state and local jurisdictions for an effective tax rate of 29%. In the third quarter of 2016, we recorded income tax expense of $18 million for an effective tax rate of 24.3%.

We recorded income tax expense for the first nine months of 2017 of $76 million from federal, foreign, state and local jurisdictions for an effective tax rate of 31.3%. In the first nine months of 2016, we recorded income tax expense of $78 million for an effective tax rate of 29.9%.

(LOSS) INCOME FROM DISCONTINUED OPERATIONS

In the first nine months of 2017, we recorded a loss of $10 million to discontinued operations of which $9 million related to L&W, primarily for a pension settlement charge related to lump sum benefits paid to former employees of L&W, and $1 million related to our European operations which were sold in December 2012. For the third quarter and first nine months of 2016, income from discontinued operations was $6 million and $20 million, respectively, and reflected the results of L&W.

Segment Results of Operations

GYPSUM

Net sales and operating profit (loss) for the businesses comprising our Gypsum segment were as follows:

	Three months ended September 30:				Nine months ended September 30:			
			Favorable (Unfavorable)				Favorable (Unfavorable)	
(millions)	2017	2016	$	%	2017	2016	$	%
Net sales								
United States	$ 558	$ 534	$ 24	4 %	$ 1,695	$ 1,609	$ 86	5 %
Canada	88	86	2	2 %	263	254	9	4 %
Mexico / Latin America	55	48	7	15 %	156	141	15	11 %
Canadian Mining	—	—	—	— %	—	—	—	— %
Eliminations	(36)	(33)	(3)	(9)%	(112)	(105)	(7)	(7)%
Total	$ 665	$ 635	$ 30	5 %	$ 2,002	$ 1,899	$ 103	5 %
Operating profit (loss)								
United States	$ 78	$ 95	$ (17)	(18)%	$ 255	$ 302	$ (47)	(16)%
Canada	2	6	(4)	(67)%	5	17	(12)	(71)%
Mexico / Latin America	3	2	1	50 %	6	8	(2)	(25)%
Canadian Mining	2	(14)	16	114 %	—	(20)	20	100 %
Gypsum Transportation Limited	—	—	—	— %	—	3	(3)	(100)%
Total	$ 85	$ 89	$ (4)	(4)%	$ 266	$ 310	$ (44)	(14)%

United States: Net sales in the third quarter of 2017 were $558 million, up $24 million, or 4%, compared with the third quarter of 2016. The increase in net sales was due to the following:

			Volume		Price	
(millions)	$	%	$	%	$	%
Change to Q3 2017 from Q3 2016						
Sheetrock® brand gypsum wallboard	$ 8	3%	$ 12	5%	$ (4)	(2)%
Sheetrock® brand joint compound	3	3%	2	2%	1	1 %
Other	13					
Total increase in net sales	$ 24	4%				

Sales for Sheetrock® brand gypsum wallboard increased $8 million in the third quarter of 2017 compared to the third quarter of 2016 due to increased shipments offset by lower average selling price. The increased volumes were driven primarily by higher shipments to big box retailers and specialty dealers, including new customers. In addition, the increased volumes reflected higher demand as a result of the hurricanes in the third quarter. The decrease in the average selling price reflected changes in product and regional mix.

Sales of Sheetrock® brand joint compound increased $3 million on increased volume and higher average selling price. The higher volume was driven by higher shipments to big box retailers. The higher average selling price reflected price increases during the third quarter of 2017. Included in the increase in Other was net higher sales of other gypsum products and higher freight due to increased volumes.

Operating profit of $78 million was recorded in the third quarter of 2017 compared to $95 million recorded in the third quarter of 2016. The decrease of $17 million in operating profit reflected the following:

		Volume	Price	Cost
(millions)	$	$	$	$
Change to Q3 2017 from Q3 2016				
Sheetrock® brand gypsum wallboard	$ (9)	$ 5	$ (4)	$ (10)
Sheetrock® brand joint compound	—	—	1	(1)
Other	(8)			
Total decrease in operating profit	$ (17)			

The decrease in operating profit reflected lower gross profit for Sheetrock® brand gypsum wallboard and flat gross profit for Sheetrock® brand joint compound. The decrease in gross profit for Sheetrock® brand gypsum wallboard reflected higher cost per unit and lower average selling price partially offset by higher volumes. The higher per unit cost for Sheetrock® brand gypsum wallboard reflected an increase in per unit cost of 11% for raw materials, driven primarily by waste paper, partially offset by a decrease in per unit cost of 6% for energy due to lower natural gas prices and lower per unit cost of 2% for conversion and 2% for fixed costs due to higher volumes. Also negatively impacting operating profit is $2 million of incremental costs incurred as a result of the hurricanes in the third quarter. The drivers of the lower average selling price and higher volumes are discussed above in sales.

The unchanged gross profit for Sheetrock® brand joint compound reflected a higher average selling price offset by higher per unit costs. The higher cost per unit for joint treatment reflected increased per unit costs for raw materials.

Included in Other are a $5 million less favorable adjustment quarter over quarter to our asset retirement obligations due to changes in cash flow estimates and a pension settlement charge of $3 million. Gross profit on other surfaces and substrates products was unchanged and selling and administrative expenses remained consistent period over period.

Canada: Net sales for our gypsum business in Canada in the third quarter of 2017 were $88 million, an increase of $2 million from $86 million in the third quarter of 2016. Sales of gypsum wallboard decreased $1 million due to a decrease of 8% in volume offset by an increase of 8% in price. The increase in average selling price reflected the final decisions of the Canadian authorities on the minimum pricing of gypsum board imported into Western Canada. The decisions were as a result of an anti-dumping proceeding initiated by a competing Canadian wallboard manufacturer. The minimum pricing of gypsum board in Western Canada also reduced our volumes. Also impacting sales was lower freight of $1 million, increased sales of other products of $1 million and a favorable impact of currency translation of $3 million.

Operating profit in the third quarter of 2017 was $2 million, a decrease of $4 million from the third quarter of 2016. The decrease reflected an increase for royalties of $2 million and for other miscellaneous costs of $2 million and lower gross profit on joint compound of $1 million offset by a favorable impact of foreign currency translation of $1 million.

Mexico / Latin America: Net sales for our gypsum businesses in Mexico and Latin America were $55 million for the third quarter of 2017, an increase of $7 million from the third quarter of 2016. The increase reflected higher sales of gypsum wallboard, Durock® brand cement tile backerboard and drywall steel and a favorable impact of currency translation of $2 million.

Operating profit increased to $3 million in the third quarter of 2017 from $2 million in the third quarter of 2016 due primarily to higher gross profit on Durock® brand cement tile backerboard and drywall steel and lower miscellaneous costs offset by lower gross profit on other products and an increase in selling and administrative expenses. The impact due to foreign currency translation was immaterial.

Canadian Mining: Our mining operation in Canada recorded no sales for both the third quarter of 2017 and the third quarter of 2016 as we indefinitely idled these properties. The operating profit of $2 million for the third quarter of 2017 reflected an adjustment for our asset retirement obligation related to one of our quarries. The operating loss of $14 million for the third quarter of 2016 primarily reflects our decision to indefinitely idle our mining operations in Little Narrows, Nova Scotia, Canada which resulted in an impairment of $10 million and severance and other charges of $2 million. See Note 14 to the consolidated financial statements for additional information.

Gypsum Transportation Limited: Our shipping company, Gypsum Transportation Limited, or GTL, recorded no sales or operating profit for the third quarter of 2017 or 2016 as we have exited this business.

CEILINGS

Net sales and operating profit for the businesses comprising our Ceilings segment were as follows:

	Three months ended September 30:				Nine months ended September 30:			
			Favorable (Unfavorable)				Favorable (Unfavorable)	
(millions)	2017	2016	$	%	2017	2016	$	%
Net sales								
United States	$ 125	$ 126	$ (1)	(1)%	$ 355	$ 365	$ (10)	(3)%
Canada	12	13	(1)	(8)%	37	40	(3)	(8)%
Mexico / Latin America	8	8	—	— %	22	24	(2)	(8)%
Eliminations	(12)	(12)	—	— %	(35)	(38)	3	8 %
Total	$ 133	$ 135	$ (2)	(1)%	$ 379	$ 391	$ (12)	(3)%
Operating profit								
United States	$ 26	$ 31	$ (5)	(16)%	$ 70	$ 86	$ (16)	(19)%
Canada	1	1	—	— %	2	4	(2)	(50)%
Mexico / Latin America	1	1	—	— %	2	3	(1)	(33)%
Total	$ 28	$ 33	$ (5)	(15)%	$ 74	$ 93	$ (19)	(20)%

United States: Net sales for our domestic ceilings business in the third quarter of 2017 were $125 million, a decrease of $1 million, or 1%, from the third quarter of 2016. The decrease reflected the following:

			Volume		Price	
(millions)	$	%	$	%	$	%
Change to Q3 2017 from Q3 2016						
Ceiling grid	$ (2)	(5)%	$ (1)	(3)%	$ (1)	(2)%
Ceiling tile	1	— %	1	— %	—	— %
Total decrease in net sales	$ (1)	(1)%				

Sales of ceiling grid decreased and sales of ceiling tile increased in the third quarter of 2017 compared with the third quarter of 2016. Lower sales of ceiling grid reflected a decrease in volumes to retail customers and a decrease in average selling price due to product mix. The increase in sales of ceiling tile was driven by an increase in volumes, primarily to specialty dealers.

Operating profit was $26 million for the third quarter of 2017, a decrease of $5 million, or 16%, from the third quarter of 2016. The decrease reflected the following:

		Volume	Price	Cost
(millions)	$	$	$	$
Change to Q3 2017 from Q3 2016				
Ceiling grid	$ (3)	$ (1)	$ (1)	$ (1)
Ceiling tile	(2)	—	—	(2)
Total decrease in operating profit	$ (5)			

The decrease in operating profit reflected a decrease in gross profit for both ceiling grid and ceiling tile in the third quarter of 2017 compared with the third quarter of 2016. The lower gross profit for ceiling grid reflected lower volumes, lower average selling price and higher per unit cost. The higher per unit cost for ceiling grid was driven primarily by an increase in

raw material costs, particularly steel. The decrease in gross profit for ceiling tile reflected higher per unit cost due to an increase in raw material costs, including starch and waste paper. Selling and administrative expenses were flat period over period.

Canada: Net sales for the third quarter of 2017 were $12 million, a decrease of $1 million from the third quarter of 2016. The decrease in sales reflected lower sales of $1 million for ceiling tile due to lower volumes. Operating profit was unchanged from the third quarter of 2016 to the third quarter of 2017.

Mexico / Latin America: Net sales and operating profit remained unchanged for the third quarter of 2017 as compared with the third quarter of 2016 at $8 million and $1 million, respectively.

USG BORAL BUILDING PRODUCTS

The following reflects the net sales and operating profit as recorded by UBBP and the equity income recorded by USG.

	Three months ended September 30:				Nine months ended September 30:			
			Favorable (Unfavorable)				Favorable (Unfavorable)	
(millions)	2017	2016	$	%	2017	2016	$	%
Net sales	$ 324	$ 276	$ 48	17%	$ 887	$ 778	$ 109	14%
Operating profit	43	41	2	5%	118	105	13	12%
Income from equity method investments - UBBP	15	14	1	7%	42	37	5	14%

Net sales for UBBP were $324 million in the third quarter of 2017 compared to $276 million for the third quarter of 2016. The increase of $48 million reflected increased plasterboard shipments in South Korea, China, Indonesia, Oman and Australia and favorable impact of currency translation of $5 million. The increase is offset by lower shipments in Vietnam. Plasterboard shipments increased to 1.31 billion square feet for the third quarter of 2017 from 1.18 billion square feet for the third quarter of 2016. Shipments of certain adjacent products, including gypsum and mineral fiber ceiling tiles, joint compound and metal studs, also increased in the third quarter of 2017 from the third quarter of 2016.

Operating profit increased to $43 million in the third quarter of 2017 compared to $41 million in the third quarter of 2016. Operating profit in 2017 reflected improved margins in South Korea, Oman and Australia offset by lower margins in Vietnam and Thailand. Negatively impacting margins are increased costs for raw materials and for energy. The increased costs for raw materials was driven by gypsum rock, most notably in Australia which experienced $3 million of higher gypsum costs. Additionally, waste paper and steel contributed to the higher raw material costs. UBBP quarterly results also included a favorable currency impact of $1 million offset by unfavorable operational reserve adjustments in India of $3 million and higher selling and administrative expenses. Operating profit in the third quarter of 2016 included impairment of long-lived assets in China of $8 million.

Our share of net income of UBBP increased $1 million in the third quarter of 2017 as compared to the third quarter of 2016. The increase reflected higher net income recorded by UBBP.

CORPORATE

The operating loss for Corporate decreased to $20 million in the third quarter of 2017 compared with $25 million in the third quarter of 2016 primarily due to lower expense for incentive compensation.

Liquidity and Capital Resources

As of September 30, 2017, we had $445 million of cash and cash equivalents and marketable securities compared with $518 million as of December 31, 2016. See discussion below under Cash Flows for explanation of the change in cash and cash equivalents. Our total liquidity as of September 30, 2017 was $634 million compared to $603 million as of December 31, 2016 (including $189 million and $85 million, respectively, of borrowing availability under our credit facility). The increase in liquidity reflected higher borrowing availability offset by payments for our share repurchase program, higher capital expenditures, premiums paid for refinancing of our 7.75% Notes and for incentives.

We invest in cash equivalents and marketable securities pursuant to an investment policy that has preservation of principal as its primary objective. The policy includes provisions regarding diversification, credit quality and maturity profile that are designed to minimize the overall risk profile of our investment portfolio. The securities in the portfolio are subject to

normal market fluctuations. See Note 5 to the condensed consolidated financial statements for additional information regarding our investments in marketable securities.

Total debt, consisting of senior notes and industrial revenue bonds, amounted to $1.077 billion ($1.089 billion in aggregate principal amount less $12 million of debt issuance costs) as of September 30, 2017 and $1.083 billion ($1.089 billion in aggregate principal amount less $6 million of debt issuance costs) as of December 31, 2016. During the nine months ended September 30, 2017, there were no borrowings under our revolving credit facility and no borrowings outstanding at period-end.

During the second quarter of 2017, we amended and restated our credit facility agreement. Our amended and restated agreement increased the maximum borrowing limit from $180 million to $220 million (including a $50 million borrowing sublimit for CGC) that is available to fund working capital needs and other general corporate purposes and matures on May 1, 2022. The facility is guaranteed by certain of our significant subsidiaries and secured by such parties' eligible trade receivables and inventory. The maximum borrowing limit under the credit agreement may be increased up to $450 million at our request and with our lenders' approval. The credit agreement contains other covenants and events of default that are customary for similar agreements and may limit our ability to take various actions including our ability to pay a dividend or repurchase our stock.

The maximum borrowing limit under the credit agreement is $220 million. The credit agreement also specifies that the maximum principal that may be borrowed is impacted by any outstanding borrowings and letters of credit under the credit agreement, by a borrowing base (comprised of eligible trade receivables and inventory), and the minimum excess availability that may be required due to the Covenant Trigger Threshold, described below, being applicable. As of September 30, 2017, the maximum principal we could borrow after taking into account the foregoing factors was approximately $189 million.

The credit agreement contains a covenant that would require us to maintain a minimum fixed charge coverage ratio of not less than 1.0-to-1.0 in the event that excess availability falls below the Covenant Trigger Threshold equal to 10% of the lesser of (a) the aggregate revolving commitment and (b) the aggregate of the USG and CGC borrowing base. As of September 30, 2017, our fixed charge coverage ratio was 1.06-to-1.0; and therefore, we are not required to maintain minimum excess availability of no less than the Covenant Trigger Threshold so that the financial covenant will remain inapplicable.

Our undistributed foreign earnings as of September 30, 2017 are considered permanently reinvested with the exception of earnings associated with the former holding company of the Knauf-USG joint venture that was sold in December 2015. The amount of cash and cash equivalents held by our foreign subsidiaries was $189 million as of September 30, 2017 and would be subject to material repatriation tax effects.

CASH FLOWS

The following table presents a summary of our cash flows:

	Nine months ended September 30,	
(millions)	2017	2016
Net cash provided by (used for):		
Operating activities from continuing operations	$ 203	$ 285
Investing activities from continuing operations	(112)	105
Financing activities from continuing operations	(182)	(204)
Discontinued operations	5	9
Effect of exchange rate changes on cash	6	(3)
Net (decrease) increase in cash and cash equivalents	$ (80)	$ 192

Operating Activities: Net cash provided by operating activities was lower for the first nine months of 2017 compared to the first nine months of 2016 due to lower operating profit. Also driving the decrease was a higher net cash outflow in the first nine months of 2017 for working capital of $98 million as compared to the cash outflow of $41 million for the first nine months of 2016. The increase in cash outflows reflected an increase in accounts receivable of $45 million due to higher sales in the current quarter, an increase in inventories of $3 million due to increased costs for raw materials offset by an increase in accounts payable of $4 million which also reflected increased costs of materials.

As of September 30, 2017, working capital (current assets less current liabilities) amounted to $541 million, and the ratio of current assets to current liabilities was 2.37-to-1. As of December 31, 2016, working capital amounted to $527 million, and the ratio of current assets to current liabilities was 2.25-to-1.

Investing Activities: Net cash used for investing activities was $112 million for the first nine months of 2017 compared to $105 million of net cash provided by investing activities for the nine months ended September 30, 2016. The increase in the use of cash reflected lower cash inflows for marketable securities and higher cash outflows for capital expenditures. The net activity of purchases and sales or maturities of marketable securities was a cash outflow of $6 million for the nine months ended September 30, 2017 as compared to a cash inflow of $127 million for the nine months ended September 30, 2016.

The increase in capital expenditures to $109 million in the first nine months of 2017 from $44 million in the first nine months of 2016 reflected expenditures for the replacement, modernization and expansion of operations, including Advanced Manufacturing initiatives. Approved capital expenditures totaled $236 million as of September 30, 2017 compared with $121 million as of December 31, 2016.

Financing Activities: Net cash used for financing activities for the first nine months of 2017 was $182 million compared to $204 million for the first nine months of 2016. The cash used in 2017 reflected the $520 million paid to redeem $500 million of our 7.75% Notes including tender premiums and the repurchase of $153 million of common stock under the approved share repurchase program. This was partially offset by the issuance of $500 million of our 4.875% Notes, net of debt issuance fees. The cash used in 2016 reflected $205 million paid to repurchase $200 million of our 6.3% Notes.

Discontinued Operations: Net cash provided by discontinued operations for the first nine months of 2017 was $5 million compared to $9 million for the first nine months of 2016. The net cash inflow in 2017 primarily reflected a working capital adjustment associated with the sale of L&W.

DEFINED BENEFIT PLANS

During the first nine months of 2017, we made cash contributions of $50 million to the USG Corporation Retirement Plan Trust, $16 million to our domestic supplemental pension plan and $3 million to our pension plan in Canada. We expect to make total contributions to our pension and postretirement plans in 2017 of approximately $71 million.

LIQUIDITY OUTLOOK

In the first nine months of 2017, our investing cash outflows included $109 million of capital expenditures. In total for 2017, we plan to spend approximately $175 million on capital expenditures, which includes $50 million allocated for Advanced Manufacturing projects to standardize and automate production, while reducing manufacturing costs and increasing efficiency, across our Gypsum and Ceilings businesses. This is a decrease from our second quarter expectations and reflects timing of projects from 2017 into 2018 partially driven by the hurricanes during the third quarter. We expect to fund these expenditures with cash from operations or cash on hand.

Interest payments, based on our current level of outstanding debt, are expected to decrease to $87 million in 2017 compared with $153 million in 2016 which reflects lower debt levels due to the repayment of $1.1 billion in debt in 2016 and lower interest rates due to the refinancing of our 7.75% Notes to our 4.875% Notes.

On January 31, 2017, our Board of Directors approved a share repurchase program in which we may repurchase up to $250 million of our common stock. As of September 30, 2017, we have purchased $153 million in shares of common stock under the program. The timing and the amount of any repurchases will be determined based on market conditions and other factors. Share repurchases will be funded with available cash on hand. See Part II, Item 2 for additional information.

Since formation, UBBP was funded from its net cash flow from operations and third-party financing, and it is our intent that as an ongoing operation, UBBP will continue to self-fund. UBBP targets the distribution of 50% of combined after tax profits to USG and Boral; however, this dividend may be adjusted by the UBBP Board with unanimous resolution. Through the first nine months of 2017, UBBP paid cash dividends on earnings through March 2017, of which our 50% share totaled $23 million. In October, the UBBP Board approved a cash dividend on earnings through September 2017, of which our 50% share is $19 million, to be paid in the fourth quarter of 2017.

In the event certain performance targets are satisfied by UBBP, we will be obligated to pay Boral an earnout payment in an amount up to $50 million in 2019, based on UBBP performance during the first five years. We have not recorded a liability for this earnout payment as we have concluded that it is currently not probable that the five-year performance target will be achieved.

We believe that cash on hand, cash equivalents, marketable securities, cash available from future operations and our credit facility will provide sufficient liquidity to fund our operations for at least the next 12 months. Cash requirements include, among other things, capital expenditures, working capital needs, employee retirement plans funding, interest payments and other contractual obligations.

Recently Issued Accounting Pronouncements

See Part 1, Item 1, Note 1 to the condensed consolidated financial statements for information related to new accounting standards.

Legal Contingencies

We are named as defendants in litigation arising from our operations, including lawsuits or claims arising from commercial disputes, product performance or warranties, products liability, and worksite or vehicular accidents.

In 2015, USG, United States Gypsum Company, L&W Supply Corporation, and seven other wallboard manufacturers were named as defendants in a lawsuit filed by twelve homebuilders alleging that the defendants conspired to fix the price of wallboard sold in the United States. Earlier, in 2013, class action lawsuits making similar allegations were filed in Canada on behalf of a class of purchasers of wallboard in Canada. We believe that the cost, if any, of resolving the homebuilders' lawsuit and Canadian class action litigation will not have a material effect on our results of operations, financial position or cash flows.

In 2015 United States Gypsum Company was served with a federal grand jury subpoena requesting the production of company records in connection with a federal investigation of the gypsum drywall industry. Two former employees of USG have also been served with subpoenas. We believe the investigation, although a separate proceeding, is related to the same events at issue in the litigation discussed above. We are fully cooperating with the grand jury investigation. We believe we acted in full compliance with the law, and we do not expect the resolution of this matter to result in any material effect on our business, financial position, liquidity or results of operations; however, we can provide no assurances as to the scope, timing, or outcome of any such investigation.

See Note 15 to the condensed consolidated financial statements for further information regarding the foregoing lawsuits and other legal matters.

Critical Accounting Policies

The preparation of our financial statements requires us to make estimates, judgments and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses during the periods presented. Our Annual Report on Form 10-K for the fiscal year ended December 31, 2016, which we filed with the Securities and Exchange Commission on February 8, 2017, includes a summary of the critical accounting policies we believe are the most important to aid in understanding our financial results. There have been no changes to those critical accounting policies that have had a material impact on our reported amounts of assets, liabilities, revenues or expenses during the first nine months of 2017.

Forward-Looking Statements

This report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 related to management's expectations about future conditions. Any forward-looking statements represent our views only as of the date of this report and should not be relied upon as representing our views as of any subsequent date, and we undertake no obligation to update any forward-looking statement. Forward-looking statements include, but are not limited to, statements under the following headings: (1) "Management's Discussion and Analysis" about (a) market conditions and outlook, including anticipated growth in new residential and nonresidential construction, repair and remodel spending, and the construction industries in Canada and Mexico, and the anticipated growth or decline in countries in the UBBP territory and its effect on the cyclicality of our North American business, industry shipments of gypsum, demand for gypsum wallboard and industry capacity utilization rate, and our selling prices and margins; (b) expected contributions to our pension and postretirement plans; (c) our liquidity outlook, including our capital expenditure plans, share repurchase program, UBBP's dividend policy and ability to self-fund, and cash requirements and adequacy of resources to fund them; and (d) the outcome and effect of ongoing and future legal and governmental proceedings; and (2) "Legal Proceedings" about the outcome and effect of ongoing and future legal and governmental proceedings.

Some of the risk factors that affect our business and financial results are discussed under "Risk Factors" in our most recent Annual Report on Form 10-K. We wish to caution the reader that actual business, market or other conditions, including the "Risk Factors" discussed in our most recent Annual Report on Form 10-K or in our other Securities and Exchange Commission filings, could cause our actual results to differ materially from those stated in the forward-looking statements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

There have been no significant changes to our market risk since December 31, 2016.

ITEM 4. CONTROLS AND PROCEDURES

(a) Evaluation of disclosure controls and procedures.

Our Chief Executive Officer and Chief Financial Officer, after evaluating the effectiveness of our “disclosure controls and procedures” (as defined in Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, or the Act), have concluded that, as of the end of the quarter covered by this report, our disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by an issuer in the reports that it files or submits under the Act is accumulated and communicated to the issuer’s management, including its principal executive and financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

(b) Changes in internal control over financial reporting.

There were no changes in our “internal control over financial reporting” (as defined in Rule 13a-15(f) promulgated under the Act) identified in connection with the evaluation required by Rule 13a-15(d) promulgated under the Act that occurred during the quarter ended September 30, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

See Part I, Item 1, Note 15 to the condensed consolidated financial statements and Part I, Item 2, Legal Contingencies for additional information regarding legal proceedings.

ITEM 1A. RISK FACTORS

There is no material change in the information reported under "Part I-Item 1A-Risk Factors" contained in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

(a) Pursuant to our Deferred Compensation Program for Non-Employee Directors, one of our non-employee directors deferred a portion of his quarterly retainer for service as a director that was payable on September 30, 2017 into a total of approximately 659 deferred stock units. These units will increase or decrease in value in direct proportion to the market value of our common stock and will be paid in shares of common stock following termination of service as a director. The issuance of these deferred stock units was effected through a private placement under Section 4(2) of the Securities Act of 1933, as amended, and was exempt from registration under Section 5 of that Act.

(b) Not applicable

(c) On February 1, 2017, we announced that our Board of Directors approved a $250 million share repurchase program. Under the program, we may repurchase shares from time to time in open market transactions or in privately-negotiated transactions in accordance with applicable securities laws, including under plans complying with Rule 10b5-1 of the Exchange Act. We may discontinue the program at any time and the program has no set expiration date. The timing and amount of any repurchase of shares is determined by our management, based on its evaluation of market conditions, cash on hand, applicable legal requirements and other factors. The following table provides information about purchases of our common stock we made during the three months ended September 30, 2017:

Issuer Purchases of Equity Securities

Period	Total number of shares purchased	Average price paid per share	Total number of shares repurchased as part of publicly announced plans or programs	Approximate dollar value of shares that may yet be purchased under the plans or programs *(millions)*
July 1, 2017 to July 31, 2017	937,274	$ 28.78	937,274	$ 126
August 1, 2017 to August 31, 2017	712,358	$ 26.71	712,358	$ 107
September 1, 2017 to September 30, 2017	338,872	$ 30.95	338,872	$ 97
Total	1,988,504		1,988,504	

ITEM 4. MINE SAFETY DISCLOSURES

The information concerning mine safety violations or regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K promulgated by the SEC is included in Exhibit 95 to this report.

ITEM 6. EXHIBITS

Exhibit Number	Exhibit
10.1	First Amendment to USG Corporation Deferred Compensation Program for Non-Employee Directors *
31.1	Rule 13a-14(a) Certifications of USG Corporation's Chief Executive Officer *
31.2	Rule 13a-14(a) Certifications of USG Corporation's Chief Financial Officer *
32.1	Section 1350 Certifications of USG Corporation's Chief Executive Officer *
32.2	Section 1350 Certifications of USG Corporation's Chief Financial Officer *
95	Mine Safety Disclosures *
101	The following financial information from USG Corporation's Quarterly Report on Form 10-Q for the three and nine months ended September 30, 2017, formatted in XBRL (Extensible Business Reporting Language): (1) the condensed consolidated statements of income for the three and nine months ended September 30, 2017 and 2016, (2) the condensed consolidated statements of comprehensive income for the three and nine months ended September 30, 2017 and 2016, (3) the condensed consolidated balance sheets as of September 30, 2017 and December 31, 2016, (4) the condensed consolidated statements of cash flows for the nine months ended September 30, 2017 and 2016 and (5) notes to the condensed consolidated financial statements. *

* Filed or furnished herewith

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

USG CORPORATION

By /s/ Jennifer F. Scanlon

Jennifer F. Scanlon,
Director, President and Chief Executive Officer

By /s/ Matthew F. Hilzinger

Matthew F. Hilzinger,
Executive Vice President and Chief Financial Officer

By /s/ Jeanette A. Press

Jeanette A. Press,
Vice President, Controller and Principal Accounting Officer

October 26, 2017

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2017

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from to

Commission File Number 1-8864

USG CORPORATION
(Exact name of Registrant as Specified in its Charter)

Delaware	**36-3329400**
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)
550 W. Adams Street, Chicago, Illinois	**60661-3676**
(Address of Principal Executive Offices)	(Zip Code)

Registrant's Telephone Number, Including Area Code: **(312) 436-4000**

Securities Registered Pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Exchange on Which Registered
Common Stock, $0.10 par value	New York Stock Exchange Chicago Stock Exchange
Preferred Stock Purchase Rights (subject to Rights Agreement dated December 21, 2006, as amended)	New York Stock Exchange Chicago Stock Exchange

Securities Registered Pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Exchange Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	(Do not check if smaller reporting company)	
		Smaller reporting company	☐
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Exchange Act Rule 12b-2). Yes ☐ No ☒

The aggregate market value of the registrant's common stock held by non-affiliates computed by reference to the New York Stock Exchange closing price on June 30, 2017 (the last business day of the registrant's most recently completed second fiscal quarter) was approximately $2,461,833,172. Solely for this purpose, directors, executive officers and greater than 10% record shareholders are considered the affiliates of the registrant.

The number of shares of the registrant's common stock outstanding as of January 31, 2018 was 141,056,498.

Documents Incorporated By Reference: Certain sections of USG Corporation's definitive Proxy Statement for use in connection with its 2018 annual meeting of stockholders, to be filed subsequently, are incorporated by reference into Part III of this Form 10-K Report where indicated.

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PART I

Item 1. BUSINESS

In this annual report on Form 10-K, "USG," "we," "our" and "us" refer to USG Corporation, a Delaware corporation, and its subsidiaries included in the consolidated financial statements, except as otherwise indicated or as the context otherwise requires.

General

USG, through our subsidiaries and joint ventures, is a leading manufacturer of building materials and innovative solutions that was originally formed in 1902. We produce a wide range of products for use in new residential, new nonresidential, and residential and nonresidential repair and remodel construction as well as products used in certain industrial processes. Our businesses are cyclical in nature and sensitive to changes in general economic conditions, including, in particular, conditions in the North American housing and construction-based markets. Our expansion through two 50/50 joint ventures we formed in 2014 with Boral Limited, referred to as USG Boral Building Products, or UBBP, into the markets of Asia, Australasia, and the Middle East has significantly increased our exposure to the economic conditions in those areas.

The effects of market conditions on our operations are discussed in Part II, Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations.

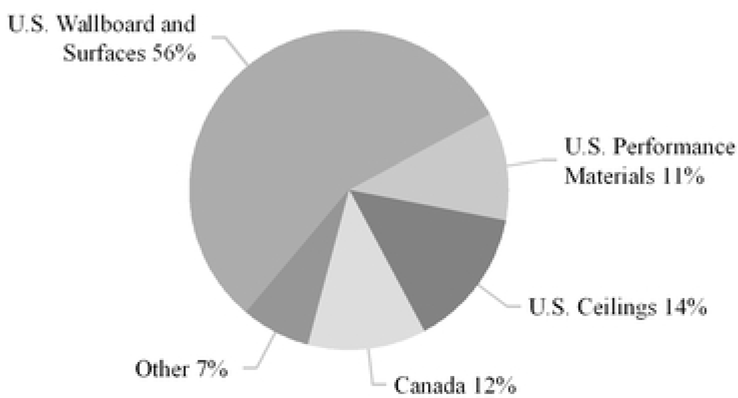
Segments

During the fourth quarter of 2017, we realigned our operating structure to reflect changes in our organizational structure and management's operation and view of our businesses. Our realigned operating structure is generally aligned by product type and consists of three divisions, in addition to UBBP: Gypsum, Performance Materials and Ceilings. The operations of the divisions are similar throughout North America.

As a result of our realigned operating structure, we changed the composition of our reportable segments effective for the quarter ended December 31, 2017 to align with how we manage our businesses, review operating performance and allocate resources considering the discrete information available for the geographies within those divisions. We now have five reportable segments: U.S. Wallboard and Surfaces, U.S. Performance Materials, U.S. Ceilings, Canada, and UBBP. Our prior period results have been recast to reflect these changes and present comparative year over year information by segment. See Note 14, Segments, to the consolidated financial statements in Part II, Item 8 of this report for financial information regarding our reportable segments.

Our reportable segments are determined considering both qualitative and quantitative metrics for aggregation of the product type within geographies for which discrete financial information is available. Our U.S. Wallboard and Surfaces, U.S. Performance Materials and U.S. Ceilings reportable segments were identified based on products manufactured and marketed as discussed below. Our Canada segment is a separately reportable segment, as while it has similar qualitative factors to U.S. operations, it has different quantitative metrics and, therefore, cannot be aggregated. Our operating segments in Mexico and Latin America, as well as our mining operation in Little Narrows, Nova Scotia, Canada, which we indefinitely idled in 2016, and our shipping company, which we exited in 2015, are now included in Other as reconciling items to our consolidated segments. There has been no change to our UBBP segment.

The following graph reflects the breakdown by segment of our 2017 consolidated net sales of $3.2 billion.



Net sales of UBBP of $1.2 billion are excluded from the graph above as the joint ventures are accounted for as equity method investments.

Gypsum

BUSINESS

Our Gypsum division manufactures and markets gypsum and related products in the United States, Canada and Mexico. It is composed of our U.S. Wallboard and Surfaces segment and the Gypsum operations of our Canada segment. Our Gypsum operations in Mexico do not rise to the level of a reportable segment and thus are included in Other. We are the largest manufacturer of gypsum wallboard in the United States and accounted for approximately 25.4% of total industry shipments of gypsum board in 2017. The gypsum board market, as determined by the Gypsum Association, includes gypsum wallboard, other gypsum-related paneling products and imports. As such, we've included the Gypsum products of USG Sheetrock® brand gypsum wallboard and Securock® brand glass mat sheathing and the Performance Materials product of Fiberock® brand gypsum fiber panels in our estimate of our market share of the gypsum board market. In Canada, we accounted for approximately 42% of Canadian domestic shipments of gypsum wallboard in 2017 and are the largest manufacturer of gypsum wallboard in Canada.

PRODUCTS

Gypsum's products are used in a variety of building applications to construct walls and ceilings of residential, nonresidential and institutional buildings, as well as in certain industrial applications. We also produce gypsum-based products for agricultural and industrial customers to use in a wide variety of applications, including soil conditioning, road repair, fireproofing and ceramics. The major product lines within the Gypsum division are:

WALLBOARD	
USG Sheetrock® brand gypsum wallboard and Securock® brand glass mat sheathing portfolios	Gypsum panels that provide aesthetic as well as sound-dampening, fire-retarding, abuse-resistance and moisture-control value
SURFACES	
USG Sheetrock® brand joint compound portfolio, as well as corner bead, joint tape, and plaster	Used for finishing wallboard joints
Construction plaster products, sold under the brand names Red Top®, Imperial®, Diamond® and Supremo™ and industrial gypsum	Used to provide a custom finish for residential and commercial interiors and provide aesthetic, sound-dampening, fire-retarding and abuse-resistance value

As the leader in lightweight innovation, we offer the industry's broadest portfolio of lightweight gypsum panels for use in interior wall and ceiling applications including our USG Sheetrock® Brand UltraLight Panels and our newly launched USG Sheetrock® Brand EcoSmart Panels.

MANUFACTURING

Our Gypsum division manufactures products at 41 plants located throughout the United States, Canada, and Mexico, some of which are shared with the Performance Materials division.

Gypsum rock is mined or quarried at 12 company-owned locations in North America. Our mines and quarries provided approximately 50% of the gypsum used by our plants in North America in 2017. Some of our manufacturing plants purchase or acquire synthetic gypsum and natural gypsum rock from outside sources. In 2017, outside sources of synthetic gypsum and natural gypsum rock accounted for approximately 43% and 7%, respectively, of the gypsum used in our North American plants.

Synthetic gypsum is a byproduct of flue gas desulphurization carried out by electric generation or industrial plants that burn coal as a fuel. The suppliers of this kind of gypsum are primarily power companies, which are required to operate scrubbing equipment for their coal-fired generating plants under federal environmental regulations. We have entered into a number of long-term supply agreements to acquire synthetic gypsum. Certain power companies have switched to using natural gas instead of coal for their electric generation needs. In the event more power companies switch to using natural gas instead of coal, the availability of synthetic gypsum may decrease which could result in an increase to our cost. See Item 1A, Risk Factors.

We produce wallboard paper at four company-owned production facilities located in the United States. Vertical integration in paper helps to ensure a continuous supply of high-quality paper that is tailored to the specific needs of our production processes. We augment our paper needs through purchases from outside suppliers when necessary. We did not make any material purchases of paper from outside suppliers in 2017.

MARKETING AND DISTRIBUTION

Our Gypsum products are marketed and distributed through specialty wallboard distributors, building materials dealers, home improvement centers and other retailers and contractors. Sales of Gypsum products are seasonal in the sense that sales are generally greater from spring through autumn than during the remaining part of the year.

Based on our estimates using publicly available data, internal surveys and industry shipment data for gypsum board, as reported by the Gypsum Association, we estimate that during 2017 volume demand for gypsum board was generated by:

- residential and nonresidential repair and remodel activity of about 51%,
- new residential construction of about 39%,
- new nonresidential construction of about 7%, and
- other activities, such as exports and temporary construction, of about 3%.

COMPETITION

Industry shipments of gypsum board in the United States (including gypsum wallboard, other gypsum-related paneling products and imports), as reported by the Gypsum Association, were an estimated 25.7 billion square feet in 2017, up approximately 3% from 25.0 billion square feet in 2016. Our share of the gypsum board market in the United States, which includes for comparability shipments of USG Sheetrock® brand gypsum wallboard, Fiberock® brand gypsum fiber panels and Securock® brand glass mat sheathing, increased to 25.4% in 2017 from 24.6% in 2016.

The principal methods of competition are quality and range of products, including introduction of new products, product availability, pricing, compatibility of systems and product design features. Our principal competitors include

	United States	Canada	Mexico
National Gypsum Company	x		
Continental Building Products, Inc.	x	x	
American Gypsum Company LLC (a unit of Eagle Materials Inc.)	x		
PABCO Gypsum (a division of PABCO Building Products)	x		
CertainTeed Corporation (a subsidiary of Compagnie de Saint-Gobain SA)	x	x	
Georgia-Pacific (a subsidiary of Koch Industries, Inc.)	x	x	
Cabot Gypsum Company		x	
Panel Rey, S.A. (a Grupo Promax Company)	x		x
Plaka (a unit of Knauf International GmbH)			x

Performance Materials

BUSINESS

Our Performance Materials division manufactures and markets a series of innovative products in the United States that provide solutions to our customers to help close the skilled labor gap and increase job site efficiency. It consists solely of our U.S. Performance Materials segment.

PRODUCTS

Performance Materials products are used in a variety of interior and exterior building applications of residential and nonresidential buildings, as well as in certain industrial applications. These products can be grouped under three product categories of underlayment, building envelope and structural. The major products within these three categories are as follows:

UNDERLAYMENT	
USG Durock® brand cement board	Provides water and fire-resistant assemblies for both interior and exterior applications
Fiberock® brand backerboard	Includes abuse-resistant interior wall panels, tile backer boards, and flooring underlayments
USG Durock™ brand shower systems	A fully bonded waterproofing system for tiled shower installations
Levelrock® brand systems of poured gypsum flooring	Provides surface leveling, enhanced sound-dampening and fire-resistant performance for residential and commercial flooring applications
BUILDING ENVELOPE	
Securock® ExoAir® 430 air barrier system	Integrated gypsum sheathing panels with pre-applied fluid air barrier membrane that provides structural performance and moisture, mold and air control
Securock® brand roof board portfolios	Roof boards for use in low-slope commercial roofing systems that provides moisture, mold and fire resistant value
STRUCTURAL	
USG Structural Panels	High-strength, reinforced factory made concrete panels for use in subfloor, roof deck, foundation walls and other noncombustible applications

MANUFACTURING

Our Performance Materials division manufactures products at 11 plants located throughout the United States, most of which are shared with our Gypsum division.

MARKETING AND DISTRIBUTION

Our Performance Materials products are marketed and distributed through specialty distributors, home improvement centers, contractors and other retailers. Sales of Performance Materials products are generally greater from spring through autumn than during the remaining part of the year. Based on our estimates using internal surveys, we estimate that during 2017 volume demand was generated by:

- new nonresidential construction of about 35%
- new residential construction of about 35%, and
- residential and nonresidential repair and remodel activity of about 30%.

COMPETITION

The principal methods of competition are quality and range of products, including introduction of new products, product availability, pricing, compatibility of systems and product design features. Our principal competitors include National Gypsum Company, Georgia Pacific, James Hardie Building Products, Schluter Systems, the ARDEX Group and Laticrete.

Ceilings

BUSINESS

Our Ceilings division manufactures and markets ceiling interior systems products in the United States, Canada and Mexico. It consists of our U.S. Ceilings segment and the ceilings operations of our Canada segment. Our ceilings operations in Mexico do not rise to the level of a reportable segment and thus are included in Other. We are a leading manufacturer and supplier of interior ceilings products including ceiling tile, ceiling grid, and specialty ceilings used primarily in nonresidential applications.

In 2017, we acquired Ceilings Plus, a leader in the specialty ceilings market. We estimate that we are the second-largest manufacturer of ceiling grid and acoustical ceiling tile.

PRODUCTS
The major product lines within the Ceilings division are:

CEILING TILE	
Radar™, Eclipse™, Mars™ and Halcyon™	Provides qualities such as sound absorption, fire retardation and convenient access to the space above the ceiling for electrical and mechanical systems, air distribution and maintenance
CEILING GRID	
Donn®, DX®, Fineline®, Centricitee™ and Identitee® DXI™	Provides qualities such as fire retardation and convenient access to the space above the ceiling for electrical and mechanical systems, air distribution and maintenance
SPECIALTY CEILINGS	
Curvatura™, Compasso®, Radians®, Illusions™, Multiples™, Runways™, Barz™, Planx™, Mirra™, Corniche™,Wallforms™ and Parti™	Provides qualities such as aesthetics, sound absorption, fire retardation and convenient access to the space above the ceiling for electrical and mechanical systems, air distribution and maintenance
ENSEMBLE™	
Ensemble™	Provides a monolithic drywall look with acoustical performance

MANUFACTURING
Our Ceilings division manufactures products at 10 plants located in the United States and Canada. Principal raw materials used to produce Ceilings' products include mineral fiber, aluminum, steel, perlite and starch. We produce mineral fiber and obtain all others from outside suppliers.

MARKETING AND DISTRIBUTION
Ceilings sells products primarily in markets related to the construction and renovation of nonresidential buildings. During 2017, based on our estimates using internal surveys, approximately:

- 75% of its net sales were from repair and remodel activity, primarily nonresidential,
- 20% of its net sales were from new nonresidential construction, and
- 5% of its net sales were from new residential construction.

Products are marketed and distributed through a network of distributors, installation contractors and home improvement centers. Sales of Ceilings' products are seasonal in nature and are generally lower in the fourth quarter of the calendar year as compared to the first three quarters of the year.

COMPETITION
Principal methods of competition are quality and range of products, including introduction of new products, product availability, pricing, compatibility of systems and product design features. Our principal competitors include the following:

	United States	Canada	Mexico
Ceiling Tile			
Armstrong World Industries, Inc.,	x	x	x
Rockfon (a subsidiary of Rockwool International A/S)	x	x	
CertainTeed Corporation (a subsidiary of Compagnie de Saint-Gobain SA)	x	x	x
Odenwald Faserplattenwerk GmbH (OWA)	x	x	x
Ceiling Grid			
WAVE (a joint venture between Armstrong World Industries, Inc. and Worthington Industries)	x	x	
Chicago Metallic Corporation (a subsidiary of Rockwool International A/S)	x	x	x
CertainTeed Corporation (a subsidiary of Compagnie de Saint-Gobain SA)	x	x	x

USG Boral Building Products

BUSINESS
In 2014, we and certain of our subsidiaries formed 50/50 joint ventures with Boral Limited, or Boral. These joint ventures are referred to as USG Boral Building Products, or UBBP. UBBP manufactures, distributes and sells certain building products, mines raw gypsum and sells natural and synthetic gypsum throughout Asia, Australasia and the Middle East. UBBP is a leader in most of the markets it serves. See Note 4 to the consolidated financial statements in Part II, Item 8 of this report for additional information related to our equity method investments.

PRODUCTS
UBBP manufactures and distributes products for wall, ceiling, floor lining and exterior systems that utilize gypsum wallboard, referred to as plasterboard in the regions in which UBBP operates, mineral fiber ceiling tiles, steel grid and joint compound. UBBP's significant brand names include USG Boral Sheetrock® premium plasterboard, USG Boral NextGen®, Elephant®, Jayaboard®, Durock® and Donn® DX®. UBBP launched USG Boral Sheetrock® products, which leverages USG technology, in Australia, South Korea, Indonesia, Vietnam, China, Thailand, India and Oman. UBBP is able to sell USG Boral Sheetrock® at a premium price in some markets and acceptance of lightweight technology continues to increase, which is led by Australia with a conversion rate above 90%.

MANUFACTURING
UBBP has 23 plasterboard lines, three gypsum mines and 36 other non-board lines for metal products, metal ceiling grid, ceiling tile, joint compound, and cornice throughout twelve countries in Asia, Australasia and the Middle East.

Executive Officers of the Registrant

See Part III, Item 10, Directors, Executive Officers and Corporate Governance - Executive Officers of the Registrant (as of February 14, 2018).

Other Information

RESEARCH AND DEVELOPMENT
To contribute to our high standards and our leadership in the building materials industry, we perform extensive research and development at the USG Corporate Innovation Center in Libertyville, Illinois, using open innovation models and outside partnerships. Research team members collaborate with suppliers, universities and national research laboratories to provide product support and to develop new products and technologies for our divisions. With fire, acoustical, structural and environmental testing capabilities, the research center allows us to conduct our own on-site evaluation of products and systems. Chemical analysis and materials characterization support product development and safety/quality assessment programs. Development activities can be taken to an on-site pilot plant before being transferred to a full-size plant. Research and development activities have been focused on customer preferred system solutions. We expense research and development expenditures as incurred. These expenditures amounted to $23 million, $24 million and $23 million in 2017, 2016 and 2015, respectively. UBBP also operates a research and development center in Thailand.

SUSTAINABILITY
The adoption of green building codes and standards such as the Leadership in Energy and Environmental Design, or LEED, rating system established by the U.S. Green Building Council to encourage the design and construction of buildings that are environmentally friendly, combined with an increase in customer preference for products that can assist in obtaining LEED credit or are otherwise environmentally preferable, has increased demand for products, systems and services that contribute to building sustainable spaces. Many of our products meet the requirements for the awarding of LEED credits, and we continue to develop new products and systems to address market demand for products that enable construction of buildings that require fewer natural resources to build, operate and maintain. Our competitors also have developed and introduced to the market more environmentally responsible products.

We expect that there will be increased demand over time for products, systems and services that meet regulatory and customer sustainability standards and preferences and decreased demand for products that produce significant greenhouse gas emissions. We also believe that our ability to continue to provide these products and systems to our customers will be necessary to maintain our competitive position in the marketplace.

ENERGY
Our primary supplies of energy have been adequate, and we have not been required to curtail operations as a result of insufficient supplies. Supplies are likely to remain sufficient for our projected requirements. Currently, we are using swap

contracts to hedge a significant portion of our anticipated purchases of natural gas to be used in our manufacturing operations over the next 12 months and beyond. We review our positions regularly and make adjustments as market conditions warrant.

SIGNIFICANT CUSTOMERS

On a worldwide basis, for each of the years ended December 31, 2017, 2016, and 2015, The Home Depot accounted for 23%, 23% and 23% of our net consolidated sales, respectively, and L&W Supply Corporation, or L&W, accounted for 16%, 19% and 18% of our consolidated net sales, respectively. On October 31, 2016, we completed the sale of L&W to American Builders & Contractors Supply Co., Inc., or ABC Supply, for $675 million inclusive of the final working capital adjustment. Additionally, we entered into a supply agreement with L&W that governs sales of wallboard and certain other products from USG to L&W. Our U.S. Wallboard and Surfaces, U.S. Performance Materials, U.S. Ceilings and Canada segments each had net sales to these customers in each of those years.

INTELLECTUAL PROPERTY

We consider patents, copyrights, trademarks, trade secrets, proprietary technology and similar intellectual property as critical to our success. We hold numerous patents and have registered numerous trademarks of varying duration in multiple legal jurisdictions. Further, we have filed patent applications and applications for the registration of trademarks in the United States and internationally. Although we consider our patents, licenses and trade secrets to constitute valuable assets, we do not regard any of our businesses as being materially dependent upon individual patents, trade secrets, or licenses.

OTHER

Because we generally fill orders upon receipt, no segment has any significant order backlog.

None of our segments has any special working capital requirements.

No material part of our business is subject to renegotiation of profits or termination of contracts or subcontracts at the election of any government.

As of December 31, 2017, we had approximately 6,800 employees worldwide in our consolidated operations.

See Note 14 to the consolidated financial statements in Part II, Item 8 of this report for financial information pertaining to net sales and long-lived assets by geographic region and net sales, operating profit and total assets by reportable segment. Our prior period results have been recast to reflect the changes to our reportable segments noted above and present comparative year over year information. See also Item 1A, Risk Factors, for information regarding the risks associated with conducting business in international locations, as well as the possible effects that compliance with environmental laws and regulations may have on our businesses and operating results.

Available Information

We maintain a website at www.usg.com and make available at this website our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and all amendments to those reports as soon as reasonably practicable after they are electronically filed with or furnished to the Securities and Exchange Commission, or SEC. The information on our website is not, and will not be deemed to be, a part of this Annual Report on Form 10-K, or incorporated into any of our other filings with the SEC, except where we expressly incorporated such information. If you wish to receive a paper copy of any exhibit to our reports filed with or furnished to the SEC, the exhibit may be obtained, upon payment of reasonable expenses, by writing to: Corporate Secretary, USG Corporation, 550 West Adams Street, Chicago, Illinois 60661-3676.

Item 1A. RISK FACTORS

Our business, financial condition, operating results and cash flows are subject to various risks and uncertainties. We have described below significant factors that may adversely affect us and our industry. You should carefully consider these factors, together with all of the other information in this annual report on Form 10-K and in other documents that we file with the SEC, before making any investment decision about our securities.

Our businesses are cyclical, regional and seasonal in nature and subject to industry downturns.

Our businesses are cyclical and sensitive to changes in general economic conditions, including, in particular, conditions in the North American housing and construction-based markets. Housing starts in the United States were 1.202 million in 2017 and remain below the historical average of 1.44 million, while new nonresidential construction and the residential and nonresidential repair and remodel market in the United States have experienced only modest increases over the past several years. Moreover, we operate in a variety of regional markets, so our businesses are subject not only to general economic conditions, but also to localized economic conditions in each of those regions. Housing and construction-based markets are impacted by broader economic circumstances, including employment levels, the availability of skilled labor, household formation, home ownership rate, new and existing home price trends, availability of mortgage financing, interest rates, deductibility of mortgage interest and real estate taxes, consumer confidence, job growth and discretionary business investment, and these markets may experience a downturn. Adverse conditions in the markets or regions where we operate, or the failure of these markets or regions to return to historical levels, may have a material adverse effect on our business, financial condition, operating results and cash flows.

In addition, our businesses are seasonal, which has caused in the past, and will likely cause in the future, our quarterly results to vary significantly. Unfavorable weather conditions, such as snow or heavy rainfall, could reduce construction activity and adversely affect demand for our products.

We operate in highly competitive markets, and we may not be able to maintain current price levels, or achieve price increases, for our products.

The markets for our products are very competitive, and our ability to effectively compete further varies by region. Principal methods of competition include quality and range of products, including introduction of new products, product availability, pricing, compatibility of systems and product design features. Prices for our products are affected by supply and demand in the markets for our products and available production capacity. Currently, there is excess wallboard production capacity industry wide in the United States and Canada. Several of our competitors have also recently added or are in the process of adding capacity and new competitors have entered certain markets, including imports from Mexico into certain regions in the South, which could lead to our inability to implement price increases or cause us to reduce pricing in an effort to maintain or grow our sales, and could negatively affect our ability to sell higher-priced products or lead to lower demand for our products. We implemented a price increase for wallboard effective in January 2018, however it is uncertain whether we will be able to maintain any increase in our selling prices or implement additional increases in 2018, as was the case in 2017. Any of the foregoing could adversely affect our business, financial condition, operating results and cash flows.

We are dependent on sales to our major customers, and the number of our customers with significant buying power is increasing.

For the year ended December 31, 2017, our two largest customers, The Home Depot and L&W, collectively accounted for approximately 39% of our sales, while our top ten customers collectively accounted for approximately 60% of our sales. We face strong competition for these and our other major customers. As is customary in our industry, we generally do not enter into long-term contracts with our customers, who may choose to reduce or delay purchases of our products at any time. If one or more of our major customers reduces or delays substantial orders, our business, financial condition, operating results and cash flows may be materially and adversely affected, particularly for the period in which the reduction or delay occurs and also possibly for subsequent periods.

Certain of our customers are also large companies with significant buying power. In addition, consolidation currently taking place in the gypsum specialty dealer channel will likely further enhance the ability of certain of our customers to seek more favorable terms, including pricing, for the products that they purchase from us. Accordingly, our ability to maintain or raise prices in the future may continue to be limited, including during periods of raw material and other cost increases, as was the case in 2017. If we are forced to reduce prices or to maintain prices during periods of increased costs, or if we lose customers because of pricing or other methods of competition, our business, financial condition, operating results and cash flows may be materially and adversely affected.

L&W is currently our largest customer in the gypsum specialty dealer channel, purchasing approximately 21% of our wallboard production in 2017, among other products we manufacture. Specialty dealers often have multiple suppliers for product categories. Following the sale of L&W in 2016, L&W diversified its supplier base, resulting in a reduction in our sales to L&W in 2017 compared to 2016. We expect this reduction to continue in 2018. In connection with the closing of the sale of L&W, we entered into a supply agreement that provides for L&W to purchase minimum volumes of our wallboard and certain other products over the near term, with volume minimums generally stepping down for those products over time. To address any loss of sales to L&W both during and after the term of the supply agreement, we have made efforts to grow our business with current customers and serve new customers. However, our efforts to replace any loss of sales to L&W may not continue to be successful, and we may experience market share loss or unfavorable pricing, in which case our net sales, operating results and cash flows may be materially and adversely impacted.

Increased costs, or decreased availability, of key raw materials, energy or transportation will increase our cost of products sold.

The cost and availability of raw materials, energy and transportation are critical to our operations. For example, we use substantial quantities of gypsum, synthetic gypsum, wastepaper, mineral fiber, steel, perlite and starch. The cost of certain of these items has been volatile, and availability has sometimes been limited. We obtain some of these materials from a limited number of suppliers or sole source suppliers, which increases the risk of unavailability. As we saw in 2017, we may not be able to pass increased raw material, energy or transportation costs on to our customers if the market or existing agreements with our customers do not allow us to raise the prices of our finished products. If price adjustments for our finished products significantly trail the increase in raw material, transportation or energy costs, or if we cannot effectively hedge against cost increases, our operating results and cash flows may be materially and adversely affected.

Approximately 43% of the gypsum used in our plants is synthetic gypsum. Nine of our Gypsum plants in operation use synthetic gypsum for all of their needs, while another four use it for some of their needs. The suppliers of synthetic gypsum are primarily power companies, and certain power companies have switched to using natural gas instead of coal for their electric generation needs. In addition, existing or future changes in environmental regulations may make it more difficult or costly for power companies to burn coal, which may result in a further shift away from coal-based sources of energy. In the event more power companies switch to using natural gas instead of coal, the availability of synthetic gypsum may continue to decrease. We could incur substantial costs in connection with any significant reduction in the availability of synthetic gypsum, including costs to convert our plants to use natural gypsum or increased costs to transport synthetic gypsum to our plants from farther away, which may materially and adversely affect our business, financial condition, operating results and cash flows.

During 2017, wastepaper pricing in the old corrugated containers (OCC) markets was one of the primary drivers of increased wallboard manufacturing cost. We buy various grades of wastepaper, and shortages occur periodically in one or more grades and may vary among geographic regions. As a result, we have experienced, and expect in the future to experience, volatility in wastepaper availability and its cost, affecting the mix of products manufactured at particular locations or the cost of producing them.

We use natural gas extensively in the production of our products in the United States, Canada and Mexico. The price of natural gas can fluctuate significantly because of weather, environmental or other regulatory changes, which can materially impact our results of operations for a particular period. In an attempt to reduce our price risk related to fluctuations in natural gas prices, we enter into hedging agreements using swaps for natural gas purchases in the United States and Canada. Because we hedge the majority of our exposures, we would not be able to participate, for the portion we hedged, in substantial or extended declines in natural gas prices. As a result, our costs would remain elevated in such an environment. During periods of rising natural gas prices on the other hand, our production costs will rise to a lesser extent because of our hedging activities.

Transportation costs are also a significant portion of our variable costs. Increases in the cost of fuel, or if we are required to transport raw materials or finished products over longer distances, as was the case in 2017 in order to meet demand resulting from the hurricane in Texas, could result in material increases in the cost of transportation that could adversely affect our operating profits.

Our facilities may experience unexpected operational difficulties or catastrophic events.

Our facilities may be forced to cease operations unexpectedly due to equipment failures or events beyond our control, such as hurricanes, fires, floods, earthquakes or other environmental catastrophes. Any downtime or facility damage may hinder our ability to meet customer demand, reduce our sales or impede our ability to transport our products in an efficient and cost-effective manner, and could require that we make significant capital expenditures. Several of our plants, and production lines within our plants, are dedicated to specific products. If any of those plants or lines is unable to operate for a prolonged period, it would reduce our ability to effectively compete in the markets for those products, which could materially and adversely affect our business, financial condition, operating results and cash flows.

We do not have majority control over UBBP, which involves risks not otherwise present when we operate our business through wholly-owned entities.

A substantial portion of our international operations are conducted through 50/50 joint ventures with Boral Limited, or Boral. These joint ventures are referred to as UBBP. UBBP involves risks not otherwise present when we operate our business through wholly-owned entities, including:

- Certain major decisions with respect to UBBP require the majority or unanimous approval of the joint ventures' boards or shareholders, which could result in a deadlock given the 50/50 ownership and equal board representation structure. Boral may have economic or other business interests or goals that are or become inconsistent with ours, and we may not be able to obtain approval of certain matters that would be in our or UBBP's best interests. In addition, we may be required to spend additional resources to resolve any dispute with Boral.
- A deadlock with respect to certain fundamental decisions may result in the triggering of a sale process of UBBP. In such a case, the terms of the sale may be less attractive than if we had held onto our investment.
- UBBP is operated in accordance with the terms of a Shareholders Agreement that limits our ability to transfer our interest in UBBP. As a result, we may be unable to sell our interest in UBBP when we would otherwise like.
- UBBP may not pay dividends if such payments are, among other things, restricted pursuant to the terms of the credit facilities maintained by UBBP, inconsistent with the then-applicable strategic plan, or illegal. Accordingly, we may not receive dividend payments from UBBP in the amounts that we currently anticipate or at all, which may adversely impact our ability to receive any economic benefit from UBBP.
- If we or Boral are subject to a change of control, or if certain other events of default under the Shareholders Agreement occur with respect to us or Boral, we or Boral, as applicable, may be required to sell our or Boral's, as applicable, entire interest in UBBP at fair market value, as determined in accordance with the Shareholders Agreement. In the event we are forced to sell our interest in UBBP, it may be under terms that are not favorable to us. In the event Boral is the party that triggers the event of default we will have the right to acquire Boral's interest in UBBP, but it may be on terms that we do not find favorable. In this circumstance, if we do not complete the acquisition due to lack of funding or otherwise, we would remain in the joint venture with Boral, but possibly under ownership that we do not find acceptable.
- In certain circumstances, a capital call may be issued to the shareholders of UBBP in order to obtain additional funding for the joint ventures' operations. If we do not provide capital and Boral does, Boral may receive additional shares in UBBP, thereby diluting our interest and diminishing our rights under the Shareholders Agreement. Further, although we intend for UBBP to be self-funding, we may nonetheless determine in the future that we need to provide additional capital in order for UBBP to continue operating.
- Boral may become insolvent, refuse to make additional capital contributions or fail to meet its obligations under the Shareholders Agreement or the two share sale and subscription agreements entered into with Boral, which may result in certain liabilities to us.
- In the event we exit UBBP, we may be restricted from competing in certain markets, many of which we anticipate to be high-growth markets, until the later of the third anniversary of our exit and ten years from the commencement of UBBP. In addition, in the event we exit UBBP, certain of our intellectual property will continue to be licensed to UBBP on a non-exclusive basis after our exit is completed.
- UBBP relies in part on new products and technology we develop. UBBP is contractually entitled to some, but not all, of our new products. If UBBP is unable to successfully implement new products to which it has a license, or if we are unable to agree on the terms for the contribution of new technology to UBBP, the joint ventures may not be able to effectively compete or grow their businesses.
- UBBP is required to protect our licensed trade secrets and confidential intellectual property in its territory, which includes countries where there is a high risk of intellectual property loss, and we also expend significant efforts to secure and enforce our intellectual property rights in UBBP's territory. If UBBP is not diligent with its protections or our efforts are insufficient and competitors acquire our trade secrets and confidential intellectual property, then there may be a material adverse impact on our business both inside and outside of UBBP's territory.

If any of these risks were to materialize, our business, financial condition, operating results and cash flows could be materially and adversely impacted.

Our international operations expose us to risks that would not otherwise be present in our U.S. operations.

Our international business operations in the countries within the territory of UBBP and in Canada and Mexico, including our ability to introduce new products into these markets, are important to our future operations, growth and prospects. Our foreign operations and our international expansion subject us to a number of risks, including:

- sensitivity to general economic conditions in each of the countries in which we or UBBP operate, including, in particular, the housing and construction-based markets;
- compliance with United States laws affecting operations outside of the United States, such as the Foreign Corrupt Practices Act or similar anti-bribery laws and regulations, or corruption in foreign countries;
- compliance with a variety of local laws and regulations, including environmental and safety laws and regulations
- changes in tax laws and the interpretation of those laws;
- imposition of more or new tariffs, quotas, trade barriers, and similar restrictions on our sales outside the United States, including cross-border intercompany sales;
- fluctuations in currency values and the impact on our consolidated results;
- changes in foreign currency exchange controls;
- discriminatory or conflicting fiscal policies;
- difficulties enforcing intellectual property and contractual rights, and securing information and infrastructure, in certain jurisdictions;
- greater risk of uncollectible accounts and longer collection cycles; and
- nationalization of properties by foreign governments.

Moreover, political and economic changes or volatility, geopolitical regional conflicts, terrorist activity, political unrest, civil strife, acts of war, epidemics, public corruption and other economic or political uncertainties could interrupt and negatively affect our business operations. All of these factors could result in increased costs or decreased revenues, and could materially and adversely affect our business, financial condition, operating results and cash flows.

Our success is dependent on our ability to innovate and protect our intellectual property and other proprietary rights.

We maintain a leadership position and price premium in part because of our innovation and introduction of new products. As a result, our success also depends, in part, upon securing and enforcing our intellectual property rights. We rely on a combination of contractual rights, patent, copyright, trademark and trade secret laws to establish and protect our intellectual property. Despite our efforts to safeguard and maintain our intellectual property, the steps we have taken may be limited in their effect. Existing trade secret, patent, trademark and copyright laws offer only limited protection, and it may be expensive and time consuming to assert these protections against competitors who infringe on our rights and our patents could be invalidated or circumvented. In addition, others may develop substantially equivalent or superseding proprietary technology, or competitors may offer similar competing products that do not infringe on our intellectual property rights, thereby substantially reducing the value of our proprietary rights. Moreover, the laws of some foreign countries in which our products are or may be manufactured or sold may not protect our products or intellectual property rights to the same extent as do the laws of the United States. This risk may be heightened in connection with our investments in UBBP because it results in the use of our intellectual property in additional foreign jurisdictions, some of which lack robust or accessible intellectual property protection enforcement mechanisms.

We intend to continue making investments in research and development to develop new and improved products and more efficient manufacturing methods in order to maintain our market leadership position. If we do not make these investments, or our investments are not successful, our revenues, operating results and market share may be materially and adversely affected.

Capital expenditures to maintain our market leadership position and expand our businesses may not achieve their intended results.

In order to standardize and automate production across our businesses, we are investing in capital improvement projects, including an anticipated $300 million investment in advanced manufacturing over four years, which we believe will materially improve our operating results. In addition, many of our facilities have been in operation for many years and require capital expenditures to maintain optimal efficiency. Future downturns in our industry or businesses may prevent us from having the funds necessary to make anticipated capital expenditures, and there may be delays or cost increases in completing these projects. Further, our return on investment from our advanced manufacturing investments or other capital expenditures may not be sufficient to recover the expenses associated with these initiatives and we may not achieve the expected $100 million in incremental EBITDA by the end of 2020.

A disruption in our information technology systems due to a catastrophic event or security breach could interrupt or damage our operations.

In the conduct of our business we collect, use, transmit and store data on information systems, which are vulnerable to an increasing threat of continually evolving cyber security risks. Any security breach or compromise of our information systems could significantly impact our operations, damage our reputation, cause the disclosure of confidential customer, employee, supplier or company information, including our intellectual property, and result in significant losses, litigation, fines and costs. The security measures we have implemented to protect against unauthorized access to our information systems and data may not be sufficient to prevent breaches. The regulatory environment related to information security, data collection and privacy is evolving, with new and constantly changing requirements applicable to our business, and compliance with those requirements could result in additional costs.

We also compete through our use and improvement of information technology. In order to remain competitive, we need to provide customers with timely, accurate, easy-to-access information about product availability, orders and delivery status. While we have provided manual processes for short-term failures and disaster recovery capability, a prolonged disruption of systems or other failure to meet customers' expectations regarding the capabilities and reliability of our systems may materially and adversely affect our operating results.

Compliance with environmental and safety laws and regulations or product safety concerns could cause us to make modifications to how we manufacture our products, negatively affect our results and also require that we make significant capital investments or otherwise increase our costs.

We operate 49 plants and 12 mines and quarries in North America. As a result, we are subject to numerous federal, state, local and foreign laws and regulations governing the protection of the environment and occupational health and safety, including laws regulating air emissions, wastewater discharges, the management and disposal of hazardous materials and wastes, and the health and safety of our employees. We are also required to obtain permits from governmental authorities for certain operations. If we were to fail to comply with these laws, regulations or permits, we could incur fines, penalties or other sanctions and be subject to private litigation. In addition, in the past we have been, and in the future could be, held responsible for costs and damages arising from any contamination at our past or present facilities or at third-party waste disposal sites. Further, new environmental and safety laws and regulations may cause us to incur material expenses relating to compliance, impact the availability and cost of raw materials and have a material and adverse impact on our operations and results.

While the U.S. EPA has begun the process to repeal the Clean Power Plan, under which the U.S. EPA would have set state-specific goals for greenhouse gas, or GHG, emissions reductions, certain states, provinces and foreign countries are considering measures to reduce emission of GHGs, including carbon dioxide and methane, and many have already adopted GHG regulation or legislation. Regulations requiring reductions in GHG emissions could affect future expansions or modifications at our plants, mines and quarries and may require that we incur significant costs and additional capital investment to satisfy permitting requirements. In addition, enactment of new climate change legislation, regulatory initiatives or treaties impacting the locations where we conduct business could have a material adverse effect on our operations. For example, legislation establishing a "carbon tax" on energy use or a "cap and trade," could materially and adversely increase the cost of energy used in our manufacturing processes.

Legal challenges to the U.S. EPA's final rule regarding the use of synthetic gypsum, or subsequent state legislation, could also result in laws or regulations that adversely affect the classification, use, storage and disposal of synthetic gypsum. Such laws or regulations may require significant capital investments to convert those plants and lines that use synthetic gypsum to natural gypsum.

The building materials industry has been subject to claims relating to raw materials, as well as claims for incidents of catastrophic loss, such as building fires. We have rigorous product safety and quality standards and a strong commitment to product safety and quality. However, if our products do not meet applicable safety standards or customers' expectations regarding safety, we could experience decreased sales, increased costs and/or be exposed to legal and reputational risks. Events that give rise to actual, potential or perceived product safety concerns could expose us to government enforcement action and/or private litigation. Reputational damage caused by real or perceived product safety concerns could negatively affect our business and results of operations, and product liability insurance coverage may not be available or adequate in all circumstances to cover claims that may arise in the future.

Legal and governmental proceedings, including those involving antitrust, tax, environmental, intellectual property or other matters, may result in significant costs.

We are party to litigation and governmental proceedings, including, but not limited to, a federal grand jury investigation of the gypsum drywall industry. We could become subject to legal claims in the future, some of which could become material. We may also initiate legal proceedings in order to defend and enforce our proprietary rights. The outcome of legal and governmental proceedings may differ from our expectations because the outcomes of litigation and governmental proceedings are often difficult to reliably predict. Various developments can lead to changes in management's estimates of liabilities. Those developments include judicial rulings or judgments, settlements, or regulatory developments or changes in applicable law. A future adverse ruling, settlement or unfavorable development could result in charges that could have a material adverse effect on our results of operations in any particular period, or we could be unsuccessful in protecting our intellectual property. For a more detailed discussion of certain of the legal proceedings in which we are involved, see Item 3, Legal Proceedings, below.

A small number of our stockholders could significantly influence our business, affairs and stock price.

Based on filings made with the SEC, we believe that, as of January 31, 2018, two stockholders collectively controlled approximately 41% of our common stock. Accordingly, a small number of our stockholders could affect matters requiring approval by stockholders, including the election of directors and the approval of potential business combination transactions. One or more of these stockholders may have interests that differ from other stockholders and may vote on such matters in a way that is adverse to the interests of those other stockholders. In addition, if one or more of these stockholders engage in sales of our common stock, our share price may decline.

We may pursue acquisitions, joint ventures and other transactions to complement or expand our businesses, which even if completed, may involve a number of risks.

We may pursue additional opportunities to acquire businesses or technologies and to form joint ventures that we believe could complement, enhance or expand our current businesses or product lines or that might otherwise offer us growth opportunities. Such pursuits may be costly and unsuccessful and cause diversion of management's attention from day-to-day operations. Even if completed, potential issues associated with these activities could include, among other things, difficulty with integrating business operations, infrastructure and personnel, and our ability to realize the full extent of the expected returns, benefits, cost savings or synergies as a result of a transaction within the anticipated time frame, or at all.

Significant changes in factors and assumptions used to measure our defined benefit plan obligations, actual investment returns on pension assets and other factors could negatively impact our operating results and cash flows.

The recognition of costs and liabilities associated with the pension and postretirement plans is affected by assumptions made by management and used by actuaries engaged by us to calculate the benefit obligations and the expenses recognized for these plans. The inputs used in developing the required estimates are calculated using a number of assumptions, which represent management's best estimate of the future. The assumptions that have the most significant impact on costs and liabilities are the discount rate, the estimated long-term return on plan assets for the funded plans, retirement rates, and mortality rates. These assumptions are generally updated annually.

As of December 31, 2017, our pension plans were underfunded by $193 million and our unfunded postretirement plan liabilities were approximately $150 million. In recent years, declining interest rates have negatively impacted the funded status of our pension and postretirement plans. Funding requirements for our pension plans may become more significant. If our cash flows and capital resources are insufficient to fund our obligations under these pension and postretirement plans, we could be forced to reduce or delay investments and capital expenditures, seek additional capital, or incur indebtedness.

We may not be able to fully execute our stock repurchase program and may not otherwise return capital to our stockholders in the foreseeable future.

In 2017 we announced a stock repurchase program in which we may repurchase up to $250 million of our common stock. On February 1, 2018 we announced an increase in this stock repurchase program, bringing the total size of the program to $500 million. There is no guarantee as to the exact number of shares or value that will be repurchased under the stock repurchase program and we may discontinue purchases at any time. Whether we make any further repurchases will depend on many factors, including but not limited to our business and financial performance, the business and market conditions at the time, including the price of our shares, and other factors that management considers relevant. Additionally, we expect to fund repurchases under our stock repurchase program through cash on hand, which may impact our ability to pursue potential strategic opportunities. Although our stock repurchase program is intended to enhance long-term stockholder value, short-term stock price fluctuations could reduce the program's effectiveness and there can be no assurance that any stock repurchases will enhance stockholder value.

Our credit agreement limits our ability to pay a dividend or repurchase our stock unless specified borrowing availability and fixed charge coverage ratio tests are met, and it prohibits payment of a dividend or repurchase of our stock if a default exists under the agreement. Accordingly, we may be required to cease repurchasing stock for periods of time in order to maintain compliance with our credit agreement terms. In addition, we have not paid a dividend on our common stock since the first quarter of 2001, and there can be no assurance that we will do so in the foreseeable future. If we do not pay dividends or continue to execute on our stock repurchase program, investors will have to rely on the possibility of stock appreciation and sell their shares to realize a return on their investment.

If we experience an "ownership change" within the meaning of the Internal Revenue Code, utilization of our net operating loss, or NOL, carryforwards would be subject to an annual limitation.

Our NOL carryforwards are a substantial asset for us. The Internal Revenue Code imposes limitations on a corporation's ability to utilize NOLs if it experiences an "ownership change," which may result from transactions increasing the ownership of certain stockholders in the stock of a corporation by more than 50 percentage points over a rolling three-year period. If we were to experience an ownership change, utilization of our NOLs would be subject to an annual limitation that may be carried over to later years within the allowed NOL carryforward period. Over the entire carryforward period, we may not be able to use all our NOLs due to the aforementioned annual limitation. If an ownership change had occurred as of December 31, 2017, our annual U.S. federal NOL utilization would have been limited to approximately $107 million per year.

Although we have our stockholder rights plan and transfer restrictions in our Restated Certificate of Incorporation, which are intended to reduce the likelihood of an "ownership change" that could adversely affect our NOL untilization, we cannot provide assurance that these restrictions on transferability will prevent all transfers that could result in such an "ownership change." There also can be no assurance that the transfer restrictions in our Restated Certificate of Incorporation will be enforceable against all of our stockholders absent a court determination confirming such enforceability. The transfer restrictions may be subject to challenge on legal or equitable grounds.

We may not be able to pursue certain strategic opportunities unless we increase our indebtedness and leverage ratio. Our level of indebtedness also requires us to dedicate a portion of our cash flow to debt payments and limits our ability to engage in certain business activities.

As of December 31, 2017, we had $1.1 billion of outstanding debt, consisting of senior notes and industrial revenue bonds, which is within our target leverage ratio range of 1.5x to 2.0x adjusted debt/EBITDA. We may not be able to pursue certain strategic opportunities that may otherwise be available to us without incurring additional indebtedness and thereby increasing our leverage ratio outside of our target range.

Our current debt service obligations also require us to dedicate a portion of our cash flow from operating activities to payments on our indebtedness, which reduces the availability to use our cash flow for other purposes, including capital expenditures, research and development efforts, potential acquisitions or investments. If we are unable to fund our business activities, meet our obligations under our debt agreements or are contractually restricted from pursuing activities or transactions that we believe are in our long-term best interests, our business, financial condition, results of operations and cash flows could be adversely affected. Our indebtedness also may increase our vulnerability to economic and industry downturns and changing market conditions and place us at a competitive disadvantage relative to competitors that have less debt. We are required to post letters of credit or cash as collateral primarily in connection with our hedging transactions, insurance programs and bonding activities. The amounts of collateral we are required to post may vary based on our financial position and credit ratings. Use of letters of credit as collateral reduces our borrowing availability under our domestic revolving credit agreement and, therefore, like the use of cash as collateral, reduces our overall liquidity and our ability to fund other business activities.

The terms of our debt agreements, including our credit facility, may also limit our ability to engage in certain activities and transactions that may be in our long-term interest. Among other things, unless we obtain approval, the covenants contained in our debt agreements may restrict or limit our ability to incur additional indebtedness, pay dividends or repurchase our common stock, make guarantees, sell our assets or make other fundamental changes, engage in mergers, acquisitions and dispositions, make investments, change our business purpose, or enter into certain transactions with affiliates. We may also be required to maintain specified financial ratios, which may require that we take action to reduce our debt or to act in a manner contrary to our current business plans. Our ability to comply with these covenants and financial ratios may be affected by events beyond our control, and we may not be able to continue to meet those covenants and ratios. Breach of any of the covenants or ratios contained in the agreements governing our debt, or our inability to pay interest on, or principal of, our outstanding debt as it becomes due, could result in an event of default, in which case, our lenders could declare all amounts outstanding to be immediately due and payable. If this occurs, we may not be able to refinance the accelerated debt on favorable terms, or at all, or repay the accelerated debt, and our liquidity may be adversely impacted.

Item 1B. UNRESOLVED STAFF COMMENTS

None

NON-CONFIDENTIAL

Item 2. PROPERTIES

Our leased corporate headquarters is located in Chicago, Illinois. We operate plants, mines, quarries, and other facilities throughout North America. The locations of our production properties in operation for our consolidated segments as of December 31, 2017 are as follows (plants are owned unless otherwise indicated):

	U.S. Wallboard and Surfaces		U.S. Performance Materials			U.S. Ceilings		
	Gypsum wallboard and other gypsum products	Surface preparation and joint treatment products	Under-layment	Building Envelope	Structural	Ceiling Tile	Ceiling Grid	Specialty Ceilings
Alabaster (Tawas City), Michigan	x							
Aliquippa, Pennsylvania*	x							
Atlanta, Georgia***								x
Auburn, Washington		x						
Baltimore, Maryland*	x	x	x					
Bridgeport, Alabama*	x	x						
Cartersville, Georgia							x	
Chamblee, Georgia		x						
Cloquet, Minnesota						x		
Commerce, California***								x
Dallas, Texas		x						
Delavan, Wisconsin					x			
Detroit (River Rouge), Michigan	x		x					
East Chicago, Indiana*	x	x						
Fort Dodge, Iowa	x	x	x					
Galena Park, Texas*	x	x						
Greenville, Mississippi						x		
Gypsum, Ohio*		x	x	x				
Jacksonville, Florida*	x	x		x				
New Orleans, Louisiana*			x					
Norfolk, Virginia*	x							
North Kansas City, Missouri	x							
Oakfield, New York	x							
Otsego, Michigan	x							
Phoenix (Glendale), Arizona***		x						
Plaster City, California	x			x				
Port Reading, New Jersey		x						
Rainier, Oregon	x							
Shoals, Indiana**	x							
Sigurd, Utah	x	x						
Southard, Oklahoma	x		x					
Sperry, Iowa**	x							
Stockton, California							x	
Sweetwater, Texas	x		x	x				
Torrance, California		x	x					
Walworth, Wisconsin						x		
Washingtonville, Pennsylvania*	x							
Westlake, Ohio							x	x

Weirton, West Virginia***	x							

* Plants supplied fully by synthetic gypsum
** Plants supplied partially by synthetic gypsum
*** Leased

	Canada			
	Gypsum wallboard and other gypsum products	Surface preparation and joint treatment products	Ceiling Grid	Specialty Ceilings
Calgary, Alberta, Canada***		x		
Hagersville, Ontario, Canada**	x	x		
Montreal, Quebec, Canada**	x	x		
Oakville, Ontario, Canada			x	x
Surrey, British Columbia, Canada***		x		

** Plants supplied partially by synthetic gypsum
*** Leased

OTHER

We operate in facilities located in Monterrey, Nuevo Leon, Mexico; Puebla, Puebla, Mexico; Saltillo, Coahuila, Mexico; San Luis Potosi, San Luis Potosi, Mexico; and Tecoman, Colima, Mexico for our gypsum wallboard and other gypsum products that are not included in the above reportable segments.

We produce paper at facilities in Galena Park, Texas; North Kansas City, Missouri; Oakfield, New York; and Otsego, Michigan. We operate mines or quarries in Alabaster, Michigan; Fort Dodge, Iowa; Hagersville, Ontario, Canada; Monterrey, Nuevo Leon, Mexico; Plaster City, California; San Luis Potosi, San Luis Potosi, Mexico; Shoals, Indiana; Sigurd, Utah; Southard, Oklahoma; Sperry, Iowa; Spruce Pine, North Carolina; Sweetwater, Texas; and Tecoman, Colima, Mexico. We operate a mica-processing plant at Spruce Pine, North Carolina. We manufacture mineral fiber products at Red Wing, Minnesota, and Walworth, Wisconsin, and metal specialty systems at Oakville, Ontario, Canada.

Gypsum's Sheetrock® brand gypsum wallboard plants operated at approximately 66% of capacity during 2017.

Item 3. LEGAL PROCEEDINGS

See Part II, Item 8, Financial Statements and Supplementary Data - Notes to Consolidated Financial Statements, Note 18, Litigation, for information on legal proceedings.

Item 4. MINE SAFETY DISCLOSURES

The information concerning mine safety violations or other regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K promulgated by the SEC is included in Exhibit 95 to this report.

PART II

Item 5. MARKET FOR THE REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Our common stock trades on the New York Stock Exchange, or NYSE, and the Chicago Stock Exchange under the symbol USG. The NYSE is the principal market for our common stock. As of January 31, 2018, there were 1,742 record holders of our common stock. We currently do not pay dividends on our common stock. Our credit facility limits our ability to pay cash dividends on or repurchase our common stock unless specified borrowing availability and fixed charge ratios are met. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations, Liquidity, for more information regarding these restrictions.

The following table sets forth for the indicated periods the high and low intra-day sales prices per share for our common stock on the NYSE in 2017 and 2016.

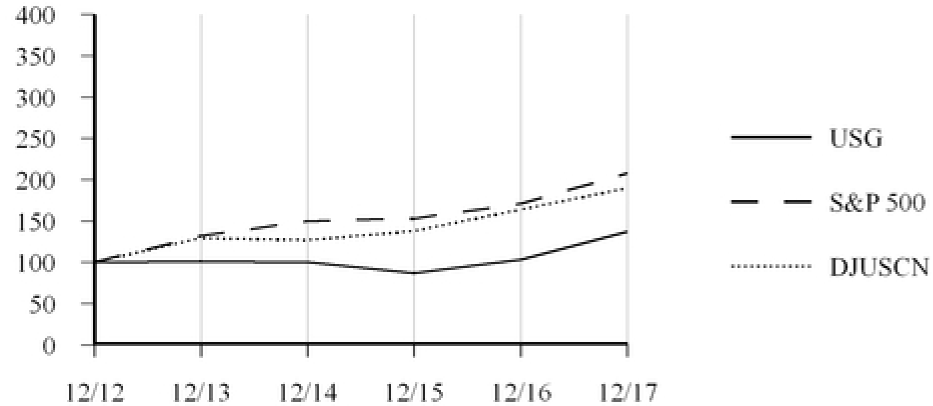
	2017		2016	
	High	Low	High	Low
First quarter	$ 34.67	$ 28.14	$ 24.99	$ 15.85
Second quarter	32.97	27.89	29.98	24.30
Third quarter	32.96	25.60	30.84	25.31
Fourth quarter	38.91	31.70	32.26	23.71

See Part III, Item 12, Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters, for information regarding common stock authorized for issuance under equity compensation plans.

Pursuant to our Deferred Compensation Program for Non-Employee Directors, four of our non-employee directors deferred the $120,000 annual grant and one of our non-employee directors deferred a portion of the quarterly retainer payment that those non-employee directors were entitled to receive on December 31, 2017 under our Non-Employee Director Compensation Program into a total of 12,963 deferred stock units. These units will increase or decrease in value in direct proportion to the market value of our common stock and will be paid in shares of common stock following termination of service as a director. The issuance of these deferred stock units was effected through a private placement under Section 4(a)(2) of the Securities Act and was exempt from registration under Section 5 of the Securities Act.

PERFORMANCE GRAPH

The following graph and table compare the cumulative total stockholder return on our common stock with the Standard and Poor's 500 Index, or S&P 500, and the Dow Jones U.S. Construction and Materials Index, or DJUSCN, in each case assuming an initial investment of $100 and full dividend reinvestment, for the five-year period ended December 31, 2017.



	Value of Investment as of December 31,					
	2012	2013	2014	2015	2016	2017
USG	$ 100	$ 101	$ 100	$ 87	$ 103	$ 137
S&P 500	100	132	150	153	171	208
DJUSCN	100	129	127	138	164	190

All amounts are rounded to the nearest dollar.

On February 1, 2017, we announced that our Board of Directors approved a stock repurchase program of $250 million, and on February 1, 2018 we announced an increase in this stock repurchase program, bringing the total size of the program to $500 million. Under the program, we may repurchase shares from time to time in open market transactions or in privately-negotiated transactions in accordance with applicable securities laws, including under plans complying with Rule 10b5-1 under the Exchange Act. We may discontinue the program at any time, and the program has no set expiration date. The timing and amount of any repurchase of shares is determined by our management, based on its evaluation of market conditions, cash on hand, applicable legal requirements and other factors. The following table provides information about purchases of our common stock we made during the three months ended December 31, 2017:

Issuer Purchases of Equity Securities

Period	**Total number of shares purchased**	**Average price paid per share**	**Total number of shares purchased as part of publicly announced plans or programs**	**Approximate dollar value of shares that may yet be purchased under the plans or programs** *(millions)*
October 1, 2017 to October 31, 2017	364,201	$ 32.83	364,201	$ 85
November 1, 2017 to November 30, 2017	356,375	$ 34.77	356,375	$ 72
December 1, 2017 to December 31, 2017 (a)	161,275	$ 37.47	161,275	$ 66
Total	881,851		881,851	

(a) Approximate dollar value of shares that may yet be purchased under the plans or programs as of December 31, 2017 does not include the additional $250 million approved by our Board of Directors in 2018.

Item 6. SELECTED FINANCIAL DATA

(millions, except per-share and employee data)	Years Ended December 31,				
	2017	2016	2015 (a)	2014 (a)	2013 (a)
Statement of Income Data:					
Net sales	$ 3,204	$ 3,017	$ 2,913	$ 2,904	$ 2,792
Cost of products sold	2,539	2,312	2,263	2,279	2,232
Gross profit	665	705	650	625	560
Selling and administrative expenses	298	304	302	323	302
Litigation settlement charge (b)	—	—	—	48	—
Long-lived asset impairment charges (c)	—	10	—	90	—
Shipping operations (d)	—	(3)	(7)	15	—
Restructuring charges	—	—	—	—	4
Operating profit	367	394	355	149	254
Income (loss) from equity method investments	59	49	48	33	(1)
Interest expense, net	(65)	(141)	(161)	(178)	(200)
Income and gain from sale of equity method investment to related party (e)	—	—	13	2	2
Gain on deconsolidation of subsidiaries and consolidated joint ventures (f)	—	—	—	27	—
Loss on extinguishment of debt	(22)	(37)	(19)	—	—
Other (expense) income, net	(4)	9	—	—	—
Income from continuing operations before income taxes	335	274	236	33	55
Income tax (expense) benefit (g)	(238)	(63)	740	(7)	(11)
Income from continuing operations	97	211	976	26	44
(Loss) income from discontinued operations, net of tax	(9)	20	15	12	2
Gain on sale of discontinued operations, net of tax (a)	—	279	—	—	—
Net income	88	510	991	38	46
Less: Net income (loss) attributable to noncontrolling interest	—	—	—	1	(1)
Net income attributable to USG	$ 88	$ 510	$ 991	$ 37	$ 47
Income from continuing operations per average common share:					
Basic	$ 0.67	$ 1.45	$ 6.70	$ 0.18	$ 0.40
Diluted	0.66	1.44	6.62	0.17	0.39
Balance Sheet Data (as of the end of the year)**:**					
Working capital	$ 576	$ 527	$ 408	$ 546	$ 1,080
Current ratio	2.39	2.25	1.41	1.97	2.90
Cash and cash equivalents (a)	394	427	442	231	815
Property, plant and equipment, net (a)	1,762	1,707	1,771	1,891	2,088
Total assets	3,851	3,869	4,736	3,936	4,051
Long-term debt (h)	1,078	1,083	1,675	2,191	2,275
Total stockholders' equity	1,845	1,886	1,436	408	662

(a) Results have been adjusted from the originally reported amounts to reflect L&W, which was sold on October 31, 2016, as a discontinued operation. We recorded a gain of $279 million on the sale of the business. See Note 3 to our consolidated financial statements in Part II, Item 8 of this report.
(b) Reflects a charge related to the settlement of the U.S. wallboard pricing class action lawsuits.
(c) Reflects long–lived asset impairment charges on mining operations in 2016. See Note 12 to our consolidated financial statements in Part II, Item 8 of this report. The amount in 2014 reflects impairment charges on manufacturing facilities, capitalized costs for the construction of future facilities and ocean vessels.
(d) Item relates to our shipping operations. See Note 13 to our consolidated financial statements in Part II, Item 8 of this report.
(e) Reflects the gain recorded on the sale of our equity method investment in our Knauf-USG joint venture to our 50/50 joint venture partner in 2015 and our share of the net income from the equity method investment for all periods presented. See Note 4 to our consolidated financial statements in Part II, Item 8 of this report.
(f) Reflects the gain recorded on the deconsolidation and contribution to UBBP of our wholly-owned subsidiaries in Singapore, Malaysia, New Zealand, and Australia and our consolidated joint ventures in Oman.
(g) Income tax expense for 2017 includes $145 million of expense related to the Tax Cuts and Jobs Act, or the 2017 Tax Act. The 2015 benefit includes the reversal of

a tax valuation allowance of $731 million. See Note 15 to our consolidated financial statements in Part II, Item 8 of this report.

(h) Excludes currently maturing portion of long-term debt.

Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

OVERVIEW

USG, through our subsidiaries and joint ventures, is a leading manufacturer of building materials and innovative solutions. We produce a wide range of products under recognized brand names including Sheetrock®, Durock®, Fiberock®, and Securock® serving the new residential, new nonresidential, and residential and nonresidential repair and remodel construction markets as well as products used in certain industrial processes, enabling our customers to build the outstanding spaces where people live, work and play.

KEY STRATEGIES

In 2017, we outlined our strategy which includes the following four pillars:

- Profitably grow our core portfolio,
- Innovate to address industry challenges,
- Align and enable our organization, and
- Maintain disciplined capital allocation.

In addition, in the fourth quarter of 2017 we realigned our organizational structure to reflect three divisions, in addition to UBBP: Gypsum, Performance Materials and Ceilings. As a result of our realigned operating structure, we changed the composition of our reportable segments effective for the quarter ended December 31, 2017 to align with how we manage our businesses, review operating performance and allocate resources considering the discrete information available for the geographies within those divisions. We now have five reportable segments: U.S. Wallboard and Surfaces, U.S. Performance Materials, U.S. Ceilings, Canada, and UBBP.

MARKET CONDITIONS AND OUTLOOK

Our businesses are cyclical in nature and sensitive to changes in general economic conditions, including, in particular, conditions in the housing and construction-based markets in North America. Our business in the markets of Asia, Australasia, and the Middle East also significantly exposes us to the economic conditions in those areas. However, the UBBP joint ventures have helped diversify USG's overall exposure to changes in the North American economic conditions. The markets we serve can be broadly categorized as new residential construction, new nonresidential construction and repair and remodel activity, which includes both residential and nonresidential construction.

The following table summarizes the current market conditions and outlook for our primary end markets in North America.

End Market	Lead time	Metric	Source	Market Condition/Outlook
New Residential	Installation of gypsum products[a] into a single family home typically follows a housing start by 90-120 days	Housing starts (seasonally adjusted)	U.S. Census Bureau	2017 - 1.202 million 2016 - 1.174 million
			Industry forecast (Blue Chip Economic Indicators)	2018 - 1.22 million to 1.35 million [b]
			USG forecast	2018 estimated - 1.25 million [c]
New Nonresidential	Installation of gypsum[a] and ceilings products typically follows signing of construction contracts by about 12 to 18 months	Change in floor space for which contracts are signed	Dodge Data & Analytics	2017 from 2016 - 2% increase
			Industry forecast (Dodge Data & Analytics) [d]	2018 from 2017 - 2% increase
			USG forecast	2018 estimated to increase by low to mid single digits
Repair and Remodel [e]	Remodels typically begin within two years from purchase	Sales of existing homes (seasonally adjusted)	National Association of Realtors	2017 - 5.51 million 2016 - 5.45 million
		Overall repair and remodel spending for gypsum products	USG forecast	2018 spending estimated to increase by low to mid single digits

(a) Gypsum products include products manufactured and marketed by our U.S. Wallboard and Surfaces segment and Fiberock® brand gypsum fiber panels manufactured and marketed by our U.S. Performance Materials segment.

(b) Forecast based on the average of the bottom ten and top ten forecasts included in the report, respectively.

(c) USG estimate is based on the seasonally adjusted annual rate of housing starts.

(d) Dodge Data & Analytics' forecast includes several building types which do not generate significant demand for our products.

(e) The repair and remodel market includes renovation of both residential and nonresidential buildings.

As indicated in the table above, we expect modest improvement in the U.S. construction markets over the next twelve months. However, while sales of products in our U.S. Wallboard and Surfaces and U.S. Performance Materials segments have generally improved with the modest recovery in residential housing, the segments continue to be adversely affected by the low level of residential and other construction activity compared to historical averages. The results of our U.S. Ceilings segment, which primarily serves the nonresidential market, have shown some improvement over the longer term. However, the results also continue to be adversely affected by the low levels of new nonresidential construction activity as compared to historical averages. Our U.S. Ceilings segment is also adversely affected by changing construction preferences, such as the shift to open plenum and specialty ceilings. We acquired Ceilings Plus in 2017 to help address this trend.

We also expect modest improvement in the construction industry in Canada. Other international markets, including those that are within the UBBP territory, provide opportunities for our operations to serve the demand in these regions. Australia is expected to experience a decline in housing starts; however, these housing starts are expected to remain above the long-term average. The construction industry in South Korea has slowed, driven by increased government regulations. The construction industry in Thailand is showing slight improvement due to growth in the government infrastructure market. Several emerging markets which are within the UBBP territory are forecasted to experience growth. The international markets within the UBBP territory are beginning to adopt Western building practices, which provide more opportunities. We anticipate that the performance of the UBBP joint ventures will partially offset some of the potential cyclicality in our North American businesses.

The following table summarizes the industry information on U.S. wallboard shipments and capacity.

U.S. Industry Information	Metric	Source	Market Condition/Outlook
U.S. industry shipments of gypsum board [(a)]	Billion of square feet (bsf)	Gypsum Association	Twelve months 2017 - 25.7 bsf Twelve months 2016 - 25.0 bsf
		USG forecast	2018 shipments expected to increase by low single digits
U.S. wallboard capacity	Billion of square feet (bsf)	USG estimate	1/1/2018 - 34.0 bsf
U.S. industry capacity utilization rate	Annualized shipments as a percentage of industry capacity	USG estimate	Twelve months 2017 - 76% Twelve months 2016 - 75%

(a) The gypsum board market as determined by the Gypsum Association includes gypsum wallboard, other gypsum-related paneling products, such as glass mat sheathing and gypsum fiber boards, and imports.

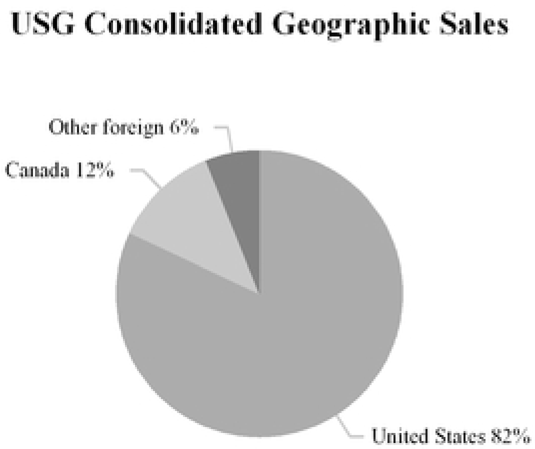
We shipped 6.12 billion square feet of USG Sheetrock® brand gypsum wallboard in 2017, a 6% increase from 5.76 billion square feet in 2016. Our share of the gypsum board market in the United States, which includes, for comparability, shipments of Gypsum products of USG Sheetrock® brand gypsum wallboard and Securock® brand glass mat sheathing and Performance Materials product of Fiberock® brand gypsum fiber panels, increased to 25.4% in 2017 from 24.6% in 2016.

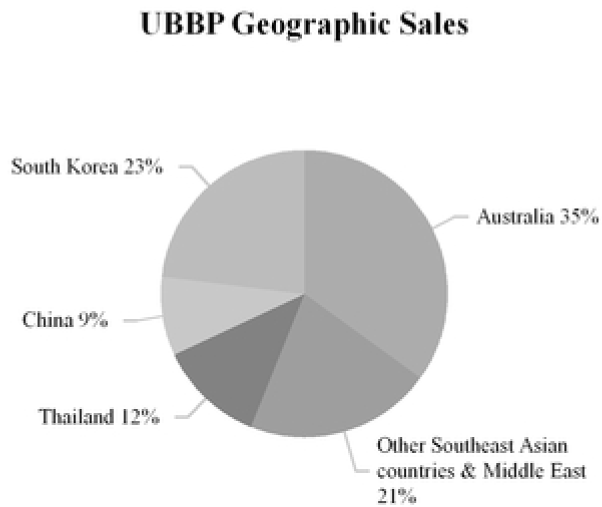
There is excess wallboard production capacity industry-wide in the United States. Based on current industry trends and forecasts, demand for gypsum wallboard is expected to increase in 2018, but the magnitude of any increase will depend on the levels of housing starts and repair and remodel activity, among other factors. We project that the industry capacity utilization rate will increase modestly in 2018 compared to 2017.

We could experience pressure on gypsum wallboard selling prices and our gross margins at these levels of capacity utilization. Our U.S. Wallboard and Surfaces segment implemented a price increase for wallboard in January 2018. However, it is uncertain that we will be able to maintain the increase or obtain additional price increases in our selling prices. If we are unable to maintain or implement additional price increases, our net sales, operating results and cash flows may be materially and adversely impacted.

GEOGRAPHIC INFORMATION

In 2017, we recorded $3.2 billion of net sales in our consolidated statement of income, and net sales for UBBP, which are not included in our consolidated statements of income, were $1.2 billion. The following charts reflect the geographic breakdown of net sales for the year ended December 31, 2017.





CURRENCY IMPACT

The impact of currency on consolidated and segment results for 2017 and 2016 has been derived by translating current period results at the year-to-date average foreign currency rates for the period ending December 31, 2016 and December 31, 2015, respectively.

PRESENTATION OF FINANCIALS

In connection with the preparation of this report, certain adjustments related to our implementation of the Tax Cuts and Jobs Act, or the 2017 Tax Act, were recorded in our financial statements subsequent to our earnings release furnished on Form 8-K on February 1, 2018. The non-cash tax charge related to the revaluation and change in realizability of our deferred tax assets was increased from $138 million to $145 million.

CONSOLIDATED RESULTS OF OPERATIONS

				Favorable (Unfavorable)			
				2017 vs. 2016		2016 vs. 2015	
(millions, except per-share data)	2017	2016	2015	$	%	$	%
Net sales	$ 3,204	$ 3,017	$ 2,913	$ 187	6 %	$ 104	4 %
Cost of products sold	2,539	2,312	2,263	(227)	(10)%	(49)	(2)%
Gross profit	665	705	650	(40)	(6)%	55	8 %
Selling and administrative expenses	298	304	302	6	2 %	(2)	(1)%
Long-lived asset impairment charges	—	10	—	10	100 %	(10)	*
Recovery of receivable	—	(3)	(6)	(3)	(100)%	(3)	(50)%
Gain on disposal of shipping operations, net	—	—	(1)	—	— %	(1)	(100)%
Operating profit	367	394	355	(27)	(7)%	39	11 %
Income from equity method investments	59	49	48	10	20 %	1	2 %
Interest expense	(69)	(145)	(163)	76	52 %	18	11 %
Interest income	4	4	2	—	— %	2	100 %
Income and gain on sale from equity method investment to related party	—	—	13	—	— %	(13)	(100)%
Loss on extinguishment of debt	(22)	(37)	(19)	15	41 %	(18)	(95)%
Other (expense) income, net	(4)	9	—	(13)	*	9	*
Income from continuing operations before income taxes	335	274	236	61	22 %	38	16 %
Income tax (expense) benefit	(238)	(63)	740	(175)	*	(803)	*
Income from continuing operations	97	211	976	(114)	(54)%	(765)	(78)%
(Loss) income from discontinued operations, net of tax	(9)	20	15	(29)	*	5	33 %
Gain on sale of discontinued operations, net of tax	—	279	—	(279)	*	279	*
Net income	$ 88	$ 510	$ 991	$ (422)	(83)%	$ (481)	(49)%
Diluted earnings per share - net income	$ 0.60	$ 3.46	$ 6.73	$ (2.86)		$ (3.27)	

* not meaningful

NET SALES

Consolidated net sales in 2017 increased $187 million, or 6%, compared with 2016, driven by higher net sales in all four consolidated segments. The increase reflected higher volumes of USG Sheetrock® brand gypsum wallboard, USG Sheetrock® brand joint compound, USG Durock® brand cement board, USG Durock™ brand glass-mat tile backerboard, Fiberock® brand tile backerboard and underlayment and ceiling tile offset by lower volumes of ceiling grid and lower prices for gypsum wallboard and joint compound. On a consolidated basis, foreign currency exchange rate fluctuations positively impacted our net sales by $6 million.

Consolidated net sales in 2016 increased $104 million, or 4%, compared with 2015 driven by higher net sales in all four consolidated segments. The increased sales were driven by higher volumes of USG Sheetrock® brand gypsum wallboard, USG Sheetrock® brand joint compound, USG Durock® brand cement board, Levelrock® brand gypsum underlayment, structural panels and ceiling grid offset by lower prices of gypsum wallboard, joint compound and ceiling grid. On a consolidated basis, foreign currency exchange rate fluctuations negatively impacted our net sales by $34 million.

GROSS PROFIT

Gross profit was $665 million in 2017 compared to $705 million in 2016. As a percentage of net sales, gross profit was 20.8% in 2017 and 23.4% in 2016. The decrease of $40 million in gross profit was driven by increased costs of manufacturing due primarily to higher costs of raw materials, notably waste paper and steel, a $3 million less favorable adjustment to our asset retirement obligation due to changes in cash flow estimates and an additional $3 million of pension settlement charges. Also driving the decrease was the absence of $7 million for items recorded in 2016, which included a gain of $11 million for the sale of surplus property offset by a $2 million adjustment to customer reserves and $2 million of severance and other charges related to the decision to indefinitely idle our mining operations in Little Narrows, Nova Scotia, Canada.

Gross profit increased $55 million from $650 million in 2015 to $705 in 2016. As a percentage of net sales, gross profit was 23.4% in 2016 and 22.3% in 2015. The increase reflected lower manufacturing costs driven primarily by lower natural gas prices and lower costs of steel offset by increased costs of waste paper. Also driving the improvement was a $11 million gain recorded on the sale of surplus property offset by a $2 million adjustment to customer reserves and $2 million of severance and other charges related to the decision to indefinitely idle our mining operations in Little Narrows, Nova Scotia, Canada.

SELLING AND ADMINISTRATIVE EXPENSES

Selling and administrative expenses totaled $298 million in 2017, $304 million in 2016 and $302 million in 2015. As a percentage of net sales, selling and administrative expenses decreased to 9.3% in 2017 compared to 10.1% in 2016 and 10.4% in 2015. The decrease of $6 million in selling and administrative expenses for 2017 reflected lower pension settlement expense of $11 million and the absence of $4 million for the exit of commercial office space, which reflected the remaining lease term and accelerated depreciation, offset by higher costs for marketing and services including those in support of product growth initiatives.

The increase in selling and administrative expenses from 2015 to 2016 was driven by $13 million in pension settlement charges and $4 million for the remaining lease term and accelerated depreciation associated with the exit of commercial office space. Offsetting these charges are lower net compensation costs and lower marketing expenses.

LONG-LIVED ASSET IMPAIRMENT CHARGES

We recorded long-lived asset impairment charges of $10 million in 2016. These charges resulted from the decision to indefinitely idle our mining operations in Little Narrows, Nova Scotia, Canada, after completing a review of our gypsum sourcing needs. See Note 12 to our consolidated financial statements in Part II, Item 8 of this report for additional information related to long-lived asset impairment charges.

RECOVERY ON RECEIVABLE

In 2016 and 2015, we recovered $3 million and $6 million, respectively, of a previously deemed uncollectible receivable through a settlement agreement. See Note 13 to our consolidated financial statements in Part II, Item 8 of this report for additional information.

GAIN ON DISPOSAL OF SHIPPING OPERATIONS, NET

During the second quarter of 2015, we recorded a net gain on the disposal of our shipping operations of $1 million. This reflected a gain on sale of our two self-unloading vessels of $7 million and charges to wind down our shipping operations of $6 million. See Note 13 to our consolidated financial statements in Part II, Item 8 of this report for additional information.

INCOME FROM EQUITY METHOD INVESTMENTS

Income from equity method investments was $59 million in 2017, $49 million in 2016, and $48 million in 2015. The increase from 2016 to 2017 was driven by an increase in the net income of UBBP, which was due to a favorable currency impact of $2 million and the absence of $8 million in impairment charges recorded in 2016.

The increase from 2015 to 2016 was driven by an increase in the net income of UBBP, which reflected higher sales and operating profit year over year offset by $8 million of long-lived asset impairment charges in China and Oman. Foreign currency exchange rate fluctuations due to the strengthening of the U.S. dollar negatively impacted our share of equity earnings by $1 million in 2016.

INTEREST EXPENSE

Interest expense was $69 million in 2017, $145 million in 2016 and $163 million in 2015. The decrease in interest expense for both comparative periods primarily reflected lower debt levels and lower interest rates on our outstanding debt. The decline was driven by repayments of $1.1 billion of debt in 2016 and $21 million in 2015.

INCOME AND GAIN ON SALE FROM EQUITY METHOD INVESTMENT TO RELATED PARTY

In 2015, upon the sale of our 50% share of the Knauf-USG joint venture to Knauf, we recorded a gain of $11 million, or $6 million net of tax. Our share of the income from the equity method investment in 2015 through the date of sale amounted to $2 million. See Note 4 to our consolidated financial statements in Part II, Item 8 of this report for additional information.

LOSS ON EXTINGUISHMENT OF DEBT

We recorded a loss on extinguishment of debt, including premiums and write-off of unamortized debt issuance costs, of $22 million in 2017, $37 million in 2016 and $19 million in 2015. The loss in 2017 included $21 million primarily for premiums paid as a result of a tender offer and repurchase of our 7.75% Senior Notes due 2018, referred to as our 7.75% Notes, and write-off of $1 million for deferred fees upon the amendment of our credit facility. The loss in 2016 was a result of the early redemption of our 6.3% Senior Notes due 2016 throughout 2016 and repayment in December of our 7.875% Senior Notes due 2020 and 5.875% Senior Notes due 2021. The loss in 2015 resulted from the tender offer and repurchase of our 8.375% Senior Notes due 2018.

OTHER (EXPENSE) INCOME, NET

In 2017, we recorded $4 million in other expense, which primarily reflected net losses on foreign currency transactions. We recorded $9 million of net other income in 2016 which included net gains on foreign currency transactions and the receipt of the remaining payments under a settlement agreement with our former trading partner of which $4 million was recorded as other income. See Note 13 to the consolidated financial statements in Part II, Item 8 of this report for additional information.

INCOME TAX EXPENSE (BENEFIT)

Our effective tax rate was 71.0% in 2017, 22.9% in 2016, and not meaningful in 2015. Our effective tax rate has historically been sensitive to the geographic mix of earnings. When the percentage of pretax earnings generated outside of the United States increased, our effective tax rate generally decreased. Conversely, when the percentage of pretax earnings generated outside of the United States decreased, our effective tax rate generally increased.

The effective tax rate for each of 2017, 2016 and 2015 was significantly impacted by the charges and credits described in detail below. Excluding the impact of these charges and credits, the effective tax rate was 27.8% in 2017, 30.7% in 2016 and 36.9% in 2015.

Income tax expense was $238 million in 2017 compared with income tax expense of $63 million in 2016. The income tax expense in 2017 included a $145 million non-cash tax charge related to the revaluation and change in realizability of our deferred tax assets due to the change in U.S. federal tax law under the Tax Cuts and Jobs Act, or the 2017 Tax Act.

Income tax expense was $63 million in 2016 compared with income tax benefit of $740 million in 2015. The income tax expense in 2016 was related to tax expense from domestic, foreign, state and local jurisdictions. This expense was partially offset by foreign tax credits attributable to tax planning strategies to optimize foreign tax credit utilization and management's intention to amend its tax returns for the tax years 2012-2014 in order to claim credits for previously deducted foreign tax.

The income tax benefit in 2015 primarily resulted from the reversal of a substantial portion of our deferred tax asset valuation allowance of $731 million. In addition, tax benefits of $5 million were recorded for Federal law changes in 2015 related to alternative minimum tax credit monetization, or AMT credits. These benefits recorded were offset slightly by tax expense for certain foreign, state and local jurisdictions of $7 million. Due to the effects of reversing our deferred tax asset valuation allowance, our effective tax rate for 2015 was abnormally low.

(LOSS) INCOME FROM DISCONTINUED OPERATIONS, NET OF TAX

We recorded a loss from discontinued operations of $9 million for 2017 which primarily related to a pension settlement charge triggered by lump sum benefits paid to former employees of L&W. We recorded income from discontinued operations of $20 million for 2016 and $15 million for 2015 which primarily reflected the income recorded by L&W prior to the sale to ABC Supply on October 31, 2016. We also recorded losses of $1 million and $2 million in 2017 and 2016, respectively, related to our European operations which were sold in December 2012. See Note 3 to our consolidated financial statements in Part II, Item 8 of this report for additional information.

GAIN ON SALE OF DISCONTINUED OPERATIONS, NET OF TAX

On October 31, 2016, we completed the sale of L&W, our distribution business, to ABC Supply and received proceeds of $675 million, inclusive of a $6 million final working capital adjustment that was received subsequent to year end. The sale resulted in a gain on sale, net of tax, of $279 million. See Note 3 to our consolidated financial statements in Part II, Item 8 of this report for additional information.

SEGMENT RESULTS OF OPERATIONS

Net sales and operating profit (loss) for our consolidated reportable segments were as follows:

				Favorable (Unfavorable)			
				2017 vs. 2016		2016 vs. 2015	
(millions)	2017	2016(a)	2015(b)	$	%	$	%
Net Sales:							
U.S. Wallboard and Surfaces	$ 1,916	$ 1,778	$ 1,720	$ 138	8 %	$ 58	3 %
U.S. Performance Materials	373	357	321	16	4 %	36	11 %
U.S. Ceilings	477	467	464	10	2 %	3	1 %
Canada	405	389	372	16	4 %	17	5 %
Other	245	220	239	25	11 %	(19)	(8)%
Eliminations	(212)	(194)	(203)	(18)	(9)%	9	4 %
Total	$ 3,204	$ 3,017	$ 2,913	$ 187	6 %	$ 104	4 %
Operating Profit (Loss):							
U.S. Wallboard and Surfaces	$ 314	$ 334	$ 298	(20)	(6)%	$ 36	12 %
U.S. Performance Materials	26	41	31	(15)	(37)%	10	32 %
U.S. Ceilings	95	101	80	(6)	(6)%	21	26 %
Canada	12	26	10	(14)	(54)%	16	*
Other	11	(4)	30	15	*	(34)	*
Corporate	(90)	(104)	(94)	14	13 %	(10)	(11)%
Eliminations	(1)	—	—	(1)	*	—	*
Total	$ 367	$ 394	$ 355	$ (27)	(7)%	$ 39	11 %

* Not meaningful

(a) Operating profit in 2016 included a gain of $11 million recorded on the sale of surplus property related to U.S. Wallboard and Surfaces and $10 million of long-lived asset impairment charges, $2 million of severance and $3 million of recovery of loss on receivable in Other.

(b) Operating profit in 2015 included $1 million for a net gain on sale of the ships and costs to wind-up our shipping business business, a $6 million recovery of a portion of the receivable deemed uncollectible in 2014 and a pre-tax gain on the sale of assets of $10 million in Other.

U.S. Wallboard and Surfaces

Our U.S. Wallboard and Surfaces segment manufactures and markets gypsum and related products in the United States. These products are used in a variety of building applications to construct walls and ceilings of residential, nonresidential and institutional buildings, as well as in certain industrial applications.

2017 COMPARED WITH 2016

Net sales for U.S. Wallboard and Surfaces in 2017 were $1.9 billion, an increase of $138 million, or 8%, compared with 2016. The net sales increase was due to the following:

	Sales		Volume		Price	
(millions)	**$**	**%**	**$**	**%**	**$**	**%**
Change to 2017 from 2016						
USG Sheetrock® brand gypsum wallboard	$ 52	6%	$ 59	6%	$ (7)	—%
USG Sheetrock® brand joint compound	21	6%	23	6%	(2)	—%
Other	65					
Total increase in net sales	$ 138	8%				

The increase in net sales reflected higher volumes of USG Sheetrock® brand gypsum wallboard due to higher shipments to big box retailers and specialty dealers, including new customers, and higher volumes of USG Sheetrock® brand joint compound as a result of higher shipments to big box retailers. We shipped 6.12 billion square feet of USG Sheetrock® brand gypsum wallboard in 2017, a 6% increase from 5.76 square feet in 2016. Offsetting the increase in volumes were lower average selling prices in USG Sheetrock® brand gypsum wallboard and USG Sheetrock® brand joint compound primarily driven by a change in mix and regional pricing differences as we balance price and volume across the country with new customers and the continued transition under the L&W supply agreement.

Sales also increased by $65 million due to net sales of other products including glass-mat panels, paper and joint compound accessory products, $8 million in higher royalties and higher freight as a result of higher sales.

Operating profit for U.S. Wallboard and Surfaces was $314 million in 2017 and $334 million in 2016, or a $20 million decrease, and reflected the following:

	Operating Profit	Volume	Price	Cost
(millions)	$	$	$	$
Change to 2017 from 2016				
USG Sheetrock® brand gypsum wallboard	$ (16)	$ 26	$ (7)	$ (35)
USG Sheetrock® brand joint compound	(1)	6	(2)	(5)
Other	(3)			
Total decrease in operating profit	$ (20)			

The decrease in operating profit primarily reflected higher per unit costs of USG Sheetrock® brand gypsum wallboard and USG Sheetrock® brand joint compound partially offset by higher volumes of these products as discussed above. Higher manufacturing per unit costs of USG Sheetrock® brand gypsum wallboard reflected an increase in per unit cost of 11% for raw materials, primarily due to waste paper. Offsetting the higher costs for raw materials were improved per unit costs of 3% for energy and 2% for fixed costs due to higher volumes. The increased per unit costs of USG Sheetrock® brand joint compound were also driven by increased costs of raw materials.

Further contributing to the decrease in operating profit in 2017 was a $5 million less favorable adjustment year over year to our asset retirement obligations due to changes in cash flow estimates, an incremental $1 million of pension settlement expense and the absence of $9 million for items recorded in 2016, which included a gain of $11 million for the sale of surplus property offset by a $2 million adjustment to customer reserves. Offsetting the decrease in operating profit was higher gross profit of $9 million on other products including glass-mat panels, and lower selling and administrative expenses of $3 million. As a percentage of sales, selling and administrative expenses decreased 50 basis points.

2016 COMPARED WITH 2015

Net sales for U.S. Wallboard and Surfaces in 2016 increased $58 million, or 3%, compared with 2015. The net sales increase was due to the following:

	Sales		Volume		Price	
(millions)	$	%	$	%	$	%
Change to 2016 from 2015						
USG Sheetrock® brand gypsum wallboard	$ 46	5%	$ 54	6%	$ (8)	(1)%
USG Sheetrock® brand joint compound	16	4%	18	5%	(2)	(1)%
Other	(4)					
Total increase in net sales	$ 58	3%				

Net sales of USG Sheetrock® brand gypsum wallboard increased $46 million, or 5%, reflecting a 6% increase in volume offset by a 1% decrease in wallboard average selling prices. The increase in volume was driven by higher shipments to the core channels of distribution which includes big box retailers, specialty dealers and pro dealers. We shipped 5.76 billion square feet of USG Sheetrock® brand gypsum wallboard in 2016, a 6% increase from 5.44 billion square feet in 2015. The decrease in average selling prices reflected changes in mix and regional pricing differences. Sales of USG Sheetrock® brand joint compound increased $16 million driven largely by increased shipments to specialty dealers, pro dealers and big box retailers offset by a 1% decrease in average selling prices due to product mix.

The decrease in Other reflected a $25 million reduction in sales for inventory sold by U.S. Wallboard and Surfaces to L&W that was included in L&W’s inventory as of October 31, 2016. This was offset by higher sales of other products, including glass mat panels, joint compound accessories, and bead and trim products, of $15 million and by an increase in freight as a result of higher product sales.

Operating profit for U.S. Wallboard and Surfaces was $334 million in 2016 and $298 million in 2015, or a $36 million increase, and reflected the following:

	Operating Profit	Volume	Price	Cost
(millions)	$	$	$	$
Change to 2016 from 2015				
USG Sheetrock® brand gypsum wallboard	$ 23	$ 24	$ (8)	$ 7
USG Sheetrock® brand joint compound	11	4	(2)	9
Other	2			
Total increase in operating profit	$ 36			

The increase in operating profit in 2016 reflected gross profit improvement for USG Sheetrock® brand gypsum wallboard and USG Sheetrock® brand joint compound. Manufacturing costs per unit improved for USG Sheetrock® brand gypsum wallboard which was reflected in $7 million of increased operating profit. The lower cost was driven by a reduction in per unit cost of 11% for energy costs as a result of lower natural gas prices and of 8% for fixed costs due to higher volumes. Offsetting some of these cost savings was a 4% increase in raw material costs driven by waste paper and synthetic gypsum and a 4% increase in conversion costs driven partially by higher labor costs. Manufacturing costs per unit for USG Sheetrock® brand joint compound decreased due to lower raw material costs, driven primarily by pails, latex, and thickener and lower fixed costs due to improved volumes.

Gross profit improvement of $5 million on other gypsum products contributed to improved operating profit driven by product mix, in addition to a gain of $11 million on the sale of surplus property, a favorable adjustment of $3 million for our asset retirement obligations and improved selling and administrative expenses of $2 million. Offsetting these improvements to operating profit was a $11 million reduction in gross profit for inventory sold by U.S. Wallboard and Surfaces to L&W that was included in L&W's inventory as of October 31, 2016, an adjustment to customer reserves of $2 million and a pension settlement of $6 million. As a percentage of net sales, selling and administrative expenses declined by 30 basis points driven primarily by lower net compensation costs.

U.S. Performance Materials

Our U.S. Performance Materials segment manufactures and markets a series of innovative products in the United States in the product categories of underlayment, building envelope and structural. These products are used in a variety of interior and exterior building applications of residential and nonresidential buildings, as well as in certain industrial applications.

2017 COMPARED WITH 2016

Net sales for U.S. Performance Materials in 2017 were $373 million, an increase of $16 million, or 4%, compared with 2016. The net sales increase was due to the following:

	Sales		Volume		Price	
(millions)	$	%	$	%	$	%
Change to 2017 from 2016						
USG Durock® brand cement board	$ 3	2%	$ 3	2%	$ —	— %
USG Durock™ brand glass-mat tile backerboard	3	39%	3	39%	—	— %
Fiberock® brand tile backerboard and underlayment	2	7%	3	12%	(1)	(5)%
Other	8					
Total increase in net sales	$ 16	4%				

The increase in net sales in 2017 was driven by increased volumes of USG Durock® brand cement board, USG Durock™ brand glass-mat tile backerboard and Fiberock® brand tile backerboard and underlayment. The higher volumes of these products primarily reflected increased sales into the repair and remodel market with higher shipments to big box retailers and specialty dealers. Lower average selling price of Fiberock® brand tile backerboard and underlayment slightly offset the increases in volumes.

The increase in Other reflected higher sales of $8 million of other products including Securock® brand roof boards, Levelrock® brand gypsum underlayment, tile and flooring accessories and Securock® ExoAir® 430 air barrier system and higher freight due to increased shipments.

Operating profit for U.S. Performance Materials was $26 million in 2017 and $41 million in 2016, or a $15 million decrease, and reflected the following:

(millions)	Operating Profit $	Volume $	Price $	Cost $
Change to 2017 from 2016				
USG Durock® brand cement board	$ (2)	$ 1	$ —	$ (3)
USG Durock™ brand glass-mat tile backerboard	1	1	—	—
Fiberock® brand tile backerboard and underlayment	(1)	1	(1)	(1)
Other	(13)			
Total decrease in operating profit	$ (15)			

The decrease in operating profit in 2017 reflected lower gross profit on USG Durock® brand cement board and Fiberock® brand tile backerboard and underlayment as a result of higher per unit cost offset by higher gross profit on USG Durock™ brand glass-mat tile backerboard. The increased per unit cost for Durock® brand cement board primarily reflected increased transportation costs offset by lower cost of raw materials. The higher cost per unit for Fiberock® brand tile backerboard and underlayment was driven by an increase in the cost of raw materials, primarily waste paper, and increased transportation costs offset slightly by lower energy costs.

Included in Other was lower gross profit on other products of $8 million, including Securock® brand roof boards, which reflected higher costs of raw materials and transportation costs, a $1 million increase in operational reserves and $4 million of higher selling and administrative expenses. As a percentage of sales, selling and administrative expenses increased 100 basis points which reflected increased marketing and compensation costs.

2016 COMPARED WITH 2015

Net sales for U.S. Performance Materials in 2016 increased $36 million, or 11%, compared with 2015. The net sales increase was due to the following:

	Sales		Volume		Price	
(millions)	$	%	$	%	$	%
Change to 2016 from 2015						
USG Durock® brand cement board	$ 10	8%	$ 8	6%	$ 2	2%
Levelrock® brand gypsum underlayment	11	22%	11	22%	—	—%
Structural panels	7	89%	6	84%	1	5%
Other	8					
Total increase in net sales	$ 36	11%				

Net sales of USG Durock® brand cement board increased $10 million, driven by higher volumes and higher average selling price. The higher volumes reflected increased shipments to customers in the repair and remodel market, big box retailers and specialty dealers. Net sales of Levelrock® brand gypsum underlayment increased by $11 million driven by higher volume which reflected an improvement in the multi-family housing construction market as well as sales of accessory products. Net sales of structural panels increased $7 million due primarily to higher volumes as a result of organic growth.

The increase in Other of $8 million included higher sales of other products of $9 million, including Fiberock® brand tile backerboard, USG Durock™ brand glass-mat tile backerboard and Securock® brand gypsum-fiber roof boards and an increase in freight as a result of higher sales. Offsetting this increase in Other was a $4 million reduction in sales for inventory sold by U.S. Performance Materials to L&W that was included in L&W's inventory as of October 31, 2016.

Operating profit for U.S. Performance Materials was $41 million in 2016 and $31 million in 2015, or a $10 million increase, and reflected the following:

	Operating Profit	Volume	Price	Cost
(millions)	$	$	$	$
Change to 2016 from 2015				
USG Durock® brand cement board	$ 4	$ 2	$ 2	$ —
Levelrock® brand gypsum underlayment	3	10	—	(7)
Structural panels	1	1	1	(1)
Other	2			
Total increase in operating profit	$ 10			

The increase in operating profit for 2016 reflected gross profit improvement for USG Durock® brand cement board, Levelrock® brand gypsum underlayment and structural panels reflective of higher sales as discussed above. Further driving the increase in operating profit for 2016 were higher gross profits of $5 million on other products, including Fiberock® brand tile backerboard and underlayment, USG Durock™ brand glass-mat tile backerboard and Securock® brand gypsum-fiber roof boards, offset by a $2 million reduction in gross profit for inventory sold by U.S. Performance Materials to L&W that was included in L&W's inventory as of October 31, 2016. Also impacting operating profit was a pension settlement of $2 million offset by a decrease of $1 million of selling and administrative expenses. As a percentage of net sales, selling and administrative expenses declined by 120 basis points driven primarily by lower net compensation costs.

U.S. Ceilings

Our U.S. Ceilings segment manufactures and markets ceiling interior systems products in the United States and is a leading supplier of interior ceilings products used primarily in nonresidential applications.

2017 COMPARED WITH 2016

Net sales for U.S. Ceilings increased to $477 million in 2017, a $10 million, or 2%, increase from $467 million in 2016. The increase reflected the following:

	Sales		Volume		Price	
(millions)	$	%	$	%	$	%
Change to 2017 to 2016						
Ceiling grid	$ (2)	(1)%	$ (3)	(2)%	$ 1	1%
Ceiling tile	6	2 %	6	2 %	—	—%
Other	6					
Total increase in net sales	$ 10					

The increase in net sales reflected higher sales of ceiling tile of $6 million due to higher volumes, primarily to our specialty dealers, offset by lower sales of ceiling grid of $2 million as a result of lower volumes, primarily to our customers in the retail channel. The increase in other included one month of net sales of $4 million from Ceilings Plus for specialty ceilings, $1 million in higher royalties and higher freight due to increased sales.

Operating profit for U.S. Ceilings of $95 million in 2017 decreased $6 million, or 6%, from $101 million in 2016. The decrease reflected the following:

	Operating Profit	Volume	Price	Cost
(millions)	$	$	$	$
Change to 2017 from 2016				
Ceiling grid	$ (8)	$ (2)	$ 1	$ (7)
Ceiling tile	(2)	—	—	(2)
Other	4			
Total decrease in operating profit	$ (6)			

The decrease in operating profit for 2017 was driven by a decrease in gross profit for both ceiling grid and ceiling tile in 2017 compared with 2016. The lower gross profit for ceiling grid reflected lower volumes and higher per unit cost partially offset by higher average selling price. The higher per unit cost for ceiling grid was due to an increase in raw materials costs, primarily steel. The decrease in gross profit for ceiling tile primarily reflected higher per unit cost which was driven by an increase in energy costs due to higher prices of natural gas. Other primarily included a decrease in miscellaneous costs and selling and administrative expenses. As a percentage of sales, selling and administrative expenses declined by 50 basis points.

2016 COMPARED WITH 2015

Net sales for U.S. Ceilings increased to $467 million in 2016, a $3 million, or 1%, increase from $464 million in 2015. The increase reflected the following:

	Sales		Volume		Price	
(millions)	$	%	$	%	$	%
Change to 2016 from 2015						
Ceiling grid	$ 3	3%	$ 5	4%	$ (2)	(1)%
Ceiling tile	1	1%	(1)	—%	2	1 %
Other	(1)					
Total increase in net sales	$ 3	1%				

The increase in sales for ceiling grid was driven by higher volumes of 4% offset by lower prices. The increase in volume for ceiling grid reflected improved market conditions and product mix. The increase in ceiling tile reflected higher prices offset by lower volumes. The decrease in Other included a $3 million increase in sales for inventory sold by U.S. Ceilings to L&W that was included in L&W's inventory as of October 31, 2016 offset by lower freight.

Operating profit for U.S. Ceilings of $101 million in 2016 increased $21 million, or 26%, from $80 million in 2015. The increase reflected the following:

	Operating Profit	Volume	Price	Cost
(millions)	$	$	$	$
Change to 2016 from 2015				
Ceiling grid	$ 7	$ 3	$ (1)	$ 5
Ceiling tile	10	—	3	7
Other	4			
Total increase in operating profit	$ 21			

The increase in operating profit for 2016 reflected the improvement in volume and cost for ceiling grid and in price and cost for ceiling tile. The increase in volume for ceiling grid reflected improved market conditions and product mix. The reduction in cost of ceiling grid was largely driven by lower per unit cost for ceiling grid, which reflected lower raw material costs led by lower steel prices, lower conversion reflective of improved efficiencies and fixed costs driven by increased volumes. The higher price for ceiling tile was primarily due to product mix. The lower cost for ceiling tile was due to lower costs per unit for raw materials, energy and conversion costs due to improved efficiencies. Per unit energy costs also declined as a result of favorable energy prices.

Included in the increase in Other was $1 million of gross profit on sales by U.S. Ceilings to L&W that were included in L&W's inventory as of October 31, 2016. Also driving the increase in Other was a decrease in selling and administrative expenses due to lower net compensation costs offset by a pension settlement of $2 million. As a percentage of sales, selling and administrative expenses declined by 40 basis points.

Canada

Our Canada segment manufactures gypsum products and ceiling grid and markets gypsum products, ceiling grid and ceiling tile in Canada and is a leading supplier of gypsum wallboard. These products are used in a variety of building applications, including residential, nonresidential and institutional buildings, as well as in certain industrial applications.

2017 COMPARED WITH 2016

Net sales for our Canada segment in 2017 were $405 million, an increase of $16 million compared to net sales in 2016 of $389 million. Sales of gypsum wallboard increased $15 million due to a 10% increase of average selling price offset by a 2% decrease in volume. The increase in the average selling price reflected the final decisions of the Canadian authorities on the minimum pricing of gypsum board into Western Canada. The decisions were as a result of an anti-dumping proceeding initiated by a competing Canadian wallboard manufacturer. The minimum pricing of gypsum board in Western Canada also reduced our volumes. The increase in net sales in 2017 was also driven by an increase of $5 million in other products, including glass-mat panels, industrial products and specialty ceilings, and a favorable impact of foreign currency translation of $7 million offset by a decrease in net sales of joint treatment of $3 million and ceiling tile of $2 million and lower freight of $6 million.

Operating profit for our Canada segment was $12 million in 2017 compared with $26 million in 2016. This decrease of $14 million reflected a lower gross profit on joint treatment of $3 million and ceiling grid of $1 million. Also negatively impacting operating profit were increased royalties of $9 million, higher losses on our foreign exchange contracts of $7 million and higher other miscellaneous costs of $4 million. Offsetting these reductions to operating profit was an increase in gross profit for gypsum wallboard of $10 million driven primarily by the increase in average selling price offset by an increase of 6% in cost due to higher costs of waste paper. Selling and administrative expenses decreased 40 basis points as a percentage of sales.

2016 COMPARED WITH 2015

Net sales for our Canada segment in 2016 were $389 million, an increase of $17 million or 5%, compared with 2015. The increase was driven primarily by a $21 million increase in net sales of gypsum wallboard, a $4 million increase in net sales of joint treatment and an adjustment of an accrual for volume rebate incentives of $4 million. The higher wallboard sales reflected higher average selling prices of 11%, largely resulting from a preliminary decision on minimum pricing imposed by Canadian authorities discussed above. Offsetting the higher sales was a $14 million unfavorable impact of foreign currency due to the strengthening of the U.S. Dollar.

Operating profit for our Canada segment increased $16 million to $26 million in 2016 from $10 million in 2015. The increase was driven by higher gross profit on gypsum wallboard of $9 million, on ceiling tile of $2 million and on joint treatment of $1 million, an adjustment of an accrual for volume rebate incentives of $4 million and lower miscellaneous and selling and administrative costs of $7 million. Gross profit of gypsum wallboard improved due to higher average selling prices of 11% offset by higher per unit cost of 7% due to increased employee costs. Offsetting these increases was a $9 million unfavorable impact of foreign currency.

USG Boral Building Products

UBBP, our 50/50 joint ventures with Boral Limited, manufactures, distributes and sells certain building products, mines raw gypsum and sells natural and synthetic gypsum throughout Asia, Australasia and the Middle East. UBBP also manufactures and distributes products for wall, ceiling, floor lining and exterior systems that utilize gypsum wallboard, referred to as plasterboard in the regions in which UBBP operates, mineral fiber ceiling tiles, steel grid and joint compound. The following reflects the net sales and operating profit as recorded by UBBP and the equity income recorded by USG:

				Favorable (Unfavorable)			
				2017 vs. 2016		2016 vs. 2015	
(millions)	2017	2016	2015	$	%	$	%
Net sales	$ 1,200	$ 1,052	$ 1,003	$ 148	14%	$ 49	5%
Operating profit [(a)]	160	133	124	27	20%	9	7%
Income from equity method investments - UBBP [(b)]	59	49	48	10	20%	1	2%

(a) Operating profit in 2016 included long-lived asset impairment charges of $14 million for Oman and $8 million for China.
(b) Income from equity method investments - UBBP in 2016 included long-lived asset impairment charges of $4 million for Oman and $4 million for China.

2017 COMPARED WITH 2016

Net sales for UBBP increased $148 million to $1.2 billion in 2017. The increase reflected higher shipments of plasterboard in South Korea, China, Australia, and Thailand, offset by lower shipments in Vietnam and Thailand. Plasterboard shipments increased 7% in 2017 to 4.9 billion square feet from 4.6 billion square feet in 2016 and reflected continued improved market acceptance of lightweight products. Shipments of adjacent products, including joint compounds and steel studs, also increased in 2017 as compared 2016. Net sales of UBBP also reflected a favorable impact of currency translation of $27 million.

Operating profit for UBBP increased to $160 million in 2017 from $133 million in 2016. The increase of $27 million reflected improved margins in Australia, South Korea, Thailand, China and Indonesia. While margins improved overall, UBBP incurred higher costs for raw materials, notably waste paper and steel, and for energy. UBBP's operating profit also included a favorable currency impact of $4 million. Offsetting the increased margins were higher selling and administrative expenses reflective of higher sales. Operating profit for 2016 also included impairment of long-lived assets in China of $8 million and in Oman of $14 million.

Our share of equity income from UBBP was $59 million in 2017 compared to $49 million in 2016. The increase was driven by a favorable currency impact of $2 million and the absence of the 2016 long-lived asset impairment charges.

2016 COMPARED WITH 2015

Net sales for UBBP in 2016 increased $49 million from $1.003 billion in 2015 to $1.052 billion in 2016. The increase reflected higher plasterboard shipments in South Korea, Australia, Vietnam and India offset by lower shipments in China and unfavorable impact of currency translation of $17 million. Plasterboard shipments increased 4% in 2016 to 4.6 billion square feet from 4.4 billion square feet in 2015.

Operating profit for UBBP increased to $133 million in 2016 from $124 million in 2015. The increase reflected improved margins in Australia, South Korea, Vietnam and India, realized synergy savings and improved market acceptance of lightweight products offset by an impairment of long-lived assets in China of $8 million and in Oman of $14 million and an increase in selling and administrative expenses. Operating profit was negatively impacted by $2 million by the strengthening of the U.S. Dollar.

Our share of equity income from UBBP was $49 million in 2016 compared to $48 million in 2015. The increase from 2015 to 2016 primarily is driven by growth in the business year over year offset by impairment of long-lived asset in China of $4 million and in Oman of $4 million and unfavorable impact of foreign currency of $1 million due to the strengthening of the U.S. Dollar.

Corporate

Operating expenses for Corporate were $90 million in 2017, $104 million in 2016 and $94 million in 2015. The decrease reflected a $9 million lower pension settlement charge, the absence of $4 million in charges for the remaining lease term and accelerated depreciation associated with the exit of commercial office space, and lower costs for incentive compensation offset by higher costs for marketing and services including those in support of product growth initiatives.

The increase in 2016 compared to 2015 was due primarily to pension settlement charges of $10 million, $4 million in charges for the remaining lease term and accelerated depreciation associated with the exit of commercial office space and increased costs for incentive compensation offset by lower information technology spend.

Liquidity and Capital Resources

LIQUIDITY

As of December 31, 2017, we had $493 million of cash and cash equivalents and marketable securities compared with $518 million as of December 31, 2016. See discussion below under Cash Flows for an explanation of this change. Our total liquidity was $648 million as of December 31, 2017 (including $155 million of borrowing availability under our credit facility) compared to $603 million as of December 31, 2016 (including $85 million of borrowing availability under our credit facility). The increase in liquidity reflected increased borrowing availability as a result of our amended and restated credit facility discussed below.

We invest in cash equivalents and marketable securities pursuant to an investment policy that has preservation of principal as its primary objective. The policy includes provisions regarding diversification, credit quality and maturity profile that are designed to minimize the overall risk profile of our investment portfolio. The securities in the portfolio are subject to normal market fluctuations. See Note 5 to the consolidated financial statements in Part II, Item 8 of this report for additional information regarding our investments in marketable securities.

Total debt as of December 31, 2017 and 2016 consisted of senior notes and industrial revenue bonds and amounted to $1.078 billion ($1.089 billion in aggregate principal amount less $11 million of unamortized debt issuance costs) and $1.083 billion ($1.089 billion in aggregate principal amount less $6 million of unamortized original issue discount and debt issuance costs), respectively. See Note 6 to the consolidated financial statements in Part II, Item 8 of this report for additional information about our debt.

During 2017, we amended and restated our credit facility agreement. Our amended and restated agreement increased the maximum borrowing limit from $180 million to $220 million (including a $50 million borrowing sublimit for our Canadian subsidiary, CGC Inc., or CGC) that is available to fund working capital needs and other general corporate purposes and matures on May 1, 2022. The facility is guaranteed by certain of our significant subsidiaries and secured by such parties' eligible trade receivables and inventory. The maximum borrowing limit under the credit agreement may be increased up to $450 million at our request and with our lenders' approval. The credit agreement contains other covenants and events of default that are customary for similar agreements and may limit our ability to take various actions including our ability to pay a dividend or repurchase our stock.

The maximum borrowing limit under the credit agreement is currently $220 million. The credit agreement also specifies that the maximum principal that may be borrowed is impacted by any outstanding borrowings and letters of credit under the credit agreement, by a borrowing base (comprised of eligible trade receivables and inventory), and the minimum excess availability that may be required due to the Covenant Trigger Threshold, described below, being applicable. As of December 31, 2017, the maximum principal we could borrow after taking into account the foregoing factors was approximately $155 million.

The credit agreement contains a covenant that would require us to maintain a minimum fixed charge coverage ratio of not less than 1.0-to-1.0 in the event that excess availability falls below the Covenant Trigger Threshold equal to 10% of the lesser of (a) the aggregate revolving commitment and (b) the aggregate of the USG and CGC borrowing base. As of December 31, 2017, our fixed charge coverage ratio was 1.25-to-1.0; and therefore, we are not required to maintain minimum excess availability of no less than the Covenant Trigger Threshold so that the financial covenant will remain inapplicable.

As of December 31, 2017 and during the year then ended, there were no borrowings under the facility. Had there been any borrowings as of that date, the applicable interest rate would have been 2.69% for loans in the U.S. and 2.54% for loans in Canada. Outstanding letters of credit as of December 31, 2017 totaled $29 million.

CASH FLOWS

The following table presents a summary of our cash flows:

(millions)	2017	2016	2015
Net cash provided by (used for):			
Operating activities from continuing operations	$ 382	$ 314	$ 279
Investing activities from continuing operations	(225)	79	(61)
Financing activities from continuing operations	(202)	(1,129)	(44)
Discontinued operations	6	726	47
Effect of exchange rate changes on cash	6	(5)	(10)
Net (decrease) increase in cash and cash equivalents	$ (33)	$ (15)	$ 211

Operating Activities: Net cash provided by operating activities increased in 2017 from 2016 due primarily to lower cash payments to our pension and postretirement plans and lower cash payments for interest. In 2017, we contributed $77 million to our pension and postretirement plans as compared to $174 million in 2016. We made $82 million in interest payments in 2017 as compared to $153 million in 2016. The decrease in interest payments primarily reflected lower debt levels and lower interest rates on our outstanding debt. These lower cash outflows were offset by an increase in cash outflows related to working capital. This was led by an increase in accounts receivable as a result of higher sales, an increase in inventories due to increased costs for raw materials and a decrease in accrued employee compensation and interest expense, offset by an increase in accounts payable, which also reflected higher costs of materials.

As of December 31, 2017, working capital (current assets less current liabilities) amounted to $576 million, and the ratio of current assets to current liabilities was 2.39-to-1. As of December 31, 2016, working capital amounted to $527 million, and the ratio of current assets to current liabilities was 2.25-to-1.

Higher cash provided by operating activities in 2016 compared to 2015 primarily reflected improved gross profit. Also driving the increase in operating cash flow was improved working capital. Our net cash outflow for accounts receivable, inventories, accounts payable and accrued expenses of continuing operations was lower in 2016 compared to 2015. Cash outflows for accrued expenses in 2015 included $39 million pursuant to the settlement agreement with the direct purchaser class in the U.S. wallboard pricing class action lawsuit. Excluding this payment, 2016 still reflected lower net cash outflow driven by initiatives over accounts payable offset by lower inflow from accounts receivable. As of December 31, 2015, working capital amounted to $408 million, and the ratio of current assets to current liabilities was 1.41-to-1.

Investing Activities: Investing cash flows used $225 million of net cash in 2017 and provided $79 million of net cash during 2016. Net purchases of marketable securities was $8 million in 2017 compared to net sales of $139 million in 2016. Significant cash outflows in 2017 reflected $168 million for capital expenditures and $52 million for our 2017 acquisition of Ceilings Plus. The increase of $85 million in 2017 as compared to 2016 for capital expenditures reflected expenditures for the replacement, modernization and expansion of operations, including Advanced Manufacturing initiatives.

Investing cash flows provided $79 million of net cash in 2016 and used $61 million of net cash during 2015. Net sales of marketable securities were $139 million in 2016 compared to net purchases of $76 million in 2015. Cash outflows for capital expenditures decreased in 2016 by $4 million as compared to 2015. The net increase in cash inflows from marketable securities and capital expenditures were offset by the lower cash inflows for the net proceeds of asset dispositions primarily due to the sale of a surplus property in Mexico and of our ships owned by GTL and for the disposition of our Knauf USG joint venture in 2015.

Financing Activities: The net cash used for financing activities in 2017 reflected the $520 million paid to redeem $500 million of our 7.75% Notes, including tender premiums, and the repurchase of $184 million of common stock under our stock repurchase program. This was partially offset by the issuance of $500 million of our 4.875% Senior Notes due 2027, referred to as our 4.875% Notes, net of debt issuance fees.

The net cash used for financing activities in 2016 was driven by the repayment of $1.1 billion of debt during the year. The net cash used for financing activities in 2015 included $365 million paid to repurchase $350 million of our 8.375% Senior Notes due 2018, including tender premiums, offset by the $344 million of proceeds received from the issuance of $350 million of 5.5% Senior Notes, net of debt issuance costs, and $21 million used to repay our ship mortgage facility.

Discontinued Operations: Net cash provided by discontinued operations was $6 million, $726 million and $47 million for 2017, 2016 and 2015, respectively. The cash received in 2017 primarily reflected a working capital adjustment associated with the sale of L&W. The higher cash inflow in 2016 as compared to 2015 reflected cash received for the sale of L&W of $669 million and higher cash inflows for accounts payable offset by higher cash outflows for accounts receivable and inventories.

LIQUIDITY OUTLOOK

In 2018, we plan to spend approximately $250 million on capital expenditures in the normal course of our business, which includes approximately $90 million allocated for advanced manufacturing projects to standardize and automate production across our businesses, approximately $95 million for growth investments, and approximately $65 million for maintenance. Estimated future spending on approved capital expenditures for the replacement, modernization and expansion of operations totaled $172 million as of December 31, 2017.

We also plan to incur approximately $370 million in selling and administrative expenses in 2018, including $31 million on strategic investments to support and grow our businesses and $15 million on integration and divisional realignment costs. Interest payments for 2018 are expected to decrease to $57 million from $85 million in 2017 which primarily reflects lower interest rates due to the refinancing of our 7.75% Notes to our 4.875% Notes.

We expect to make tax payments of approximately $8 million for foreign jurisdictions. Our utilization of our net operating loss, or NOL,carryforwards will limit our cash payments for U.S. income taxes.

The 2017 Tax Act significantly changes U.S. corporate income tax laws by, among other things, reducing the U.S. corporate income tax rate to 21% and creating a quasi-territorial tax system with a one-time mandatory tax on previously deferred foreign earnings. Excluding the impact of any discrete items, the provisions of the 2017 Tax Act are expected to reduce our effective tax rate in 2018 by approximately 10 to 13 percentage points compared to what the rate would have otherwise been in the absence of the 2017 Tax Act. Amounts adjusted in the measurement period under SEC Staff Accounting Bulletin No. 118, "Income Tax Accounting Implications of the Tax Cuts and Jobs Act", will be recorded as discrete items in the period in which the accounting for these items is complete. Our estimate of our effective tax rate does not include an estimate for the resolution of items which we identified as provisional. In addition, the ultimate impact on our effective tax rate will vary based upon the percentage of pretax earnings that we generate in the United States as compared to the rest of the world. See Note 15 to our consolidated financial statements in Part II, Item 8 of this report for additional information regarding those items and our NOL carryforwards. We do not anticipate that resolution of such item will result in a material change to our estimate of the effective tax rate or the impact on cash paid for taxes.

We expect to fund our capital expenditures, our selling and administrative expenses and our interest and tax payments with cash from operations or cash on hand.

On February 1, 2018, we announced that our Board of Directors approved a $250 million increase to our stock repurchase program, bringing the total authorization to $500 million. During 2017, we repurchased $184 million, leaving $316

million of authorization remaining. The timing and the amount of any additional repurchases will be determined based on market conditions and other factors. We expect that stock repurchases will be executed within 18 months and funded with available cash on hand. See Part II, Item 5 of this report.

Since formation, UBBP was funded from its net cash flows from operations and third-party financing. It is our intent that as an ongoing operation, UBBP will continue to self-fund. UBBP is targeting the distribution of 50% of combined after tax profits to USG and Boral, however, this dividend may be adjusted by the UBBP board with unanimous resolution. During the second and fourth quarters of 2017, UBBP paid cash dividends on earnings through September 30, 2017 of which our 50% share totaled $42 million.

In the event certain performance targets are satisfied by UBBP, we will be obligated to pay Boral an earnout payment in an amount up to $50 million in 2019, based on UBBP performance during the first five years. We have not recorded a liability for this earnout payment as we have concluded that it is currently not probable that the five-year performance target will be achieved.

We believe that cash on hand, cash equivalents, marketable securities, cash available from future operations and our credit facility will provide sufficient liquidity to fund our operations for at least the next 12 months. Cash requirements include, among other things, capital expenditures, working capital needs, employee retirement plans funding, interest payments and other contractual obligations.

CONTRACTUAL OBLIGATIONS AND OTHER COMMITMENTS

As of December 31, 2017, our contractual obligations and commitments were as follows:

	Payments Due by Period				
(millions)	Total	2018	2019 - 2020	2021 - 2022	Thereafter
Debt obligations (a)	$ 1,089	$ —	$ —	$ —	$ 1,089
Other long-term liabilities (b)	531	15	39	9	468
Interest payments (c)	519	57	114	114	234
Purchase obligations (d)	618	129	191	125	173
Capital expenditures (e)	172	127	45	—	—
Operating leases	130	36	56	29	9
Unrecognized tax benefits (f)	12	2	4	5	1
Earnout payment (g)	50	—	50	—	—
Total	$ 3,121	$ 366	$ 499	$ 282	$ 1,974

(a) Excludes unamortized deferred issuance costs of $11 million.
(b) Other long-term liabilities primarily consist of asset retirement obligations that principally extend over a 50-year period. The majority of associated payments are payable toward the latter part of that period.
(c) Reflects estimated interest payments on debt obligations as of December 31, 2017.
(d) Purchase obligations primarily consist of contracts to purchase energy, certain raw materials and finished goods.
(e) Reflects estimates of future spending on active capital projects that were approved prior to December 31, 2017 but were not completed by that date.
(f) Reflects estimated payments (if required) of gross unrecognized tax benefits.
(g) Reflects potential maximum earnout payment for our investments in UBBP up to $50 million based on performance during the first five years.

The table above excludes liabilities related to both our defined benefit pension plans and postretirement benefits (retiree health care and life insurance). For 2017, our defined benefit pension plans had no minimum funding requirements under the Employee Retirement Income Security Act of 1974. We are evaluating our level of funding for pension plans and currently estimate that we will contribute approximately $63 million to our pension plans in 2018. We voluntarily provide postretirement benefits for eligible employees and retirees and estimate cash payments to be $9 million in 2018. See Note 9 to the consolidated financial statements in Part II, Item 8 for additional information on future expected cash payments for pension and other postretirement benefits.

OFF-BALANCE-SHEET ARRANGEMENTS

With the exception of letters of credit, it is not our business practice to use off-balance-sheet arrangements, such as third-party special-purpose entities.

GUARANTEES

We are party to a variety of agreements under which we may be obligated to indemnify a third party with respect to certain matters. We do not consider the maximum potential amount of future payments that we could be required to make under these agreements to be material.

Legal Contingencies

We are named as defendants in litigation arising from our operations, including lawsuits or claims arising from commercial disputes, product performance or warranties, products liability, and worksite or vehicular accidents.

In 2015, USG, our subsidiary United States Gypsum Company, our former subsidiary L&W Supply Corporation, and seven other wallboard manufacturers were named as defendants in a lawsuit filed by twelve homebuilders alleging that the defendants conspired to fix the price of wallboard sold in the United States. Earlier, in 2013, class action lawsuits making similar allegations were filed in Canada on behalf of a class of purchasers of wallboard in Canada. We believe that the cost, if any, of resolving the homebuilders' lawsuit and Canadian class action litigation will not have a material effect on our results of operations, financial position or cash flows.

In 2015, United States Gypsum Company was served with a federal grand jury subpoena requesting the production of company records in connection with a federal investigation of the gypsum drywall industry. Two former employees of USG have also been served with subpoenas. We believe the investigation, although a separate proceeding, is related to the same events at issue in the litigation discussed above. We are fully cooperating with the grand jury investigation. We believe we acted in full compliance with the law, and we do not expect the resolution of this matter to result in any material effect on our business, financial position, liquidity or results of operations; however, we can provide no assurances as to the scope, timing, or outcome of any such investigation.

See Note 18 to the consolidated financial statements in Part II, Item 8 of this report for additional information regarding litigation matters. See, also, Part I, Item 1A, Risk Factors, for information regarding the possible effects of environmental laws and regulations on our businesses.

Critical Accounting Policies

In preparing our consolidated financial statements in conformity with accounting principles generally accepted in the United States, we make decisions that impact the reported amounts of assets, liabilities, revenues and expenses, and related disclosures. Such decisions include the selection of the appropriate accounting principles to be applied and the assumptions on which to base accounting estimates. In reaching such decisions, we apply judgments based on our understanding and analysis of the relevant circumstances, current developments and historical experience. Actual amounts could differ materially from those estimated at the time the consolidated financial statements are prepared.

Our significant accounting policies are described in Note 1 to the consolidated financial statements in Part II, Item 8 of this report. Some of these significant accounting policies require us to make difficult, subjective or complex judgments or estimates. An accounting estimate is considered to be critical if it meets both of the following criteria: (1) the estimate requires assumptions about matters that are highly uncertain at the time the accounting estimate is made and (2) different estimates reasonably could have been used, or changes in the estimate are reasonably likely to occur from period to period, that would have a material impact on the presentation of our financial condition, changes in financial condition, results of operations or cash flows. Our critical accounting estimates are as follows:

EMPLOYEE RETIREMENT PLANS

We maintain defined benefit pension plans for most of our employees. Most of these plans require employee contributions in order to accrue benefits. We also maintain plans that provide postretirement benefits (retiree health care and life insurance) for eligible existing retirees and for eligible active employees who may qualify for coverage in the future. The accounting for these plans depend on assumptions made by management, which are used by actuaries we engage to calculate the projected and accumulated benefit obligations and the annual expense recognized for these plans. The assumptions used in developing the required estimates primarily include discount rates, expected return on plan assets for the funded plans, compensation increase rates, retirement rates, mortality rates and, for postretirement benefits, retirement rates and levels of a company-provided subsidy.

We determined the assumed discount rate based on a hypothetical AA yield curve represented by a series of annualized individual discount rates. Each underlying bond issue is required to have a credit rating of Aa or better by Moody's Investors Service or a credit rating of AA or better by Standard & Poor's Global Ratings. We consider the underlying types of bonds and our projected cash flows of the plans in evaluating the yield curve selected. The use of a different discount rate would impact net pension and postretirement benefit costs and benefit obligations. In determining the expected return on plan assets, we use a "building block" approach, which incorporates historical experience, our pension plan investment guidelines, asset allocation, and expectations for long-term rates of return. The use of a different rate of return would impact net pension costs. A one-half percentage point change in the assumed discount rate and return on plan asset rate would have the following effects (dollars in millions):

		Increase (Decrease) in	
Assumptions	Percentage Change	2018 Net Annual Benefit Cost	2017 Projected Benefit Obligation
Pension Benefits:			
Discount rate	0.5% increase	$ (7)	$ (92)
Discount rate	0.5% decrease	7	102
Expected return on plan assets	0.5% increase	(7)	N/A
Expected return on plan assets	0.5% decrease	7	N/A
Postretirement Benefits:			
Discount rate	0.5% increase	$ (1)	$ (10)
Discount rate	0.5% decrease	1	11

Compensation increase rates are based on historical experience and anticipated future management actions. Retirement rates are based primarily on actual plan experience, while standard actuarial tables are used to estimate mortality rates.

We no longer have significant exposure to health care cost trend rates due to the modifications we made to our U.S. postretirement health care plan to limit the increase in the annual amount we pay for retiree health care coverage for certain current and future retirees to 3% and to require retiree medical plan participants to purchase individual coverage in the Affordable Insurance Exchanges or individual Medicare marketplace effective January 1, 2016 using a company-funded subsidy based upon years of service at retirement.

Results that differ from these assumptions are accumulated and amortized over future periods and, therefore, generally affect the net benefit cost of future periods. The sensitivity of assumptions reflects the impact of changing one assumption at a time and is specific to conditions at the end of 2017. Economic factors and conditions could affect multiple assumptions simultaneously, and the effects of changes in assumptions are not necessarily linear.

See Note 9 to our consolidated financial statements in Part II, Item 8 of this report for additional information regarding costs, plan obligations, plan assets discount rates and other assumptions.

INCOME TAXES

We record income taxes (benefit) under the asset and liability method. Under this method, deferred tax assets and liabilities are recognized based on the future tax consequences to temporary differences between the financial statement carrying values of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply in the years in which the temporary differences are expected to be recovered or paid.

The 2017 Tax Act amends the Internal Revenue Code to reduce tax rates and modify policies, credits and deductions. For businesses, the 2017 Tax Act reduces the corporate federal tax rate from a maximum of 35% to a flat 21%. The provisional effect on deferred tax assets and liabilities of the change in tax rates was recognized in earnings in the period ended December 31, 2017, which was when the change was enacted.

A reduction of the carrying values of deferred tax assets by a valuation allowance is required if, based on the available evidence, it is more likely than not that such assets will not be realized. The need to establish valuation allowances for deferred tax assets is assessed periodically. In assessing the requirement for, and amount of, a valuation allowance in accordance with the more-likely-than-not standard, we give appropriate consideration to all positive and negative evidence related to the realization of the deferred tax assets. This assessment considers, among other matters, the nature, frequency and severity of current and cumulative losses, forecasts of future profitability, the duration of statutory carryforward periods, our experience with operating loss and tax credit carryforwards not expiring unused and tax planning strategies. A history of cumulative losses for a certain threshold period is a significant form of negative evidence used in the assessment, and we are required to have a policy regarding the duration of the threshold period. We believe the historical cyclical nature of our operations show economic

cycles ranging from 7 to 10 years with demand troughs historically showing recovery over four years. Accordingly, we have a policy of four years as our threshold period for cumulative losses.

We weigh, based upon the level of objectivity, all available evidence in our assessment related to the realization of deferred tax assets. Our ability to generate sufficient taxable income in the future, taking into consideration federal foreign tax credits limitations and expirations and state laws on NOL expirations, will determine the need for a valuation allowance. The 2017 Tax Act made significant and material changes to the federal tax system related to the taxation of economic activity within and outside the United States, including a transition tax on unremitted foreign earnings, changes to the foreign tax credits system, carryforward periods and other limitations thereon. Our ability to realize our deferred tax assets, including our foreign tax credit carryforwards, is subject to further clarification of the 2017 Tax Act. As a result, the actual impact on the realizability of our net deferred tax assets may vary from the estimated amount due to uncertainties in our preliminary assessment and estimate. Amounts adjusted in the measurement period for resolution of such uncertainties under SEC Staff Accounting Bulletin No. 118 will be recorded as discrete items in the period in which the accounting for these items is complete.

We recognize the tax benefits of an uncertain tax position only if those benefits are more likely than not to be sustained upon examination by the relevant taxing authorities. Unrecognized tax benefits are subsequently recognized at the time the more-likely-than-not recognition threshold is met, the tax matter is effectively settled or the statute of limitations for the relevant taxing authority to examine and challenge the tax position has expired, whichever is earlier.

See Note 15 to our consolidated financial statements in Part II, Item 8 of this report for additional information regarding these items. We do not anticipate that resolution of such items will result in a material change to our estimate of the effective tax rate or the impact on cash paid for taxes.

Recently Issued Accounting Pronouncements

See Note 2, Recent Accounting Pronouncements, to the consolidated financial statements in Part II, Item 8 of this report for information related to new accounting standards.

Forward-Looking Statements

This report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 related to management’s expectations about future conditions. Any forward-looking statements represent our views only as of today and should not be relied upon as representing our views as of any subsequent date, and we undertake no obligation to update any forward-looking statement. Forward-looking statements include, but are not limited to, statements under the following headings: (1) “Business” about: (a) the availability of synthetic gypsum and sufficiency of energy supplies; and (b) demand for new products and systems that meet regulatory and customer sustainability standards and preferences and our ability to provide such products and systems to maintain our competitive position; (2) “Risk Factors” about significant factors that may adversely affect us and our industry; (3) “Legal Proceedings” and "Legal Contingencies" about the outcome and effect of ongoing and future legal and governmental proceedings; and (4) “Management’s Discussion and Analysis” about: (a) market conditions and outlook, including anticipated growth in new residential and nonresidential construction and repair and remodel spending, and the construction industries in the U.S. and Canada, anticipated growth or decline in countries within the UBBP territory, UBBP's effect on the cyclicality of our North American businesses, U.S. industry shipments of gypsum board, demand for gypsum wallboard and industry capacity utilization rate, and our selling prices and margins; (b) our liquidity outlook, including our expected capital expenditures, selling and administrative expenses, and interest and tax payments, and the funding thereof, our estimate of our effective tax rate and the impact on cash paid for taxes, the timing and funding of our stock repurchase program, UBBP's dividend policy and its ability to self-fund, and cash requirements and adequacy of resources to fund them; and (c) future contributions to our pension plans.

Some of the risk factors that affect our business and financial results are discussed in this report under the caption “Risk Factors.” You should recognize that actual business, market or other conditions, including the risk factors discussed in “Risk Factors” and those described elsewhere in this report or in our other Securities and Exchange Commission filings, could cause our actual results to differ materially from those stated in the forward-looking statements.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We use derivative instruments to manage selected commodity price and foreign currency exposures. We do not use derivative instruments for speculative trading purposes, and we typically do not hedge beyond six years.

COMMODITY PRICE RISK

We use swap contracts to manage our exposure to fluctuations in commodity prices associated with anticipated purchases of natural gas. Currently, a significant portion of our anticipated purchases of natural gas is hedged for 2018. The aggregate notional amount of these hedge contracts in place as of December 31, 2017 was 38 million mmBTUs, and they mature by December 31, 2022. We review our positions regularly and make adjustments as market and business conditions warrant. The fair value of these contracts was a $12 million unrealized loss as of December 31, 2017.

A sensitivity analysis was prepared to estimate the potential change in the fair value of our natural gas hedge contracts assuming a hypothetical 10% change in market prices. Based on the results of this analysis, which may differ from actual results, the potential change in the fair value of our natural gas hedge contracts as of December 31, 2017 and 2016 was $9 million and $10 million, respectively. This analysis does not consider the underlying exposure.

FOREIGN CURRENCY EXCHANGE RISK

We have foreign exchange forward contracts to hedge forecasted purchases of products and services denominated in foreign currencies. The notional amount of these contracts was $95 million as of December 31, 2017, and they mature by December 31, 2018. The fair value of these contracts was a $3 million unrealized loss as of December 31, 2017.

A sensitivity analysis was prepared to estimate the potential change in the fair value of our foreign exchange forward contracts assuming a hypothetical 10% change in foreign exchange rates. Based on the results of this analysis, which may differ from actual results, the potential change in the fair value of our foreign exchange forward contracts as of December 31, 2017 and 2016 was $11 million and $9 million, respectively. This analysis does not consider the underlying exposure.

INTEREST RATE RISK

As of December 31, 2017, all of our outstanding debt was fixed-rate debt. Consequently, our debt is not subject to risk from changing interest rates.

A sensitivity analysis was prepared to estimate the potential change in fair value of our marketable securities portfolio assuming a hypothetical 100-basis-point increase in interest rates. Based on the results of this analysis, which may differ from actual results, the potential change in fair value of our marketable securities as of December 31, 2017 and 2016 was immaterial in both years.

See Notes 1 and 7 to the consolidated financial statements in Part II, Item 8 for additional information regarding our financial exposures.

Item 8.FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

All other schedules have been omitted because they are not required or applicable or the information is included in the consolidated financial statements or notes thereto.

USG CORPORATION
CONSOLIDATED STATEMENTS OF INCOME

(millions, except share and per-share data)	Years Ended December 31,		
	2017	2016	2015
Net sales	$ 3,204	$ 3,017	$ 2,913
Cost of products sold	2,539	2,312	2,263
Gross profit	665	705	650
Selling and administrative expenses	298	304	302
Long-lived asset impairment charges	—	10	—
Recovery of receivable	—	(3)	(6)
Gain on disposal of shipping operations, net	—	—	(1)
Operating profit	367	394	355
Income from equity method investments	59	49	48
Interest expense	(69)	(145)	(163)
Interest income	4	4	2
Income and gain from the sale of equity method investment to related party	—	—	13
Loss on extinguishment of debt	(22)	(37)	(19)
Other (expense) income, net	(4)	9	—
Income from continuing operations before income taxes	335	274	236
Income tax (expense) benefit	(238)	(63)	740
Income from continuing operations	97	211	976
(Loss) income from discontinued operations, net of tax	(9)	20	15
Gain on sale of discontinued operations, net of tax	—	279	—
Net income	$ 88	$ 510	$ 991
Earnings per common share - basic:			
Income from continuing operations	$ 0.67	$ 1.45	$ 6.70
(Loss) income from and gain on sale of discontinued operations	(0.06)	2.04	0.11
Net income	$ 0.61	$ 3.49	$ 6.81
Earnings per common share - diluted:			
Income from continuing operations	$ 0.66	$ 1.44	$ 6.62
(Loss) income from and gain on sale of discontinued operations	(0.06)	2.02	0.11
Net income	$ 0.60	$ 3.46	$ 6.73
Average common shares	144,447,488	145,929,506	145,457,208
Dilutive awards under long-term incentive plan	2,263,358	1,731,473	1,624,866
Deferred shares for non-employee directors	—	—	164,526
Average diluted common shares	146,710,846	147,660,979	147,246,600

See accompanying Notes to Consolidated Financial Statements

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USG CORPORATION
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(millions)	Years Ended December 31,		
	2017	2016	2015
Net income	$ 88	$ 510	$ 991
Other comprehensive income (loss), net of tax:			
Derivatives qualifying as cash flow hedges:			
(Loss) gain on derivatives qualifying as cash flow hedges, net of tax (benefit) of ($10), $2, and $4, respectively	(14)	1	(5)
Less: Reclassification adjustment for loss on derivatives included in net income, net of tax (benefit) of ($3), ($4), and $2, respectively	(3)	(6)	(9)
Derivatives qualifying as cash flow hedges, net of tax (benefit) of ($7), $6, and $2, respectively	(11)	7	4
Pension and postretirement benefits:			
Changes in pension and postretirement benefits, net of tax (benefit) of ($27), ($19), and $6, respectively	(65)	(34)	74
Less: Amortization of prior service benefit cost included in net periodic benefit cost, net of tax (benefit) of ($10), ($7), and ($1), respectively	(14)	(9)	(7)
Pension and postretirement benefits, net of tax (benefit) of ($17), ($12), and $7, respectively	(51)	(25)	81
Foreign currency translation:			
Changes in foreign currency translation, net of tax of $0 in all periods	58	(53)	(67)
Less: Translation loss realized upon sale of foreign entities, net of tax of $0 in all periods	—	—	(6)
Foreign currency translation, net of tax of $0 in all periods	58	(53)	(61)
Other comprehensive (loss) income, net of tax	(4)	(71)	24
Comprehensive income	$ 84	$ 439	$ 1,015

See accompanying Notes to Consolidated Financial Statements

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USG CORPORATION
CONSOLIDATED BALANCE SHEETS

(millions, except share data)	As of December 31, 2017	As of December 31, 2016
Assets		
Cash and cash equivalents	$ 394	$ 427
Short-term marketable securities	62	62
Receivables (net of reserves: 2017 - $9 and 2016 - $8)	233	183
Inventories	252	236
Income taxes receivable	15	1
Other current assets	35	40
Total current assets	991	949
Long-term marketable securities	37	29
Property, plant and equipment, net	1,762	1,707
Deferred income taxes	287	492
Equity method investments	686	628
Goodwill and intangible assets	43	8
Other assets	45	56
Total assets	$ 3,851	$ 3,869
Liabilities and Stockholders' Equity		
Accounts payable	$ 280	$ 237
Accrued expenses	135	175
Income taxes payable	—	10
Total current liabilities	415	422
Long-term debt	1,078	1,083
Deferred income taxes	4	4
Pension and other postretirement benefits	326	290
Other liabilities	183	184
Total liabilities	2,006	1,983
Stockholders' Equity:		
Preferred stock – $1 par value, authorized 36,000,000 shares; outstanding - none	—	—
Common stock – $0.10 par value; authorized 200,000,000 shares; issued: 2017 - 146,513,000 shares and 2016 - 146,167,000 shares	15	15
Treasury stock at cost; 2017 - 5,571,000 shares and 2016 - 0 shares	(169)	—
Additional paid-in capital	3,057	3,038
Accumulated other comprehensive loss	(389)	(385)
Retained earnings (accumulated deficit)	(669)	(782)
Total stockholders' equity	1,845	1,886
Total liabilities and stockholders' equity	$ 3,851	$ 3,869

See accompanying Notes to Consolidated Financial Statements

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USG CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS

(millions)	Years Ended December 31, 2017	2016	2015
Operating Activities			
Net income	$ 88	$ 510	$ 991
Less: (Loss) income from discontinued operations, net of tax	(9)	20	15
Less: Gain on sale of discontinued operations, net of tax	—	279	—
Income from continuing operations	97	211	976
Adjustments to reconcile income from continuing operations to net cash:			
Depreciation, depletion, and amortization	132	134	131
Loss on extinguishment of debt	22	37	19
Long-lived asset impairment charges	—	10	—
Recovery of receivable	—	(3)	(6)
Share-based compensation expense	18	18	14
Deferred income taxes	255	57	(742)
(Loss) gain on asset dispositions	1	(9)	(13)
Gain from the sale of equity method investment to related party	—	—	(6)
Income from equity method investments	(59)	(49)	(50)
Dividends received from equity method investments	42	47	38
Pension settlement	12	20	1
(Increase) decrease in working capital			
Receivables	(32)	6	21
Income taxes receivable	(12)	3	(3)
Inventories	(13)	(20)	(16)
Other current assets	(3)	9	1
Payables	20	21	(16)
Accrued expenses	(36)	(39)	(61)
Decrease in other assets	4	—	4
Decrease in pension and other postretirement benefits	(57)	(142)	(28)
Decrease in other liabilities	(13)	(6)	(7)
Other, net	4	9	22
Net cash provided by operating activities of continuing operations	382	314	279
Net cash provided by operating activities of discontinued operations	—	59	52
Net cash provided by operating activities	$ 382	$ 373	$ 331
Investing Activities			
Purchases of marketable securities	(105)	(274)	(246)
Sales or maturities of marketable securities	97	413	170
Capital expenditures	(168)	(83)	(87)
Proceeds from asset dispositions	2	12	58
Net proceeds from the sale of equity method investment to related party	—	—	52
Acquisition of business	(52)	—	—
Return of capital	—	1	—
Insurance proceeds	1	1	—
Return (deposit) of restricted cash	—	9	(8)
Net cash (used for) provided by investing activities of continuing operations	(225)	79	(61)

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Net cash provided by (used for) investing activities of discontinued operations	6	667	(2)
Net cash (used for) provided by investing activities	$ (219)	$ 746	$ (63)
Financing Activities			
Issuance of debt	500	—	350
Repayment of debt	(521)	(1,131)	(386)
Payment of debt issuance fees	(8)	—	(6)
Issuance of common stock	15	4	6
Repurchase of common stock	(184)	—	—
Repurchases of common stock to satisfy employee tax withholding obligations	(4)	(2)	(8)
Net cash used for financing activities of continuing operations	$ (202)	$ (1,129)	$ (44)

(continued on the next page)

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USG CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
(millions)	2017	2016	2015
Effect of exchange rate changes on cash	6	(5)	(10)
Net (decrease) increase in cash and cash equivalents from continuing operations	(39)	(741)	164
Net increase in cash and cash equivalents from discontinued operations	6	726	50
Change in cash balance included in discontinued operations	—	—	(3)
Net (decrease) increase in cash and cash equivalents	$ (33)	$ (15)	$ 211
Cash and cash equivalents at beginning of period	427	442	231
Cash and cash equivalents at end of period	$ 394	$ 427	$ 442
Supplemental Cash Flow Disclosures:			
Interest paid, net of interest capitalized	$ 82	$ 153	$ 158
Income taxes paid, net of refunds received	10	4	—
Noncash Investing and Financing Activities:			
Amount in accounts payable for capital expenditures	18	15	5
Reversal of USG Boral Building Products earnout	—	(24)	—

See accompanying Notes to Consolidated Financial Statements

USG CORPORATION
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(millions, except share data)	Common Shares Issued (000)	Treasury Shares (000)	Common Stock	Treasury Stock	Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Retained Earnings (Deficit)	Stockholders' Equity	Non-controlling Interest	Total
Balance as of January 1, 2015	144,768	—	$ 14	$ —	$ 3,014	$ (338)	$ (2,283)	$ 407	$ 1	$ 408
Net income							991	991		991
Other comprehensive income						24		24		24
Share-based compensation					15			15		15
Stock issuances	899	283	1	8	(2)			7		7
Repurchase of common stock		(283)		(8)				(8)		(8)
Changes in noncontrolling interest								—	(1)	(1)
Balance as of December 31, 2015	145,667	—	$ 15	$ —	$ 3,027	$ (314)	$ (1,292)	$ 1,436	$ —	$ 1,436
Net income							510	510		510
Other comprehensive loss						(71)		(71)		(71)
Share-based compensation					18			18		18
Tax deficiencies in share-based compensation					(11)			(11)		(11)
Stock issuances	500	85	—	2	4			6		6
Repurchase of common stock		(85)		(2)				(2)		(2)
Balance as of December 31, 2016	146,167	—	$ 15	$ —	$ 3,038	$ (385)	$ (782)	$ 1,886	$ —	$ 1,886
Impact due to adoption of ASU 2016-09							25	25		25
Net income							88	88		88
Other comprehensive loss						(4)		(4)		(4)
Share-based compensation					18			18		18
Stock issuances	346	577	—	19	(5)			14		14
Repurchase of common stock		(6,148)		(188)				(188)		(188)
Other					6			6		6
Balance as of December 31, 2017	146,513	(5,571)	$ 15	$ (169)	$ 3,057	$ (389)	$ (669)	$ 1,845	$ —	$ 1,845

See accompanying Notes to Consolidated Financial Statements

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

In the following Notes to Consolidated Financial Statements, "USG," "we," "our" and "us" refer to USG Corporation and its subsidiaries included in the consolidated financial statements, except as otherwise indicated or as the context otherwise requires.

1. Significant Accounting Policies

Nature of Operations

USG, through our subsidiaries and joint ventures, is a leading manufacturer of building materials and innovative solutions. We produce a wide range of products for use in new residential, new nonresidential, and residential and nonresidential repair and remodel construction as well as products used in certain industrial processes. Our products are distributed through building materials dealers, home improvement centers and other retailers and specialty wallboard distributors and sold directly to contractors.

Segments

During the fourth quarter of 2017, we realigned our operating structure to reflect changes in our organizational structure and management's operation and view of our businesses. Our realigned operating structure is generally aligned by product type and consists of three divisions, in addition to our USG Boral Building Products, or UBBP, our joint ventures in Asia, Australasia and the Middle East: Gypsum, Performance Materials and Ceilings. The operations of the divisions are similar throughout North America.

This change to our operating structure modified how the business is managed and the financial information received by the chief operating decision maker to assess operating performance and allocate resources, and thus, triggered a review of our segment structure. Effective for the quarter ended December 31, 2017, we changed the composition of our reportable segments to reflect this change. We now have five reportable segments: U.S. Wallboard and Surfaces, U.S. Performance Materials, U.S. Ceilings, Canada, and UBBP. Our prior period results have been recast to reflect these changes and present comparative year over year information by segment. See Note 14, Segments.

Our reportable segments are determined considering both qualitative and quantitative metrics for aggregation of the product type within geographies for which discrete financial information is available. Our U.S. Wallboard and Surfaces, U.S. Performance Materials and U.S. Ceilings reportable segments were identified based on products manufactured and marketed. Our Canada segment is a separately reportable segment, as while it has similar qualitative factors to U.S. operations, it has different quantitative metrics and, therefore, cannot be aggregated. Our operating segments in Mexico and Latin America, as well as our mining operation in Little Narrows, Nova Scotia, Canada, which we indefinitely idled in 2016, and our shipping company, which we exited in 2015, are now included in Other as reconciling items to our consolidated segments. There has been no change to our UBBP segment.

Consolidation and Presentation

Our consolidated financial statements include the accounts of USG Corporation and its majority-owned subsidiaries. Entities in which we have more than a 20% but not more than 50% ownership interest are accounted for using the equity method of accounting. All intercompany balances and transactions are eliminated in consolidation.

Certain other reclassifications have been made to prior year amounts in order to conform with current year presentation. On our consolidated balance sheet, we reclassified the balance of our intangible assets from '"Other assets" to "Goodwill and intangible assets."

Use of Estimates

The preparation of our consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions. These estimates and assumptions affect the reported amounts of assets, liabilities, revenues and expenses. Actual results could differ from these estimates.

Revenue Recognition

We recognize revenue when shipment is received by the customer. We enter into agreements with customers to offer rebates, generally based on achievement of specified sales levels and various marketing allowances that are common industry practice. Estimated reductions to revenue for customer programs and incentive offerings, including promotions and other volume–based incentives, are recorded in the period in which the sale occurs. Provisions for early payment discounts are accrued in the same period in which the sale occurs.

Shipping and Handling Costs

Shipping and handling costs billed to customers are included in net sales and the related costs are presented in cost of products sold.

Advertising

Advertising expenses consist of media advertising and related production costs and sponsorships. We charge advertising expenses to earnings as incurred. These expenses amounted to $10 million, $12 million and $16 million for the years ended December 31, 2017, 2016 and 2015, respectively, and are included in "Selling and administrative expenses" in our consolidated statements of income.

Research and Development

We charge research and development expenditures to earnings as incurred. These expenditures amounted to $23 million, $24 million and $23 million for the years ended December 31, 2017, 2016 and 2015, respectively, and are included in "Cost of products sold" and "Selling and administrative expenses" in our consolidated statements of income.

Legal Costs

We expense legal costs as incurred.

Income Taxes

We record income tax expense (benefit) under the asset and liability method. Under this method, deferred tax assets and liabilities are recognized based on temporary differences between the financial statement carrying values of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply in the years in which the temporary differences are expected to be recovered or paid. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in earnings in the period when the change is enacted. Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not that a tax benefit will not be realized.

A reduction of the carrying values of deferred tax assets by a valuation allowance is required if, based on all available evidence, it is more likely than not that such assets will not be realized. The need to establish valuation allowances for deferred tax assets is assessed at each reporting date. In assessing the requirement for, and amount of, a valuation allowance in accordance with the more-likely-than-not standard, we give appropriate consideration to all positive and negative evidence related to the realization of the deferred tax assets. This assessment considers, among other matters, the nature, frequency and severity of current and cumulative losses, forecasts of future profitability, the duration of statutory carryforward periods, our experience with operating loss and tax credit carryforwards not expiring unused and tax planning strategies.

A history of cumulative losses for a certain threshold period is a significant form of negative evidence used in the assessment, and we are required to have a policy regarding the duration of the threshold period. We believe the historical cyclical nature of our operations show economic cycles ranging from 7 to 10 years with demand troughs historically showing recovery over four years. Accordingly, we have a policy of four years as our threshold period for cumulative losses.

Inventory Valuation

All of our inventories are stated at the lower of cost or net realizable value and are valued under the average cost method. Our inventories include materials, labor and applicable factory overhead costs. Depreciation associated with manufacturing assets is excluded from inventory cost but is included in cost of products sold.

Earnings per Share

Basic earnings per share is based on the weighted average number of common shares outstanding. Diluted earnings per share is based on the weighted average number of common shares outstanding plus the dilutive effect, if any, of market share units, or MSUs, restricted stock units, or RSUs, performance shares, stock options and the deferred shares associated with our deferred compensation program for non-employee directors. The shares that were not included in the computation of diluted earnings per share for those periods because their inclusion would be anti-dilutive were as follows:

(millions, common shares)	2017	2016	2015
Stock options, RSUs, MSUs and performance shares	0.7	1.5	1.9
Deferred shares associated with a deferred compensation program for non-employee directors	0.2	0.2	—

Business Combinations

Business combinations are accounted for using the acquisition method of accounting. The purchase price of the acquisition is allocated to the tangible and intangible assets acquired and liabilities assumed based on their fair values at the acquisition date. The calculation of fair value of the identified intangible assets are determined using cash flow models following the income approach or a discounted market-based methodology approach. Significant inputs include projected revenues, gross margins, operating expenses, estimated attrition rate and discount rates. The excess of fair value of the purchase price over the fair values of the tangible and identifiable intangible assets acquired and liabilities assumed is recorded as goodwill. During the measurement period, which may be up to one year from the acquisition date, we may record adjustments to the net assets with the corresponding offset to goodwill. The results of operations of the acquired business are included in our consolidated results of operations beginning on the date of the acquisition. Acquisition-related expenses, including legal costs, due diligence costs and business valuation costs, are expensed as incurred.

Cash and Cash Equivalents

Cash and cash equivalents include highly liquid investments, primarily money market funds, with maturities of three months or less at the time of purchase.

Marketable Securities

Marketable securities are classified as available-for-sale securities and reported at fair value, with unrealized gains and losses excluded from earnings and reported in accumulated other comprehensive income (loss), or AOCI. If it is deemed that marketable securities have unrealized losses that are other than temporary, these losses will be recorded in earnings immediately. Situations in which losses may be considered other than temporary include when we have decided to sell a security or when it is more likely than not that we will be required to sell the security before we recover its amortized cost basis. Cost basis for securities sold are determined on a first-in-first-out basis.

Receivables

Receivables are recorded at net realizable value, which includes allowances for cash discounts and doubtful accounts. We review the collectability of receivables on an ongoing basis and reserve for receivables determined to be uncollectible. This determination is based on the delinquency of the account, the financial condition of the customer and our collection experience.

We include short-term financing receivables in "Receivables" and long-term financing and loan receivables in "Other assets" on our consolidated balance sheets. Financing and loan receivables are recorded at net realizable value which includes an allowance for credit losses. We review the collectability of financing and loan receivables on an ongoing basis and reserve for financing and loan receivables determined to be uncollectible. This determination is based on the delinquency of the account and the financial condition of the other party. As of December 31, 2017, the allowance for credit losses was immaterial.

Investments in Unconsolidated Joint Ventures

The equity method of accounting is used for investments in joint ventures that we do not consolidate, but over which we have the ability to exercise significant influence. These investments are initially recorded at cost and subsequently adjusted for our share of the net income or loss and cash contributions and distributions to or from these entities. If the underlying net assets in our investments are denominated in a foreign currency, we adjust the value of our investment for translation gains or losses with a corresponding adjustment to our AOCI.

We are required to pay Boral, our UBBP joint venture partner, an earnout of $50 million in 2019 if certain financial metrics are met. At least quarterly, we review the probability of this earnout payment to Boral. At December 31, 2017, we concluded that it is currently not probable that the earnout target will be achieved. If our conclusion on the probability of achievement were to change, we will record a liability representing the present value of the second earnout payment with a corresponding increase to our investment.

Losses in the value of an equity method investment that are other than temporary are recognized when the current fair value of the investment is less than its carrying value. We review our investments in equity method investments for impairment whenever factors indicate an other than temporary loss in value. If we conclude a loss in value is other than temporary, an impairment charge is recognized for the difference between the investment's carrying value and its estimated fair value.

Property, Plant and Equipment

Property, plant and equipment is recorded at cost. We record depreciation of property, plant and equipment on a straight-line basis over the expected useful lives of the assets. We have determined estimated useful lives to be 50 years for buildings and improvements, a range of 10 to 25 years for machinery and equipment, and a range of 5 to 7 years for computer software and systems development costs. Leasehold improvements are capitalized and amortized over the shorter of the remaining lease term or remaining economic useful life. We compute depletion on a basis calculated to spread the cost of gypsum and other applicable resources over the estimated quantities of material recoverable.

We capitalize interest during the active construction period of major capital projects. Capitalized interest is added to the cost of the underlying assets and is depreciated over the useful lives of those assets. We recorded capitalized interest of $3 million, $1 million and $3 million for the years ended December 31, 2017, 2016 and 2015, respectively. Facility start-up costs that cannot be capitalized are expensed as incurred and recorded in cost of products sold.

Property, plant and equipment is reviewed for impairment when indicators of a potential impairment are present by comparing the carrying values of the assets with their estimated future undiscounted cash flows. If we determine an impairment exists, the asset is written down to fair value.

Intangible Assets

We perform impairment tests for intangible assets with indefinite useful lives once a year, or more frequently if events occur or circumstances change that would more likely than not reduce the fair value of an intangible asset below its carrying value. The impairment test for assets with indefinite lives consists of a comparison of the fair value of the asset with its carrying value. If the carrying value of an intangible asset exceeds its fair value, an impairment loss is recognized in an amount equal to that excess. Intangible assets determined to have indefinite useful lives, primarily composed of trade names, are not amortized. An income approach is used for valuing trade names. Assumptions used in the income approach include projected revenues and assumed royalty, long-term growth and discount rates. As of December 31, 2017 and 2016, our indefinite lived intangibles, which are included in "Goodwill and intangible assets" on our consolidated balance sheets, totaled $19 million and $8 million, respectively.

We perform impairment tests on definite lived intangible assets upon identification of events or circumstances that may indicate the carrying value of the assets might be unrecoverable by comparing their undiscounted cash flows with their carrying value. If we determine impairment exists, the assets are written down to estimated fair value. As of December 31, 2017 and 2016, our definite lived intangibles, which are included in "Goodwill and intangible assets" on our consolidated balance sheets, totaled $8 million and $0 million, respectively.

Goodwill

We perform an impairment test on goodwill as of October 1, or more frequently if events occur or circumstances change that would more likely than not reduce the fair value below its carrying value. In testing goodwill for impairment, we have the option to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the estimated fair value of a reporting unit is less than its carrying value. If we elect to perform a qualitative assessment and determine that an impairment is more likely than not, we are then required to perform a quantitative impairment test, otherwise no further analysis is required. We also may elect not to perform the qualitative assessment and, instead, proceed directly to the quantitative impairment test. We perform a quantitative analysis which involves comparing the current fair value of each reporting unit to its carrying value, including goodwill. If the carrying value of a reporting unit exceeds its fair value, we recognize an impairment loss equal to the difference between the carrying value and the estimated fair value of the reporting unit. As of December 31, 2017 and 2016, goodwill totaled $16 million and $0 million, respectively, and is included in "Goodwill and intangible assets" on our consolidated balance sheets.

Asset Retirement Obligations

Our asset retirement obligations include reclamation requirements as regulated by government authorities related principally to assets such as our mines, quarries, landfills, ponds and wells. The accounting for asset retirement obligations requires estimates by management about the timing of asset retirements, the cost of retirement obligations, discount and inflation rates used in determining fair values and the methods of remediation associated with our asset retirement obligations. We generally use assumptions and estimates that reflect the most likely remediation method on a site-by-site basis. Our estimated liability for asset retirement obligations is revised annually, and whenever events or changes in circumstances indicate that a revision to the estimate is necessary.

In instances where a decrease in the asset retirement obligation is in excess of the related remaining net book value of the asset retirement costs, the excess is recorded to the consolidated statement of income as a reduction in "Cost of products sold." Asset retirement obligations are included in "Other liabilities" on the consolidated balance sheets.

Share-Based Compensation

We award share-based compensation to employees in the form of MSUs, performance shares and RSUs and to non-employee directors in the form of shares of our common stock. All grants under share-based payment programs are accounted for at fair value at the date of grant. We recognize expense on all share-based awards to employees expected to vest over the service period, which is the shorter of the period until the employees' retirement eligibility dates or the service period of the award. We record forfeitures as they occur.

Derivative Instruments

We use derivative instruments to manage selected commodity price and foreign currency exposures. We do not use derivative instruments for speculative trading purposes, and we typically do not hedge beyond six years. All derivative instruments are recorded on the balance sheet at fair value. For derivatives designated as cash flow hedges, the effective portion of changes in the fair value of the derivative is recorded to AOCI, and is reclassified to earnings when the underlying forecasted transaction affects earnings. The ineffective portion of changes in the fair value of the derivative is reported in cost of products sold in the current period. For contracts designated as cash flow hedges, we reassess the probability of the underlying forecasted transactions occurring on a quarterly basis. For derivatives designated as net investment hedges, we record changes in fair value to AOCI. For derivatives not designated as hedging instruments, all changes in fair value are recorded to earnings in the current period. Cash flows from derivative instruments are included in operating activities in our consolidated statements of cash flows.

We use swaps to hedge a significant portion of our anticipated purchases of natural gas to be used in our manufacturing operations. Generally, we hedge the cost of a majority of our anticipated purchases of natural gas over the next 12 months. However, we review our positions regularly and make adjustments as market conditions warrant. The majority of contracts currently in place are designated as cash flow hedges and the remainder are not designated as hedging instruments.

We have operations outside of the United States and use forward contracts to hedge the risk of changes in cash flows resulting from selected forecasted intercompany and third-party sales or purchases, as well as intercompany loans, denominated in non-U.S. currencies, or to hedge the risk of selected changes in our net investment in foreign subsidiaries. These contracts are designated as either cash flow or net investment hedges or are not designated as hedging instruments.

Foreign Currency Translation

We translate foreign-currency-denominated assets and liabilities into U.S. Dollars at the exchange rates existing as of the respective balance sheet dates. We translate income and expense items at the average exchange rates during the respective periods. We record translation adjustments resulting from fluctuations in exchange rates to AOCI on our consolidated balance sheets.

We record transaction gains and losses to earnings. We recorded a total transaction loss of $4 million in 2017, a gain of $3 million in 2016 and a loss of $7 million in 2015. Transaction gains and losses are included in "Other (expense) income, net" in our consolidated statements of income.

Fair Value Measurements

Certain assets and liabilities are required to be recorded at fair value. The estimated fair values of those assets and liabilities have been determined using market information and valuation methodologies. Changes in assumptions or estimation methods could affect the fair value estimates. However, we do not believe any such changes would have a material impact on our financial condition, results of operations or cash flows. There are three levels of inputs that may be used to measure fair value:

- Level 1 – Quoted prices for identical assets and liabilities in active markets;
- Level 2 – Quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in markets that are not active; and model-derived valuations in which all significant inputs and significant value drivers are observable in active markets; and
- Level 3 – Valuations derived from valuation techniques in which one or more significant inputs or significant value drivers are unobservable.

Certain assets and liabilities are measured at fair value on a nonrecurring basis rather than on an ongoing basis, but are subject to fair value adjustments in certain circumstances, such as an acquisition, when evidence of impairment or when a new liability is being established that requires fair value measurement.

2. Recent Accounting Pronouncements

Recently Adopted Accounting Pronouncements

We adopted Accounting Standards Update, or ASU 2017-04, "Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment," on November 30, 2017 in connection with our acquisition of Ceilings Plus, which eliminates Step 2 from the goodwill impairment test. Under the new standard, an impairment charge would be recognized for the amount by which the carrying value exceeds the reporting unit's fair value; however, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. The adoption did not have an impact on our consolidated financial statements.

We adopted ASU 2016-09, "Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting," on January 1, 2017. This ASU simplifies certain aspects of accounting for employee share-based payments. Upon adoption, we recorded to retained earnings a $25 million cumulative-effect adjustment for previously unrecognized excess tax benefits and an immaterial cumulative-effect adjustment for the reversal of cumulative forfeiture estimates to record forfeitures as they occur.

Recently Issued Accounting Pronouncements

In August 2017, the Financial Accounting Standards Board, or FASB, issued ASU 2017-12, "Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities," which expands and refines hedge accounting for both non-financial and financial risk components and aligns the recognition and presentation of the effects of the hedging instrument and the hedged item in the financial statements. The new standard will be effective for us on January 1, 2019. We do not expect the adoption of ASU 2017-12 to have a significant impact to our consolidated financial statements or disclosures.

In March 2017, the FASB issued ASU 2017-07, "Compensation - Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost," which will require us to disaggregate and present current service cost along with other current compensation costs for employees while presenting other net benefit cost components below operating profit. In addition, only the service cost component of net benefit cost is eligible for capitalization in our inventory and fixed assets. We will retrospectively adopt the standard on January 1, 2018 for the presentation of service cost using the practical expedient and prospectively adopt the capitalization of only service cost into inventory and fixed assets. Select line items from our consolidated statements of income for the years ended December 31, 2017 and 2016 which reflect the changes in presentation of net benefit costs are as follows:

(millions)	Year ended December 31, 2017		Year ended December 31, 2016	
	After Adoption	As Reported	After Adoption	As Reported
Gross profit	$ 656	$ 665	$ 700	$ 705
Operating profit	353	367	396	394
Other net periodic postretirement benefit (costs)	14	—	(2)	—
Net income	88	88	510	510

We do not expect the adoption of ASU 2017-07 to have a significant impact on our other financial statements.

In January 2017, the FASB issued ASU 2017-01, "Business Combinations (Topic 805): Clarifying the Definition of a Business," which clarifies the definition of a business in order to assist in the evaluation of whether transactions should be accounted for as acquisitions or disposals of assets or businesses. We will prospectively adopt the standard on January 1, 2018. The impact of our adoption of ASU 2017-01 will be dependent on the nature of future acquisitions or dispositions, if any.

In November 2016, the FASB issued ASU 2016-18, "Statement of Cash Flows (Topic 230): Restricted Cash," which requires amounts generally described as restricted cash and restricted cash equivalents to be included with cash and cash equivalents when reconciling beginning-of-period and end-of-period total amounts shown on the statement of cash flows. We will adopt the standard on January 1, 2018 using the retrospective approach. The adoption will result in a $9 million reduction of our net cash provided by investing activities on our consolidated statement of cash flows for the year ended December 31, 2016.

In February 2016, the FASB issued ASU 2016-02, "Leases (Topic 842)," which supersedes existing lease guidance to require lessees to recognize assets and liabilities on the balance sheet for the rights and obligations created by long-term leases and to disclose additional quantitative and qualitative information about leasing arrangements. We will adopt the new standard on January 1, 2019 using the modified retrospective approach. As a result of the new standard, we will implement a new lease accounting system, new processes and accounting policies. Further, we anticipate the adoption of ASU 2016-02 will have a significant impact to our consolidated balance sheets and disclosures. We are currently finalizing our accounting policies and analyzing our lease population and, thus, we are unable to quantify the financial statement impact at this time.

In May 2014, the FASB issued ASU 2014-09, "Revenue from Contracts with Customers (Topic 606)," which supersedes the revenue recognition requirements in "Revenue Recognition (Topic 605)," and requires entities to recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Subsequently, the FASB has issued various ASUs to provide further clarification around certain aspects of Topic 606. We will adopt, via the modified retrospective approach, the standard on January 1, 2018 using practical expedients. With our adoption of the new revenue guidance, we will modify the point in time at which we record revenue to be upon shipment for most of our customers and will record an adjustment to opening retained earnings of $2 million. The adoption will not have a significant impact to our consolidated financial statements. However, we will expand our disclosures to include disaggregation of revenue and discussion on the satisfaction of our performance obligations.

3. Acquisitions and Dispositions

Acquisition of Ceilings Plus

On November 30, 2017, we completed our acquisition of Ceilings Plus for $52 million with an expected working capital adjustment to be measured and recorded in 2018. The addition of Ceilings Plus to our U.S. Ceilings segment expands our operations in the specialty ceilings markets. The preliminary fair value of tangible assets acquired, less liabilities assumed, in connection with the Ceilings Plus acquisition was $16 million. The preliminary fair value of intangible assets acquired, which included customer relationships and trade names, totaled $20 million. The resulting preliminary goodwill recorded was $16 million and all is expected to be deductible for tax purposes. The goodwill resulting from this acquisition consists largely of the company's expected future product sales and synergies with the existing U.S. Ceilings product offerings. No impairments were recorded in 2017. The acquisition is immaterial to our consolidated statement of income for the year end December 31, 2017.

Discontinued Operations

On October 31, 2016, we completed the sale of our L&W distribution business to ABC Supply for total cash consideration of $675 million inclusive of the final working capital adjustment and recorded a gain on the sale of $279 million.

For the year ended December 31, 2016, L&W met the criteria to be classified as held for sale and to be presented as a discontinued operation. Accordingly, we reclassified the results of operations and the cash flows of L&W to discontinued operations in our consolidated statements of income and consolidated statements of cash flows for all periods presented.

The summarized financial information related to L&W that has been excluded from continuing operations and reported as a discontinued operation is as follows:

(millions)	For the year ended December 31,	
	2016(a)	2015
Net sales	$ 1,252	$ 1,428
Cost of products sold	1,196	1,387
Gross profit	56	41
Selling and administrative expenses (b)	22	15
Operating profit	34	26
Income tax expense	12	11
Net income from discontinued operations (c)	$ 22	$ 15
Gain on sale of discontinued operations	$ 279	$ —

(a) Operating results for 2016 are presented for the ten months ended October 31, 2016.

(b) The ten month period ended October 31, 2016 included transaction costs of $8 million.

(c) The year ended December 31, 2016 included $2 million of net loss from discontinued operations from our European business, which were sold in 2012.

For the twelve months ended December 31, 2017, we recorded a net loss of $9 million to "(Loss) income from discontinued operations," which reflected a $8 million loss for L&W primarily due to a pension settlement and a loss of $1 million for our European operations which were sold in December 2012.

Additionally, upon the close of the sale, we entered into a supply agreement with L&W. For the year ended December 31, 2017, we recorded sales of $510 million and cash inflows related to payments on trade receivables of $489 million. For the years ended December 31, 2016 and 2015, the sales that were sold by L&W to third party customers were $568 million and $531 million, respectively. For the two months in 2016 after the sale of L&W, we recorded a cash inflow of $102 million related to payments on trade receivables.

4. Equity Method Investments

Equity method investments were as follows:

	December 31, 2017		December 31, 2016	
(millions)	Carrying Value	Ownership Percentage	Carrying Value	Ownership Percentage
USG Boral Building Products	$ 679	50%	$ 621	50%
Other equity method investments	7	33% - 50%	$ 7	33% - 50%
Total equity method investments	$ 686		$ 628	

Investments in USG Boral Building Products (UBBP)

During 2017, UBBP paid cash dividends on earnings through September 2017 of which our 50% share totaled $42 million. As of December 31, 2017, the amount of our consolidated retained earnings which represents undistributed earnings from UBBP is $60 million.

In the event certain U.S. Dollar denominated performance targets are satisfied by UBBP, we are obligated to pay Boral an earnout payment of up to $50 million based on performance through 2019. We have not recorded a liability for this earnout payment as we have concluded that it is currently not probable that the five years performance target will be achieved. In the second quarter of 2016, we reversed a liability with a corresponding reduction to our investment for an earn-out payment that was based on a three years performance target.

Translation gains and losses recorded in other comprehensive income were as follows:

(millions)	2017	2016	2015
Translation gain (loss)	$ 40	$ (30)	$ (23)

Transactions with UBBP

Our U.S. Wallboard and Surfaces and U.S. Performance Materials segments sell products to UBBP. Total sales to UBBP for each of the years ended December 31, 2017, 2016 and 2015 were immaterial.

In 2014, in connection with the formation of UBBP, we contributed our ownership interest in a joint venture in China to UBBP but retained our loan receivable from this joint venture. As of December 31, 2017 and 2016, the loan receivable, including interest, totaled $13 million and $15 million, respectively, and is included in "Other assets" on our consolidated balance sheets.

Investment in Knauf-USG Joint Venture

In 2015, we sold our 50% interest in Knauf/USG Verwaltungs GmbH and Knauf/USG Systems GmbH & Co. KG, or collectively the Knauf-USG joint venture, to our joint venture partner, Knauf Aquapanel GmbH, a subsidiary of Gebr. Knauf Verwaltungsgesellschaft KG (Knauf) for €48 million in cash, or approximately $52 million. The Knauf-USG joint venture manufactured and distributed Aquapanel® brand cement-based panels in Europe (excluding Turkey) and all countries that were part of the former Soviet Union. Affiliates of Knauf are the beneficial owners of approximately 10% of USG's outstanding shares of common stock.

We recorded a gain of approximately $6 million, which is net of $5 million for income taxes payable on the sale. The gross gain and our equity method income in the Knauf-USG joint venture was $13 million for the year ended December 31, 2015 and is recorded in "Income and gain from the sale of equity method investment to related party" in our consolidated statement of income.

Summarized Financial Information

Summarized financial information for our equity method investments is as follows:

Statements of Income

	For the year ended December 31,		
(millions)	2017	2016	2015
USG Boral Building Products:			
Net sales	$ 1,200	$ 1,052	$ 1,003
Gross profit [a]	369	337	278
Operating profit	160	133	124
Net income before taxes	174	142	132
Net income	121	95	101
Net income attributable to USG Boral Building Products	117	99	96
USG share of income from USG Boral Building Products[b]	59	49	48
Other equity method investments[c]:			
USG share of income from other investments accounted for using the equity method	—	—	2
Total income from equity method investments	59	49	50

(a) Year ended December 31, 2016 includes long-lived asset impairment charges of $8 million for China and of $14 million for Oman.
(b) Year ended December 31, 2016 includes long-lived asset impairment charges of $4 million for China and of $4 million for Oman.
(c) Amounts represent our share of income or loss from all equity method investments, other than UBBP.

Balance Sheets

(millions)	December 31, 2017	December 31, 2016
USG Boral Building Products:		
Current assets	$ 438	$ 389
Non-current assets	981	903
Current liabilities[a]	255	211
Long-term debt	10	37
Other non-current liabilities	12	17
Shareholders' equity[b]	1,142	1,027

(a) Includes the current portion of long-term debt of $16 million and $15 million as of December 31, 2017 and 2016, respectively.
(b) Shareholders' equity includes $66 million and $50 million related to non-controlling interests as of December 31, 2017 and 2016, respectively.

5. Marketable Securities

Our investments in marketable securities as of December 31, 2017 and 2016 consisted of the following:

	2017		2016	
(millions)	Amortized Cost	Fair Value	Amortized Cost	Fair Value
Corporate debt securities	$ 68	$ 68	$ 69	$ 69
U.S. government and agency debt securities	6	6	14	14
Asset-backed debt securities	11	11	2	2
Certificates of deposit	13	13	6	6
Municipal debt securities	1	1	—	—
Total marketable securities	$ 99	$ 99	$ 91	$ 91

The realized and unrealized gains and losses as of and for the years ended December 31, 2017, 2016 and 2015 were immaterial.

Contractual maturities of marketable securities as of December 31, 2017 were as follows:

(millions)	Amortized Cost	Fair Value
Due in 1 year or less	$ 62	$ 62
Due in 1-5 years	37	37
Total marketable securities	$ 99	$ 99

Actual maturities may differ from the contractual maturities because issuers of the securities may have the right to prepay them.

6. Debt

Total debt as of December 31 consisted of the following:

(millions)	2017	2016
4.875% senior notes due 2027	$ 500	$ —
5.5% senior notes due 2025	350	350
7.75% senior notes due 2018	—	500
Industrial revenue bonds (due 2028 through 2034)	239	239
Total	$ 1,089	$ 1,089
Less: Unamortized debt issuance costs	11	6
Total	$ 1,078	$ 1,083

Issuance of Senior Notes

During 2017, we issued $500 million of 4.875% senior notes due 2027, referred to as our 4.875% Notes. The net proceeds from the issuance of these notes and cash on hand were used to fund the repurchase of our 7.75% senior notes due 2018, referred to as our 7.75% Notes, and all related costs and expenses. We deferred $7 million of debt issuance costs that are being amortized to interest expense over the term of the 4.875% Notes.

In 2015, we issued $350 million of 5.5% senior notes due 2025, referred to as our 5.5% Notes. The net proceeds from the issuance of these notes and cash on hand were used to fund the repurchase of our 8.375% senior notes due 2018, referred to as our 8.375% Notes, and all related costs and expenses. We deferred approximately $6 million of debt issuance costs that are being amortized to interest expense over the term of the notes.

Repurchases and Redemptions of Senior Notes

During 2017, we repurchased $500 million of our 7.75% Notes through a cash tender offer and subsequent redemption for aggregate consideration of $536 million, including premiums of $20 million and accrued interest of $16 million. For the year ended December 31, 2017, we recorded a pre-tax loss on the early extinguishment of debt of $21 million.

During 2016, we repaid $500 million of our 6.3% senior notes due 2016, referred to as the 6.3% Notes, $250 million of our 7.875% senior notes due 2020, referred to as the 7.875% Notes, and $350 million of our 5.875% senior notes due 2021, referred to as the 5.875% Notes. The retirement of the 6.3% Notes, the 7.875% Notes and the 5.875% Notes included premiums of $30 million and accrued interest of $9 million. As a result of these transactions, we recorded a loss on the early extinguishment of debt, before tax, of $37 million including premiums, write-off of deferred financing fees, debt discount and broker fees.

During 2015, we repurchased $350 million of our 8.375% Notes, through a cash tender offer and subsequent redemption for aggregate consideration, including tender offer premium and accrued and unpaid interest, of $377 million. As a result of the repurchases, we recorded a loss on the early extinguishment of debt of $19 million including the write-off of unamortized debt issuance costs.

Senior Notes

Our senior notes are senior unsecured obligations, rank equally with all of our other existing and future unsecured senior indebtedness and are guaranteed by certain of our domestic subsidiaries. The indentures governing the notes contain events of default, covenants and restrictions that are customary for similar securities, including a limitation on our ability and the ability of certain of our subsidiaries to create or incur secured indebtedness.

Interest rate	5.5%	4.875%
Principal net of discount (in millions) [(a)]	$350	$500
Maturity	March 1, 2025	June 1, 2027
Call date [(b)]	March 1, 2020	June 1, 2022
Mandatory redemption offer	at 101% plus accrued and unpaid interest in the event of a change in control	at 101% plus accrued and unpaid interest in the event of a change in control

(a) Principal amounts exclude unamortized debt issuance costs.

(b) Callable at any time, in whole or in part, prior to the call date at a redemption price equal to 100% of the principal plus a premium (as outlined in the respective indentures), plus any accrued and unpaid interest on the principal amount being called. Callable after the call date at stated redemption prices (as outlined in the applicable indenture), plus any accrued and unpaid interest on the principal amount being called.

Credit Facility

In 2017, we amended and restated our credit facility agreement to, among other things, increase the maximum borrowing limit from $180 million to $220 million. As a result, we recorded a pre-tax loss on extinguishment of debt of $1 million for the year ended December 31, 2017 and incurred $1 million of debt issuance costs. Our amended and restated agreement requires us to maintain a minimum fixed charge coverage ratio in the event excess availability falls below a minimum threshold. Because our excess borrowing availability as of December 31, 2017 of $155 million exceeds this threshold, the requirement to maintain the minimum fixed charge coverage ratio is not applicable. As of December 31, 2017, we were in compliance with the covenants contained in our credit facility.

As of December 31, 2017 and during the year then ended, there were no borrowings under the facility. Outstanding letters of credit as of December 31, 2017 totaled $29 million.

Industrial Revenue Bonds

Our $239 million of industrial revenue bonds have fixed interest rates ranging from 5.5% to 6.4%. The weighted average rate of interest on our industrial revenue bonds is 5.875%. These bonds mature during the years 2028 through 2034.

OTHER INFORMATION

(millions)	December 31, 2017	December 31, 2016
Fair value of debt	$ 1,134	$ 1,129
Accrued interest	12	31

The fair value of our debt was determined using the fair value hierarchy of inputs described in Note 1. The fair values were determined utilizing prices from independent pricing services. The vendors' methodologies utilize various forms of market data, including but not limited to, trade data, yield, spreads, bids and offers. We review the values provided by the independent pricing service for reasonableness by comparing the valuations received from the independent pricing service to valuations from at least one other observable source. We have not adjusted the prices obtained from the independent pricing service. As a result, the fair values are classified as Level 2. See Note 8 for further discussion on fair value measurements.

As of December 31, 2017, the amounts of total debt outstanding maturing in each of the next five years and beyond were as follows:

(millions)	2018 through 2022	After 2022
Debt maturities (principal amounts)	$ —	$ 1,089

7. Derivative Instruments

We use derivative instruments to manage selected commodity price and foreign currency exposures as described below.

Derivative Instruments	Type	Hedged Item	Aggregate Notional Amount	Contracts Maturing Through
Commodity	Natural gas swaps	Purchases of natural gas	38 million mmBTUs*	December 31, 2022
Foreign Exchange	Forward contracts	Purchases of products and services denominated in a foreign currency	$95 million	December 31, 2018

* - millions of British Thermal Units

During 2015, we entered into foreign exchange forward contracts with a notional amount of $35 million to hedge a portion of our net investment in our Knauf-USG joint venture. These forward contracts were designated as net investment hedges and no ineffectiveness was recorded. On December 22, 2015, we completed the sale of our Knauf-USG joint venture and, as a result, we terminated the outstanding foreign exchange forward contracts and reclassified a $1 million net gain realized for these contracts from AOCI to earnings which increased the gain on the sale of the equity method investment. See Note 4 for further discussion on the sale.

COUNTERPARTY RISK, MASTER NETTING ARRANGEMENTS AND BALANCE SHEET OFFSETTING

We are exposed to credit losses in the event of nonperformance by the counterparties to our derivative instruments. As of December 31, 2017, our derivatives were in a $15 million net liability position. All of our counterparties have investment grade credit ratings; accordingly, we anticipate that they will be able to fully satisfy their obligations under the contracts.

All of our derivative contracts are governed by master netting agreements negotiated between us and the counterparties that reduce our counterparty credit exposure. The agreements outline the conditions (such as credit ratings and net derivative fair values) upon which we, or the counterparties, are required to post collateral. As required by certain of our agreements, we had $13 million of collateral posted with our counterparties related to our derivatives as of December 31, 2017. Amounts paid as cash collateral are included in "Receivables" on our consolidated balance sheets.

We have not adopted an accounting policy to offset fair value amounts related to derivative contracts under our master netting arrangements; therefore, individual derivative contracts are reflected on a gross basis, as either assets or liabilities, on our consolidated balance sheets, based on their fair value as of the balance sheet date.

FINANCIAL STATEMENT INFORMATION

The following are the pre-tax effects of derivative instruments on our consolidated statements of income and our consolidated statements of comprehensive income for the years ended December 31, 2017, 2016 and 2015:

	Amount of Gain or (Loss) Recognized in Other Comprehensive Income (Loss) on Derivatives (Effective Portion)			Location of Gain or (Loss) Reclassified from AOCI into Income (Effective Portion)	Amount of Gain or (Loss) Reclassified from AOCI into Income (Effective Portion)		
(millions)	2017	2016	2015		2017	2016	2015
Derivatives Designated as Hedging Instruments							
Commodity contracts	$ (19)	$ 6	$ (14)	Cost of products sold	$ (4)	$ (15)	$ (15)
Foreign exchange contracts	(5)	(3)	12	Cost of products sold	(2)	5	7
Foreign exchange contracts	—	—	1	Income and gain from the sale of equity method investment to related party	—	—	1
Total	$ (24)	$ 3	$ (1)		$ (6)	$ (10)	$ (7)

	Location of Gain or (Loss) Recognized in Income on Derivatives	Amount of Gain or (Loss) Recognized in Income on Derivatives		
(millions)		2017	2016	2015
Derivatives Not Designated as Hedging Instruments				
Commodity contracts	Cost of products sold	$ (1)	$ 1	$ (3)
Foreign exchange contracts	Other (income) expense, net	—	—	2
Total		$ (1)	$ 1	$ (1)

For both commodity contracts and foreign exchange contracts, no ineffectiveness was recorded in 2017, 2016 or 2015.

The fair values of derivative instruments on the consolidated balance sheets are as follows:

	Balance Sheet Location	Fair Value		Balance Sheet Location	Fair Value	
(millions)		12/31/17	12/31/16		12/31/17	12/31/16
Derivatives Designated as Hedging Instruments						
Commodity contracts	Other current assets	$ 1	$ 8	Accrued expenses	$ 6	$ 4
Commodity contracts	Other assets	1	3	Other liabilities	8	5
Foreign exchange contracts	Other current assets	—	1	Accrued expenses	3	1
Total derivatives in hedging relationships		$ 2	$ 12		$ 17	$ 10
Derivatives Not Designated as Hedging Instruments						
Commodity contracts	Other current assets	$ —	$ 1	Accrued expenses	$ —	$ —
Commodity contracts	Other assets	—	—	Other liabilities	—	—
Total derivatives not designated as hedging instruments		$ —	$ 1		$ —	$ —
Total derivatives	Total assets	$ 2	$ 13	Total liabilities	$ 17	$ 10

As of December 31, 2017, we had no derivatives designated as net investment or fair value hedges.

8. Fair Value Measurements

Certain assets and liabilities are required to be recorded at fair value. The fair values of our cash equivalents, equity mutual funds, marketable securities and derivatives were determined using the fair value hierarchy of inputs described in Note 1.

Level	USG Valuation Method
Level 1	Cash equivalents and equity mutual funds consist of money market funds that are valued based on quoted prices in active markets.
Level 2	Marketable securities, including certain cash equivalents, are valued using a "market value" approach. Values are based on quoted prices and other observable market inputs received from data providers.
	Derivatives are valued using the "income" approach such as discounted-cash-flow models and readily observable market data. The inputs for the valuation models are obtained from data providers and include end-of-period spot and forward natural gas prices, foreign currency exchange rates, natural gas price volatility and LIBOR and swap rates for discounting the cash flows implied from the derivative contracts.
Level 3	No level 3 investments.

Our assets and liabilities measured at fair value on a recurring basis were as follows:

	Quoted Prices in Active Markets for Identical Assets (Level 1)		Significant Other Observable Inputs (Level 2)		Significant Unobservable Inputs (Level 3)		Total	
(millions)	12/31/17	12/31/16	12/31/17	12/31/16	12/31/17	12/31/16	12/31/17	12/31/16
Cash equivalents	$ 124	$ 38	$ 24	$ 34	$ —	$ —	$ 148	$ 72
Equity mutual funds	6	5	—	—	—	—	6	5
Marketable securities:								
Corporate debt securities	—	—	68	69	—	—	68	69
U.S. government and agency debt securities	—	—	6	14	—	—	6	14
Asset-backed debt securities	—	—	11	2	—	—	11	2
Certificates of deposit	—	—	13	6	—	—	13	6
Municipal debt securities	—	—	1	—	—	—	1	—
Derivative assets	—	—	2	13	—	—	2	13
Derivative liabilities	—	—	(17)	(10)	—	—	(17)	(10)

9. Employee Retirement Plans

We maintain defined benefit pension plans for most of our employees. Most of these plans require employee contributions in order to accrue benefits. Benefits payable under the plans are based on employees' years of service and compensation during specified years of employment. Effective December 31, 2010, we amended the USG Corporation defined benefit pension plan to replace the final average pay formula with a cash balance formula for employees hired after that date. In November 2016, we amended the U.S. pension plan to allow retirees and all terminated vested employees to take a lump-sum at all times without restriction.

We also maintain plans that provide postretirement benefits (retiree health care and life insurance) for eligible employees. Employees hired before January 1, 2002 generally become eligible for the postretirement benefit plans when they meet minimum retirement age and service requirements. The cost of providing most postretirement benefits is shared with retirees.

Upon the sale of L&W, we retained responsibility for the benefits payable to employees of L&W for the benefits accrued while employed by USG under the USG pension and postretirement plans. All L&W employees had the option to receive a lump sum benefit payment from the USG Corporation pension plan upon termination of their employment from USG. The total of the lump sum distributions made by the USG Corporation pension plan to both L&W employees and USG retirees or terminated vested employees during both 2017 and 2016 exceeded the settlement threshold and, as a result, we incurred settlement expense of $25 million and $26 million, respectively. The benefits payable to employees of L&W who did not take lump sum distributions in connection with their termination or retirement from USG are included in our benefit obligation as of December 31, 2017.

The location of the settlement expense within our consolidated statements of income and the group of employees for which it is related is as follows:

(millions)		2017	2016
Cost of products sold	USG retirees or terminated vested employees	$ 10	$ 7
Selling and administrative expenses	USG retirees or terminated vested employees	2	4
(Loss) income from discontinued operations	Terminated employees of L&W	13	—
Gain on sale of discontinued operations	Terminated employees of L&W	—	15
Total		$ 25	$ 26

Additionally, as a result of the sale of L&W, we recorded a curtailment gain of $20 million for the year ended December 31, 2016 for our postretirement plan to "Gain on sale of discontinued operations" in our consolidated statement of income, for those benefits no longer accruable to the employees of L&W who were not retirement eligible or did not elect retirement upon employment termination from USG.

In 2011 and 2014, we amended our U.S. postretirement benefit plan to require retiree medical plan participants to begin purchasing individual coverage in the Affordable Insurance Exchanges or individual Medicare marketplace beginning January 1, 2016 using a company-funded subsidy. The subsidy is determined based upon years of service at retirement and Medicare eligibility. As a result of the amendments, the measurement of the accumulated postretirement benefit obligation, or APBO, was reduced and a credit to unrecognized prior service cost is being amortized into the statement of income over the average remaining service of active plan participants to retirement eligibility. This is reflected in net amortization of postretirement benefits in the table below. The subsidy provided to retirees eligible for Medicare will end December 31, 2019 at which time there will be no remaining credit to be amortized to the income statement for the unrecognized prior service cost.

The components of net pension and postretirement benefit costs are summarized in the following table:

(millions)	2017	2016	2015
Pension Benefits:			
Service cost of benefits earned	$ 44	$ 45	$ 49
Interest cost on projected benefit obligation	61	66	66
Expected return on plan assets	(93)	(89)	(83)
Settlement [(a)]	25	35	1
Net amortization	22	22	39
Net pension cost [(b)]	$ 59	$ 79	$ 72
Postretirement Benefits:			
Service cost of benefits earned	$ 2	$ 2	$ 2
Interest cost on projected benefit obligation	5	6	6
Curtailment	—	(20)	—
Net amortization	(23)	(27)	(31)
Net postretirement benefit [(c)]	$ (16)	$ (39)	$ (23)

(a) In 2016, $26 million of the settlement charge reflects the increase in lump sum benefits paid largely driven by the sale of L&W and $9 million reflected payments from our supplemental plan.
(b) Net pension costs, excluding settlement costs, includes amounts allocated to (loss) income from discontinued operations for L&W totaling a benefit of $1 million for 2017 and expense of $7 million for 2016 and $12 million for 2015.
(c) Net postretirement benefit, excluding curtailment gain, includes a net benefit allocated to (loss) income from discontinued operations for L&W of $1 million for 2017, $3 million for 2016 and $3 million for 2015.

We use a December 31 measurement date for our plans. The accumulated benefit obligation, or ABO, for the defined benefit pension plans was $1.506 billion as of December 31, 2017 and $1.396 billion as of December 31, 2016.

	As of December 31,	
(millions)	2017	2016
Selected information for pension plans with accumulated benefit obligations in excess of plan assets:		
Accumulated benefit obligation	$ (35)	$ (39)
Fair value of plan assets	3	2
Selected information for pension plans with benefit obligations in excess of plan assets:		
Benefit obligation	$ (1,769)	$ (1,384)
Fair value of plan assets	1,576	1,205

The following table summarizes projected benefit obligations, plan assets and funded status as of December 31:

	Pension		Postretirement	
(millions)	2017	2016	2017	2016
Change in Benefit Obligation:				
Benefit obligation as of January 1	$ 1,610	$ 1,564	$ 135	$ 144
Service cost	44	45	2	2
Interest cost	61	66	5	6
Settlements	(121)	(123)	—	—
Curtailments	—	(37)	—	(7)
Participant contributions	9	11	—	—
Benefits paid	(51)	(33)	(6)	(7)
Actuarial (gain) loss	202	112	10	(5)
Foreign currency translation	16	5	4	2
Benefit obligation as of December 31	$ 1,770	$ 1,610	$ 150	$ 135
Change in Plan Assets:				
Fair value as of January 1	$ 1,435	$ 1,301	$ —	$ —
Actual return on plan assets	217	107	—	—
Employer contributions	71	167	6	7
Participant contributions	9	11	—	—
Benefits paid	(51)	(33)	(6)	(7)
Settlements	(121)	(123)	—	—
Foreign currency translation	17	5	—	—
Fair value as of December 31	$ 1,577	$ 1,435	$ —	$ —
Funded status	$ (193)	$ (175)	$ (150)	$ (135)
Components on the Consolidated Balance Sheets:				
Noncurrent assets	$ —	$ 4	$ —	$ —
Current liabilities	(8)	(16)	(9)	(8)
Noncurrent liabilities	(185)	(163)	(141)	(127)
Net liability as of December 31	$ (193)	$ (175)	$ (150)	$ (135)
Pretax Components in AOCI:				
Net actuarial loss	$ 421	$ 388	$ 11	$ —
Prior service credit	—	(1)	(42)	(65)
Total as of December 31	$ 421	$ 387	$ (31)	$ (65)

For our defined benefit pension plans, the 2017 actuarial loss of $202 million was primarily due to a decrease in the discount rates partially offset by the adoption of the new mortality tables used to determine the benefit obligation.

For the defined benefit pension plans, we estimate that during 2018 we will amortize from AOCI into net pension cost a net actuarial loss of $31 million and no prior service cost. For the postretirement benefit plans, we estimate that during 2018 we will amortize from AOCI into net postretirement cost a net actuarial loss of $1 million and a prior service credit of $23 million.

ASSUMPTIONS

The following tables reflect the assumptions used in the accounting for our plans:

	Pension		Postretirement	
	2017	2016	2017	2016
Weighted average assumptions used to determine benefit obligations as of December 31:				
Discount rate	3.55%	4.02%	3.42%	3.90%
Compensation increase rate	3.54%	3.55%	N/A	N/A
Weighted average assumptions used to determine net cost for years ended December 31:				
Discount rate	4.02%	4.43%	3.90%	4.24%
Expected return on plan assets	6.54%	6.66%	N/A	N/A
Compensation increase rate	3.55%	3.55%	N/A	N/A

We no longer have significant exposure to health care cost trend rates due to the modifications we made to our U.S. postretirement health care plan to limit the increase in the annual amount we pay for retiree health care coverage for certain current and future retirees to 3% and to require retiree medical plan participants to begin purchasing individual coverage in the Affordable Insurance Exchanges or individual Medicare marketplace beginning January 1, 2016 using a company-funded subsidy based upon years of service at retirement.

For the measurement of the APBO at December 31, 2017 for our Canadian postretirement health care plan, the assumed health care cost trend rates start with a 5.95% increase in 2018, followed by a gradual decline in increases to 4% for 2046. For the measurement of the APBO at December 31, 2016, the assumed health care cost trend rates started with a 7.75% increase in 2017, followed by a gradual decline in increases to 4% for 2032 and beyond.

A one percentage point change in the assumed health care cost trend rates would have the following effects on our Canadian plans:

(millions)	One-Percentage-Point Increase	One-Percentage-Point Decrease
Effect on total service and interest cost	$ 1	$ —
Effect on postretirement benefit obligation	13	(10)

RETIREMENT PLAN ASSETS

Investment Policies and Strategies: We have established investment policies and strategies for the defined benefit pension plans' assets with a long-term objective of maintaining the plans' assets at a level equal to or greater than that of their liabilities (as measured by a funded ratio of 100% or more of the ABO) and maximizing returns on the plans' assets consistent with our moderate tolerance for risk. Contributions are made to the plans periodically as needed to meet funding targets or requirements. Factors influencing our determination to accept a moderate degree of risk include the timing of plan participants' retirements and the resulting disbursement of retirement benefits, the liquidity requirements of the plans and our financial condition.

Our overall long-term objective is to achieve a 6.5% rate of return on plan assets with a moderate level of risk as indicated by the volatility of investment returns. This rate of return target was established using a "building block" approach. In this approach, ranges of long-term expected returns for the various asset classes in which the plans invest are estimated. The estimated ranges are primarily based on observations of historical asset returns and their historical volatility. In determining the expected returns, we also consider consensus forecasts of certain market and economic factors that influence returns, such as inflation, gross domestic product trends and dividend yields. We then calculate an overall range of likely expected rates of return by applying the expected asset returns to the plans' target asset allocation. The most likely rate of return is then determined and is adjusted to account for investment management fees.

Our investment strategy is to invest in a diversified mix of asset classes in accordance with an asset allocation that we believe is likely to achieve our long-term target return while prudently considering risk. In order to manage risk, the plans' pension and investment committees periodically rebalance the asset allocations as outlined by our investment policy statements. Our investment policy statements include glide paths which outline how our asset allocation would increase the portion of liability-hedging assets, such as fixed income, as our funded status improves in the future. This liability-driven investing approach is carried out by professional investment managers who help the committees in this process. The committees also monitor the investment performance of the individual investment managers compared to their benchmark returns and investment guidelines on an ongoing basis, in part through the use of quarterly investment portfolio reviews and compliance reporting by investment managers. The pension and investment committees also evaluate risk by periodically conducting asset/

liability studies to assess the correlation of the plans' assets and liabilities and the degree of risk in the target asset allocations. The plans limit the use of leverage to select investment strategies where leverage is typically employed, such as private equity and real estate. Certain investment managers utilize derivatives, such as swaps, bond futures, and options, as part of their investment strategies. This is done primarily to gain a desired market exposure or manage factors such as interest rate risk or duration of a bond portfolio.

The following table shows the aggregate target asset allocation on a weighted average basis for all the plans and the acceptable ranges around the targets as of December 31, 2017.

		Investment Policy	
Asset Categories	Asset Category Description	Target	Range
Equity	Institutional commingled/pooled equity funds, equity mutual funds and direct holdings of the common stock of U.S. and non-U.S. companies; equity funds and direct holdings are invested in companies with a range of market capitalizations	36%	32%-40%
Fixed income	U.S. Treasury securities, non-U.S. government debt securities such as Canadian federal bonds, corporate bonds of companies from diversified industries and mortgage-backed securities	54%	45%-63%
Limited partnerships	Investments in funds that follow any of several different strategies, including investing in distressed debt, energy development, infrastructure, and hedge funds. These investments use strategies with returns normally expected to have a reduced correlation to the return of equities as compared to other asset classes and often provide a current income component that is a meaningful portion of the investment's total return.	5%	1%-8%
Other real assets	Primarily investments in large core, private real estate funds that directly own a diverse portfolio of properties located in the United States. It also includes an allocation to funds investing in equities of real estate and infrastructure companies	5%	2%-9%
Cash equivalents and short-term investments	Primarily held in short-term investment funds or registered money market funds with daily liquidity	—%	0%-5%
Total		100%	

Fair Values of Plan Assets: Pension assets are classified based on the valuation methodologies and inputs used to determine the fair value as described in Note 1.

Level 1 investments include direct investments in common stocks of U.S. and non-U.S. companies that trade on liquid exchanges. These investments are valued based on the closing price on these exchanges.

Level 2 investments include primarily fixed income securities such as corporate, or government debentures, mortgage- and asset-backed securities. They are valued primarily using income and market approaches, such as pricing based on recent market transactions, and values are based on quoted prices or other observable market inputs received from data providers. Commingled funds not traded on an exchange, even though their underlying investments are common stocks traded on liquid exchanges, are also included in the Level 2 category. The net asset value of commingled funds investing in either stocks or fixed income securities is calculated by subtracting the value of any liabilities from the market value of all securities owned by a fund.

Level 3 investments include real estate, infrastructure, or direct energy investments as well as distressed securities or hedge funds. These are valued using income approach methodologies such as discounted cash flows, or market approach methodologies such as relative value (specific to equity securities), direct capitalization and comparable sales (specific to real estate investments). Some of the key inputs used to value these securities include discount rate, EBITDA multiple, yield-to-worst, yield-to-maturity, and cap rate (specific to real estate investments).

The fair values by hierarchy of inputs as of December 31 were as follows:

	Quoted Prices in Active Markets for Identical Assets (Level 1)		Significant Other Observable Inputs (Level 2)		Significant Unobservable Inputs (Level 3)		Total	
(millions)	2017	2016	2017	2016	2017	2016	2017	2016
Asset Categories:								
Equity:								
Common and preferred stock	$ 92	$ 66	$ —	$ —	$ —	$ —	$ 92	$ 66
Commingled/pooled/mutual funds [(a)]	—	—	553	490	—	—	553	490
Total equity	92	66	553	490	—	—	645	556
Fixed income:								
U.S. government and agency debt securities	—	—	8	194	—	—	8	194
Non-U.S. government and agency debt securities	—	—	68	54	—	—	68	54
Investment-grade debt securities	—	—	334	197	—	—	334	197
High-yield debt securities	—	—	42	53	—	—	42	53
Commingled/pooled funds [(a)]	—	—	305	165	—	—	305	165
Mortgaged backed securities	—	—	1	3	—	—	1	3
Other	—	—	13	10	1	1	14	11
Total fixed income	—	—	771	676	1	1	772	677
Limited partnerships	—	—	—	—	91	103	91	103
Other real estate assets	—	—	18	16	39	38	57	54
Cash equivalents and short-term investments	—	—	14	11	—	—	14	11
Total	$ 92	$ 66	$ 1,356	$ 1,193	$ 131	$ 142	$ 1,579	$ 1,401
Cash on hand							—	—
Receivables							2	35
Accounts payable							(4)	(1)
Total							$ 1,577	$ 1,435

(a) Certain investments in commingled/pooled equity funds have been classified as Level 2 because observable quoted prices for these institutional funds are not available.

A reconciliation of the change in the fair value measurement of the defined benefit plans' consolidated assets using significant unobservable inputs (Level 3) between January 1, 2016 and December 31, 2017 is as follows:

(millions)	Fixed Income	Other Real Estate Assets	Limited Partnerships	Total
Balance as of January 1, 2016	$ 1	$ 37	$ 106	$ 144
Realized losses	—	1	5	6
Unrealized gains	—	2	(3)	(1)
Purchases, sales and settlements:				
Purchases	—	—	1	1
Sales	—	(2)	(6)	(8)
Settlements	—	—	—	—
Net transfers into (out of) Level 3	—	—	—	—
Balance as of December 31, 2016	$ 1	$ 38	$ 103	$ 142
Realized gains	—	1	15	16
Unrealized gains (losses)	—	2	(1)	1
Purchases, sales and settlements:				
Purchases	—	—	9	9
Sales	—	(2)	(35)	(37)
Settlements	—	—	—	—

Net transfers into (out of) Level 3	—	—	—	—
Balance as of December 31, 2017	$ 1	$ 39	$ 91	$ 131

CASH FLOWS

We are evaluating our level of funding for pension plans and currently estimate that we will contribute approximately $63 million to our pension plans in 2018. Our cash payments for postretirement plans are estimated to be $9 million in 2018.

Total benefit payments we expect to make to participants, which include payments funded from USG's assets as well as payments from our pension plans' assets, are as follows (in millions):

Years ended December 31	Pension Benefits	Postretirement Benefits
2018	$ 120	$ 9
2019	125	9
2020	137	8
2021	134	8
2022	141	8
2023 - 2027	634	42

DEFINED CONTRIBUTION PLANS

Total charges for our defined contribution plans amounted to approximately $8 million, $5 million and $6 million for the years ended December 31, 2017, 2016 and 2015, respectively. USG's contributions are charged to cost of products sold and selling and administrative expenses.

10. Share-Based Compensation

We grant share-based compensation to eligible participants under our 2016 Long-Term Incentive Plan, or New LTIP, which was approved by our Board of Directors and stockholders in 2016, and prior thereto under our Long-Term Incentive Plan, which, together with the New LTIP, is referred to as the LTIP. As of December 31, 2017, a total of 7 million shares of common stock were reserved for future grants under the New LTIP. The New LTIP authorizes the Board's Compensation and Organization Committee to provide equity-based compensation in the form of stock options, stock appreciation rights, or SARs, restricted stock, restricted stock units, or RSUs, market share units, or MSUs, performance shares and units, and other cash incentive and share-based awards for the purpose of providing our employees, officers and non-employee directors incentives and rewards for performance. We may issue shares of our common stock upon option exercises and upon the vesting or grant of other awards under the LTIP from our authorized but unissued shares or from treasury shares.

Our expense in continuing operations for share-based arrangements was $18 million in 2017, $18 million in 2016 and $14 million in 2015 and is included in "Selling and administrative expenses" in our consolidated statements of income. No net income tax effects were recognized for share-based arrangements in the consolidated statements of income in 2017, 2016 and 2015.

Certain employees of L&W previously received grants of MSUs, performance shares and RSUs. On October 31, 2016, any unvested awards were forfeited upon the sale of L&W and are included as forfeited in the respective tables below. The expense associated with these awards was $1 million for 2016 and 2015 and is included in "(Loss) income from discontinued operations" in our consolidated statements of income.

MARKET SHARE UNITS

We granted MSUs with the following weighted average grant date fair values:

	2017	2016	2015
Weighted average grant date fair values	$ 35.79	$ 19.59	$ 30.06

MSUs generally vest after a three-year period based on our actual stock price performance during such period. The number of MSUs earned will vary from 0% to 150% of the number of MSUs awarded depending on the actual performance of our stock price. In the case of termination of employment due to death, disability or retirement during the performance period, vesting will be pro-rated based on the number of full months employed in the grant year. Awards earned will be issued at the end of the three-year period. MSUs may vest earlier in the case of a change in control in most circumstances only if there is also a related loss of employment or diminution of duties. Each MSU earned will be settled in shares of our common stock.

We estimated the fair value of each MSU granted on the date of grant using a Monte Carlo simulation that used the assumptions noted in the following table. Volatility was based on stock price history immediately prior to grant for a period

commensurate with the expected term. The risk-free rate was based on zero-coupon U.S. government issues at the time of grant. The expected term represents the period from the valuation date to the end of the performance period.

Assumptions:	2017	2016	2015
Expected volatility	32.10%	34.02%	42.70%
Risk-free rate	1.39%	0.86%	1.09%
Expected term (in years)	2.96	2.95	2.95
Expected dividends	—	—	—

Nonvested MSUs outstanding as of December 31, 2017 and MSU activity during 2017 were as follows:

	Number of MSUs (000)	Weighted Average Grant Date Fair Value
Nonvested at January 1, 2017	1,157	$ 23.39
Granted	371	35.79
Vested	(417)	30.06
Forfeited	(14)	26.20
Nonvested at December 31, 2017	1,097	25.01

With respect to the MSUs granted in 2015, for which the three-year period ended December 31, 2017, 417,001 vested for approximately 554,624 shares of common stock based on the actual performance of our stock price.

Total unrecognized compensation cost related to nonvested share-based compensation awards represented by MSUs granted under the LTIP was $5 million as of December 31, 2017. We expect that cost to be recognized over a weighted average period of 1.7 years.

PERFORMANCE SHARES

We granted performance shares with the following weighted average grant date fair values:

	2017	2016	2015
Weighted average grant date fair values	$ 39.42	$ 21.10	$ 30.63

The performance shares generally vest after a three-year period based on our total stockholder return relative to the performance of the Dow Jones U.S. Construction and Materials Index, with adjustments to that index in certain circumstances, for the three-year period. The number of performance shares earned will vary from 0% to 200% of the number of performance shares awarded depending on that relative performance. Vesting will be pro-rated based on the number of full months employed during the performance period in the case of death, disability, retirement or a change in control, and pro-rated awards earned will be settled in common stock at the end of the three-year period.

We estimated the fair value of each performance share granted on the date of grant using a Monte Carlo simulation that uses the assumptions noted in the following table. Volatility was based on stock price history immediately prior to grant for a period commensurate with the expected term. The risk-free rate was based on zero-coupon U.S. government issues at the time of grant. The expected term represents the period from the grant date to the end of the three-year performance period.

Assumptions:	2017	2016	2015
Expected volatility	32.10%	34.02%	42.70%
Risk-free rate	1.39%	0.86%	1.09%
Expected term (in years)	2.96	2.95	2.95
Expected dividends	—	—	—

Nonvested performance shares outstanding as of December 31, 2017 and performance share activity during 2017 were as follows:

	Number of Performance Shares (000)	Weighted Average Grant Date Fair Value
Nonvested at January 1, 2017	246	$ 24.98
Granted	113	39.42
Vested	(99)	30.63
Forfeited	(4)	26.75
Nonvested at December 31, 2017	256	29.14

With respect to the performance shares granted in 2015, for which the three-year performance period ended December 31, 2017, 99,238 of the performance awards vested for no common shares.

Total unrecognized compensation cost related to nonvested share-based compensation awards represented by performance shares granted under the LTIP was $4 million as of December 31, 2017. We expect that cost to be recognized over a weighted average period of 1.8 years.

RESTRICTED STOCK UNITS

We granted RSUs with the following weighted average grant date fair values:

	2017	2016	2015
Weighted average grant date fair values	$ 31.57	$ 23.94	$ 28.56

RSUs granted as special retention awards, including those granted in 2017, generally vest after a specified number of years from the date of grant or at a specified date and RSUs granted with performance goals vest if those goals are attained. RSUs may vest earlier in the case of death, disability, retirement or a change in control. Each RSU is settled in a share of our common stock after the vesting period. The fair value of each RSU granted is equal to the closing market price of our common stock on the date of grant. The RSUs granted in 2017 were special retention awards that generally vest in three years from the date of grant.

RSUs outstanding as of December 31, 2017 and RSU activity during the year then ended were as follows:

	Number of RSUs (000)	Weighted Average Grant Date Fair Value
Nonvested at January 1, 2017	228	$ 27.31
Granted	133	31.57
Vested	(54)	31.38
Forfeited	(3)	29.83
Nonvested at December 31, 2017	304	14.67

As of December 31, 2017, there was $5 million of total unrecognized compensation cost related to nonvested share-based compensation awards represented by RSUs granted under the LTIP. We expect that cost to be recognized over a weighted average period of 2.2 years. The total fair value of RSUs that vested was $2 million during 2017, $2 million during 2016 and $4 million during 2015.

STOCK OPTIONS

We last granted stock options in 2012. All outstanding stock options are exercisable. The stock options generally expire ten years from the date of grant, or earlier in the event of death, disability or retirement.

A summary of stock options outstanding as of December 31, 2017 and of stock option activity during the year then ended is presented below:

	Number of Options (000)	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value (millions)
Outstanding at January 1, 2017	2,174	$ 22.55	2.78	$ 22
Exercised	(590)	23.88		
Canceled	(323)	46.80		
Outstanding at December 31, 2017	1,261	$ 15.72	2.48	$ 28
Exercisable at December 31, 2017	1,261	$ 15.72	2.48	$ 28
Vested at December 31, 2017	1,261	$ 15.72	2.48	$ 28

(millions)	2017	2016	2015
Intrinsic value of stock options exercised	$ 7	$ 4	$ 6
Cash received from stock options exercised	$ 14	$ 4	$ 6
Fair value of stock options vested	$ —	$ 1	$ 1

Intrinsic value for stock options is defined as the difference between the current market value of our common stock and the exercise price of the stock options.

NON-EMPLOYEE DIRECTOR DEFERRED STOCK UNITS

Our non-employee directors may elect to receive a portion of their compensation as deferred stock units. In August 2017, we amended this program to remove the election to receive cash or shares of USG common stock upon termination of board service and, as a result, all deferred stock units granted after August 2017 will be paid in shares of USG common stock. Also in August 2017, four of our non-employee directors elected to receive shares of stock for previously granted deferred stock units, and as a result, in 2017, we recorded a reclassification from a liability to equity of $6 million for these previously deferred awards.

11. Supplemental Balance Sheet Information

INVENTORIES

Inventories as of December 31 consisted of the following:

(millions)	2017	2016
Finished goods	$ 140	$ 132
Work in progress	39	37
Raw materials	73	67
Total	$ 252	$ 236

PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment as of December 31 consisted of the following:

(millions)	2017	2016
Land and mineral deposits	$ 120	$ 116
Buildings and improvements	1,100	1,078
Machinery and equipment	2,595	2,473
	3,815	3,667
Reserves for depreciation and depletion	(2,053)	(1,960)
Total	$ 1,762	$ 1,707
Annual depreciation and depletion expense	$ 129	$ 129

ACCRUED EXPENSES

Accrued expenses as of December 31 consisted of the following:

(millions)	2017	2016
Self-insurance reserves	$ 12	$ 12
Employee compensation	17	35
Interest	12	31
Derivatives	9	5
Pension and other postretirement benefits	17	24
Environmental	17	18
Other	51	50
Total	$ 135	$ 175

ASSET RETIREMENT OBLIGATIONS

Changes in our liability for asset retirement obligations consisted of the following:

(millions)	2017	2016
Balance as of January 1	$ 113	$ 119
Accretion expense	7	7
Liabilities incurred	3	2
Changes in estimated cash flows [(a)]	(4)	(12)
Liabilities settled	(3)	(4)
Foreign currency translation	2	1
Balance as of December 31	$ 118	$ 113

(a) Changes in estimated cash flows for the year ended December 31, 2016 includes a $8 million reduction related to one of our quarries.

ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

Changes in the balances of each component of accumulated other comprehensive income (loss), or AOCI, are summarized in the following table:

(millions)	Derivatives	Pension and Other Postretirement Benefit Plans	Foreign Currency Translation	Total AOCI
Balance as of January 1, 2015	$ 16	$ (302)	$ (52)	$ (338)
Other comprehensive income (loss) before reclassifications, net of tax	(5)	74	(67)	2
Less: Amounts reclassified from AOCI, net of tax	(9)	(7)	(6)	(22)
Other comprehensive income (loss), net of tax	4	81	(61)	24
Balance as of December 31, 2015	$ 20	$ (221)	$ (113)	$ (314)
Other comprehensive income (loss) before reclassifications, net of tax	1	(34)	(53)	(86)
Less: Amounts reclassified from AOCI, net of tax	(6)	(9)	—	(15)
Other comprehensive income (loss), net of tax	7	(25)	(53)	(71)
Balance as of December 31, 2016	$ 27	$ (246)	$ (166)	$ (385)
Other comprehensive income (loss) before reclassifications, net of tax	(14)	(65)	58	(21)
Less: Amounts reclassified from AOCI, net of tax	(3)	(14)	—	(17)
Other comprehensive income (loss), net of tax	(11)	(51)	58	(4)
Balance as of December 31, 2017	$ 16	$ (297)	$ (108)	$ (389)

Amounts reclassified from AOCI, net of tax, for the years ended December 31, 2017, 2016 and 2015 were as follows:

(millions)	2017	2016	2015
Derivatives			
Net reclassification from AOCI for cash flow hedges included in cost of products sold	$ (6)	$ (10)	$ (8)
Net reclassification from AOCI for cash flow hedges included in income and gain from the sale of equity method investment to related party	—	—	1
Less: Income tax (benefit) expense on reclassification from AOCI included in income tax expense	(3)	(4)	2
Net amount reclassified from AOCI	$ (3)	$ (6)	$ (9)
Pension and postretirement benefits			
Net reclassification from AOCI for amortization of prior service (benefit) cost included in cost of products sold	$ (8)	$ (1)	$ 1
Net reclassification from AOCI for amortization of prior service benefit included in selling and administrative expenses	(5)	(12)	(5)
Net reclassification from AOCI for amortization of prior service benefit included in (loss) income from and gain on sale of discontinued operations	(11)	(3)	(4)
Less: Income tax expense on reclassification from AOCI included in income tax expense	(10)	(7)	(1)
Net amount reclassified from AOCI	$ (14)	$ (9)	$ (7)
Foreign Currency Translation			
Net reclassification from AOCI for translation loss realized upon the sale of foreign entities	$ —	$ —	$ (6)
Net amount reclassified from AOCI	$ —	$ —	$ (6)

We estimate that we will reclassify a net $6 million after-tax loss on derivatives from AOCI to earnings within the next 12 months.

12. Long-Lived Asset Impairment Charges

In 2016, we indefinitely idled our mining operations in Little Narrows, Nova Scotia, Canada after completing a review of our gypsum sourcing needs. At such time, we assessed the property, plant and equipment for potential impairment. We compared the carrying values of those assets with their future undiscounted cash flows for their remaining useful lives. We measured the fair value of the machinery, equipment and buildings using measurements classified as Level 3, as a result we recorded long-lived asset impairment charges of $10 million, which are included in our consolidated statements of income in "Long-lived asset impairment charges". We also recorded severance and other charges of $2 million for the termination of employees at the Little Narrows location, which are included in "Costs of products sold" on our consolidated statements of income. Both the impairment and severance charges are included in Other.

13. Gypsum Transportation Limited

In the second quarter of 2015, we sold our two self-unloading ocean vessels previously owned by Gypsum Transportation Limited, or GTL, for $42 million and recorded a gain of $7 million on the disposition and incurred charges of $6 million to exit our shipping operations. The net impact of the gain on the sale of the vessels and charges incurred to exit the shipping operations of $1 million is recorded in “Gain on disposal of shipping operations, net” on the consolidated statement of income.

In November 2015, we entered into a release and debt settlement agreement to recover a portion of our loss incurred when our former trading partner ceased performing under the contract. We recorded a recovery of $6 million in 2015 and it is presented within the "Recovery of receivable" on our consolidated statements of income. We received an additional $8 million for the recovery in 2016, of which $3 million is recorded within "Recovery of receivable," $1 million is recorded within "Interest income" and $4 million is recorded within "Other (expense) income, net" on our consolidated statements of income.

GTL recorded operating profit of $0 million, $3 million and $7 million in 2017, 2016 and 2015, respectively, which is reflected within Other.

14. Segments

During the fourth quarter of 2017, as part of the realignment of our operating structure, we changed the composition of our reportable segments, effective for the quarter ended December 31, 2017. See Note 1, Significant Accounting Policies, for additional information regarding the changes to our reportable segments. The results of our five reportable segments are as follows:

CONSOLIDATED SEGMENTS

	For the year ended December 31,		
(millions)	2017	2016	2015
Net Sales:			
U.S. Wallboard and Surfaces	$ 1,916	$ 1,778	$ 1,720
U.S. Performance Materials	373	357	321
U.S. Ceilings	477	467	464
Canada	405	389	372
Other	245	220	239
Eliminations	(212)	(194)	(203)
Total	$ 3,204	$ 3,017	$ 2,913
Operating Profit (Loss):			
U.S. Wallboard and Surfaces	$ 314	$ 334	$ 298
U.S. Performance Materials	26	41	31
U.S. Ceilings	95	101	80
Canada	12	26	10
Other	11	(4)	30
Corporate	(90)	(104)	(94)
Eliminations	(1)	—	—
Total	$ 367	$ 394	$ 355
Depreciation, Depletion and Amortization:			
U.S. Wallboard and Surfaces	$ 91	$ 87	$ 85
U.S. Performance Materials	9	9	8
U.S. Ceilings	15	15	15
Canada	6	6	6
Other	5	7	8
Corporate	6	10	9
Total	$ 132	$ 134	$ 131
Capital Expenditures:			
U.S. Wallboard and Surfaces	$ 104	$ 60	$ 73
U.S. Performance Materials	31	11	4
U.S. Ceilings	17	4	3
Canada	10	4	4
Other	5	3	3
Corporate	1	1	—
Total	$ 168	$ 83	$ 87

	As of December 31,		
Assets:	2017	2016	2015
U.S. Wallboard and Surfaces	$ 1,574	$ 1,540	$ 1,590
U.S. Performance Materials	172	154	147
U.S. Ceilings	307	225	267
Canada	134	124	126
Other	144	135	160
Corporate	856	1,080	1,483
Equity method investments	686	628	682
Assets related to discontinued operations	—	—	357
Eliminations	(22)	(17)	(76)
Total	$ 3,851	$ 3,869	$ 4,736

CONSOLIDATED PRODUCT SALES INFORMATION

	For the year ended December 31,		
(millions)	2017	2016	2015
Net Sales:			
Gypsum	$ 2,331	$ 2,169	$ 2,105
Performance Materials	373	357	321
Ceilings	509	500	496
Elimination	(9)	(9)	(9)
Total	$ 3,204	$ 3,017	$ 2,913

CONSOLIDATED GEOGRAPHIC INFORMATION

	For the year ended December 31,		
(millions)	2017	2016	2015
Net Sales:			
United States	$ 2,787	$ 2,625	$ 2,524
Canada	406	389	379
Other Foreign	204	189	196
Geographic transfers	(193)	(186)	(186)
Total	$ 3,204	$ 3,017	$ 2,913

Consolidated long-lived assets, consisting of property, plant and equipment, net, by geographic location were as follows:

	As of December 31,		
(millions)	2017	2016	2015
Long-Lived Assets:			
United States	$ 1,604	$ 1,563	$ 1,605
Canada	90	80	90
Other Foreign	68	64	76
Total	$ 1,762	$ 1,707	$ 1,771

UBBP	For the year ended December 31,		
(millions)	2017	2016	2015
Net sales	$ 1,200	$ 1,052	$ 1,003
Operating profit	160	133	124
Net income attributable to UBBP	117	99	96
Depreciation, depletion, and amortization	45	43	43
Capital expenditures	49	45	49

	As of December 31,		
	2017	2016	2015
Assets	$ 1,419	$ 1,292	$ 1,303

UBBP GEOGRAPHIC INFORMATION	For the year ended December 31,		
(millions)	2017	2016	2015
Net Sales:			
Australia	$ 431	$ 381	$ 345
South Korea	287	223	200
Thailand	150	141	145
China	119	103	120
Other	271	255	234
Geographic Transfers	(58)	(51)	(41)
Total	$ 1,200	$ 1,052	$ 1,003

Long-lived assets, consisting of property, plant and equipment, net, by geographic location for UBBP were as follows:

	As of December 31,		
(millions)	2017	2016	2015
Long-Lived Assets:			
Australia	$ 229	$ 217	$ 216
South Korea	123	107	106
China	101	97	116
Oman	85	86	103
Thailand	86	75	72
Other	86	71	67
Total	$ 710	$ 653	$ 680

OTHER SEGMENT INFORMATION

Segment operating profit (loss) includes all costs and expenses directly related to the segment involved and an allocation of expenses that benefit more than one segment.

Revenues are attributed to geographic areas based on the location of the assets producing the revenues. Transactions between reportable segments and geographic areas are accounted for at transfer prices that are approximately equal to market value. Geographic transfers largely reflect intercompany sales from our domestic segments of U.S. Wallboard and Surfaces, U.S. Performance Materials and U.S. Ceilings to Canada and Mexico.

Sales to our significant customers were as follows:

Significant Customer	Segment with Sales to Significant Customer	2017	2016	2015
The Home Depot	U.S. Wallboard and Surfaces, U.S. Performance Materials, U.S. Ceilings, and Canada	23%	23%	23%
L&W	U.S. Wallboard and Surfaces, U.S. Performance Materials and U.S. Ceilings	16%	19%	18%

15. Income Taxes

On December 22, 2017, the President of the United States signed into law the Tax Cuts and Jobs Act, or the 2017 Tax Act. The 2017 Tax Act amends the Internal Revenue Code to reduce tax rates and modify policies, credits and deductions. For businesses, the 2017 Tax Act reduces the corporate federal tax rate from a maximum of 35% to a flat 21%. The provisional effect on deferred tax assets and liabilities of the change in tax rates was recognized in earnings in the period ended December 31, 2017, which was when the change was enacted. As part of the 2017 Tax Act's change to a quasi-territorial system, a transition tax was imposed on our accumulated foreign earnings, partially offset by foreign tax credits, which was also recognized in the period ending December 31, 2017. The 2017 Tax Act made significant changes to how foreign tax credits may be realized to offset future tax liabilities. Further clarity may change our anticipated realization of our foreign tax credits. In addition, we may make an election to forgo the use of net operating losses, or NOLs, to offset the impact of the transition tax as allowed under the 2017 Tax Act.

Due to the timing of the enactment and the complexity involved in applying the provisions of the 2017 Tax Act, we have made reasonable estimates of the effects and recorded provisional amounts in our financial statements as of December 31, 2017. As we collect and prepare necessary data, and interpret the 2017 Tax Act and any additional guidance issued by the U.S. Treasury Department, the IRS, and other standard-setting bodies, we may make adjustments to the provisional amounts.

The 2017 Tax Act also repealed the corporate alternative minimum tax, or AMT, for tax years beginning January 1, 2018, and provides that existing AMT credit carryovers are refundable beginning in 2018. We have approximately $32 million of AMT credit carryovers, net of our estimate of anticipated sequestration reduction, that are expected to be refunded by 2022. As of December 31, 2017, we recorded a $12 million receivable, which is included in "Income taxes receivable" on our consolidated balance sheet.

Income from continuing operations before income taxes consisted of the following:

(millions)	2017	2016	2015
U.S.	$ 272	$ 201	$ 152
Foreign	63	73	84
Total	$ 335	$ 274	$ 236

Income tax expense (benefit) on continuing operations consisted of the following:

(millions)	2017	2016	2015
Current:			
Federal	$ (21)	$ —	$ —
Foreign	2	5	12
State	2	1	1
Total current	$ (17)	$ 6	$ 13
Deferred:			
Federal	$ 243	$ 41	$ (631)
Foreign	—	2	(4)
State	12	14	(118)
Total deferred	$ 255	$ 57	$ (753)
Total	$ 238	$ 63	$ (740)

For our continuing operations, differences between actual provisions for income taxes and provisions for income taxes at the U.S. federal statutory rate (35%), prior to changes under the 2017 Tax Act, were as follows:

(millions)	2017	2016	2015
Taxes on income from continuing operations at U.S. federal statutory rate	$ 117	$ 96	$ 82
Foreign earnings subject to different tax rates [(a)]	3	(3)	(3)
State income tax, net of federal benefit	9	10	8
Change in valuation allowance	—	—	(827)
Income from equity method investments [(b)]	(21)	(17)	(16)
Law changes [(c)]	145	—	—
Prior year return adjustments	(7)	—	—
Benefits from unrecognized tax positions	—	—	(6)
Foreign tax credits	—	(21)	—
Tax expense on distribution of foreign earnings	—	—	20
Other, net	(8)	(2)	2
Provision for income tax expense (benefit)	$ 238	$ 63	$ (740)
Effective income tax rate	71.0%	22.9%	(313.6)%

(a) Foreign earnings subject to different tax rates includes amounts related to impairments and other charges associated with our former shipping operations.

(b) Included in income from equity method investments are taxes associated with that income in the respective jurisdictions. These taxes, which are predominately foreign statutory rates, are at rates that are lower than the U.S. federal statutory rate.

(c) The impact of the 2017 Tax Act included the transition tax on deferred foreign earnings, net of foreign tax credits, of $9 million, an increase in the valuation allowance related to foreign tax credits of $106 million, an increase in the valuation allowance of our state NOLs due to the change in federal benefit related to those assets of $18 million, anticipated sequestration of our AMT credits of $3 million and the impact of the corporate rate change on deferred tax assets and liabilities of $9 million.

Significant components of deferred tax assets and liabilities were as follows:

	As of December 31,	
(millions)	2017	2016
Deferred Tax Assets:		
Net operating loss and tax credit carryforwards	$ 477	$ 599
Pension and postretirement benefits	86	112
Reserves not deductible until paid	14	20
Self insurance	2	2
Capitalized interest	7	13
Inventories	4	6
Share-based compensation	14	28
Other	7	4
Deferred tax assets before valuation allowance	611	784
Valuation allowance	(175)	(51)
Total deferred tax assets	$ 436	$ 733
Deferred Tax Liabilities:		
Property, plant and equipment	153	245
Other	—	—
Total deferred tax liabilities	$ 153	$ 245
Net deferred tax assets	$ 283	$ 488

During 2017, we recorded an increase in the valuation allowance against our deferred tax assets of $124 million. The increase was primarily related to law changes under the 2017 Tax Act, including the federal rate change, from 35% to 21%, and the ability to realize foreign tax credits.

As of December 31, 2017, we had net deferred tax assets of $283 million, which included a valuation allowance of $175 million. The components of the valuation allowance relate to certain state NOL carryforwards and foreign tax credit carryforwards that we anticipate will not be used prior to their expiration. Our ability to realize our deferred tax assets, including our foreign tax credit carryforwards, is subject to further clarification of the 2017 Tax Act. As a result, the actual impact on the realizability of our net deferred tax assets may vary from the estimated amount due to uncertainties in our preliminary assessment and estimate.

As of December 31, 2017, we had federal NOL carryforwards of approximately $477 million that are available to offset future federal taxable income and will expire in the years 2030 through 2032. In addition, as of that date, we had federal AMT credit carryforwards of approximately $20 million that are available to reduce future regular federal income taxes with the full benefit being realized by 2022 as described in the 2017 Tax Act. We have foreign tax credit carryforwards of $223 million that are available to offset future federal taxable income and expire in the years 2022 through 2027. The foreign tax credits are attributable to tax planning strategies to optimize foreign tax credit utilization and management's intention to amend its tax returns for the tax years 2012-2013 in order to claim credits for previously deducted foreign tax. In 2017, additional foreign tax credits were attributed to the transition tax as enacted by the 2017 Tax Act. The calculation of the foreign tax credit carryforwards and our ability to use them in the future is based on currently available information and is subject to revaluation as further clarification on the new law is available. In order to fully realize the U.S. federal net deferred tax assets, taxable income of approximately $1.663 billion would need to be generated during the period before their expiration based on our current interpretation of the 2017 Tax Act.

As of December 31, 2017, we had a deferred tax asset of $169 million related to state NOLs and tax credit carryforwards. The NOLs will expire if unused in years 2018 through 2036. To the extent that we do not generate sufficient state taxable income within the statutory carryforward periods to utilize the NOL and tax credit carryforwards in these states, they will expire unused.

In 2016, we recorded a decrease in the valuation allowance against our deferred tax assets of $19 million which was related to the expiration of state Net Operating Loss (NOL) carryforwards.

In 2015, we reversed $731 million of our valuation allowance. We considered all positive and negative evidence and gave more weight to evidence that was objective in nature as compared to subjective evidence. Significant weight was given to evidence that directly relates to our current financial performance. As of December 31, 2015, we emerged from a four-year cumulative pre-tax loss and had five consecutive quarters of domestic pre-tax earnings. The recent domestic pre-tax operating earnings was a significant, principal piece of positive evidence, which was weighed with the underlying momentum in the business, and generally improved market and economic conditions. Other evidence included strategic actions taken by management to lower costs and our expected utilization of deferred tax assets. All of this positive evidence lead to the determination that December 31, 2015 was the appropriate time to reverse a significant portion of the valuation allowance.

The Internal Revenue Code imposes limitations on a corporation's ability to utilize NOLs if it experiences an "ownership change," which can result from transactions increasing the ownership of certain stockholders in the stock of a corporation by more than 50 percentage points over a three-year period. If we were to experience an ownership change, utilization of our NOLs would be subject to an annual limitation that may be carried over to later years within the allowed NOL carryforward period. Over the entire carryforward period, we may not be able to use all our NOLs due to the aforementioned annual limitation. If an ownership change had occurred as of December 31, 2017, our annual U.S. federal NOL utilization would have been limited to approximately $107 million per year.

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

(millions)	2017	2016	2015
Balance as of January 1	$ 15	$ 18	$ 22
Tax positions related to the current period:			
Gross increase	—	—	4
Gross decrease	—	—	—
Tax positions related to prior periods:			
Gross increase	—	—	—
Gross decrease	(1)	(3)	(1)
Settlements	—	—	(6)
Lapse of statutes of limitations	(2)	—	(1)
Balance as of December 31	$ 12	$ 15	$ 18

We classify interest expense and penalties related to unrecognized tax benefits and interest income on tax overpayments as components of income taxes (benefit). We do not have amounts related to interest expense and penalties recognized on our consolidated balance sheets as of December 31, 2017 and had $2 million as of December 31, 2016. We recorded no interest and penalties in our consolidated statements of income in each of the three years ended December 31, 2017, 2016 and 2015. The

total amounts of unrecognized tax benefit that, if recognized, would affect our effective tax rate were $12 million, $14 million and $17 million for 2017, 2016 and 2015, respectively.

Our federal income tax return for 2014 is currently under examination by the Internal Revenue Service, or IRS. Our federal income tax returns for 2008 and prior years have been examined by the IRS. The U.S. federal statute of limitations remains open for 2006-2012 and 2014 to the present. We are under examination in various U.S. state and foreign jurisdictions. We do not believe our gross unrecognized tax benefits will change as a result of the conclusion of these examinations. There are statutes, however, that are expiring within the next 12 months that could result in recognition of approximately $2 million of tax benefit. Foreign and U.S. state jurisdictions have statutes of limitations generally ranging from three to five years.

We do not provide for U.S. income taxes on the portion of undistributed earnings of foreign subsidiaries that is intended to be permanently reinvested. It is not practical to calculate the residual income tax which would result if basis differences reversed due to the complexities of the tax law impacted by the 2017 Tax Act and the hypothetical nature of the calculations. Our reevaluation of our permanently reinvested assertion is subject to further clarification of the 2017 Tax Act, the impact of which cannot be estimated at this time.

16. Stockholder Rights Plan

NOL Protective Provisions of our Rights Plan

We have a stockholder rights plan that is intended to protect our substantial NOL carryforwards and related tax benefits. See Note 15 for a description of our NOL carryforwards. Under federal tax laws, we generally can use our NOLs and certain related tax credits to reduce ordinary income tax paid in our prior two tax years or on our future taxable income for up to 20 years, when they “expire” for such purposes.

Our ability to use our NOLs could be substantially limited if we experience an “ownership change,” as defined under Section 382 of the Internal Revenue Code of 1986, as amended (the "Code"), and the rights plan has been designed to help prevent such an “ownership change.” Under Section 382 of the Code, an “ownership change” occurs if, over a rolling three-year period, there has been an aggregate increase of 50 percentage points or more in the percentage of our common stock owned by one or more of our “5-percent stockholders” (as determined under Section 382 of the Code).

The rights plan provides that if any person becomes the beneficial owner (as defined in the Code) of 4.9% or more of our common stock, stockholders other than the triggering stockholder will have the right to purchase additional shares of our common stock at half the market price, thereby diluting the triggering stockholder; provided that stockholders whose beneficial ownership, as defined in Section 382 of the Code, exceeded 4.9% of our common stock outstanding on February 11, 2015 will not be deemed to have triggered the rights plan, so long as they do not thereafter acquire beneficial ownership of additional common stock other than in certain specified exempt transactions.

The rights will expire at the close of business on May 31, 2019, unless earlier redeemed or exchanged. Our Board of Directors has the power to accelerate or extend the expiration date of the rights. The NOL protective provisions of the rights plan described above will be effective until the earliest of the close of business on (i) May 31, 2019, (ii) the date on which our Board of Directors determines that these provisions are no longer necessary for the protection of certain tax benefits because of the repeal of Section 382 of the Code, (iii) the first day of a taxable year as to which our Board of Directors determines that no tax benefits may be carried forward, or (iv) such other date as our Board of Directors determines that these provisions are no longer necessary for the preservation of tax benefits (the "Special Period"). After the end of the Special Period, the triggering threshold for the rights issued pursuant to the rights plan will revert to 15% of our outstanding common stock and the definition of “beneficial owner” will revert to definitions that do not track Section 382 of the Code. At our 2016 annual meeting our stockholders ratified, on an advisory basis, the extension of the term of the rights plan and the NOL protective provisions described above.

A board committee composed solely of independent directors reviews the rights plan at least once every three years to determine whether to modify the rights plan in light of all relevant factors. This review was most recently conducted in November 2015. The next review is required by the end of 2018.

Restated Certificate of Incorporation

Our Restated Certificate of Incorporation also restricts certain transfers of our common stock and includes provisions intended to further protect the tax benefits of our NOL carryforwards. Subject to certain limited exceptions, these transfer restrictions restrict any person from transferring our common stock (or any interest in our common stock) if the transfer would result in a stockholder (or several stockholders, in the aggregate, who hold their stock as a “group” under Section 382 of the Code) owning 4.9% or more of our common stock. Any direct or indirect transfer attempted in violation of these transfer restrictions would be void as of the date of the prohibited transfer as to the purported transferee, and the purported transferee would not be recognized as the owner of the shares attempted to be owned in violation of the transfer restrictions for any purpose, including for purposes of voting and receiving dividends or other distributions in respect of that common stock, or in the case of options, receiving our common stock in respect of their exercise. These restrictions are effective until the earliest of (i) the close of business on May 31, 2019, (ii) the repeal of Section 382 of the Code if our Board of Directors determines that the restrictions are no longer necessary or desirable for the preservation of tax benefits, (iii) the close of business on the first day of a taxable year as to which our Board of Directors determines that no tax benefits may be carried forward, or (iv) such other date as determined by our Board of Directors pursuant to the provisions described above.

Treatment of Berkshire Hathaway under Rights Plan and Restated Certificate of Incorporation

Pursuant to a Shareholder's Agreement reached in 2006, Berkshire Hathaway and certain of its affiliates may acquire beneficial ownership of up to 50% of our voting stock on a fully-diluted basis without triggering the ownership thresholds in our Restated Certificate of Incorporation or the rights plan, and may acquire beneficial ownership of more than 50% of our voting stock on a fully-diluted basis without triggering the ownership thresholds in our Restated Certificate of Incorporation or the rights plan through an offer to purchase all of our common stock that remains open for at least 60 days, in each case subject to specified exceptions.

17. Lease Commitments

We lease some of our offices, buildings, machinery and equipment, and autos under noncancelable operating leases. These leases have various escalation terms and renewal options. Lease expense amounted to $38 million in 2017, $37 million in 2016 and $36 million in 2015. Future minimum lease payments required under operating leases with initial or remaining noncancelable terms in excess of one year as of December 31, 2017 were as follows:

(millions)	2018	2019	2020	2021	2022	After 2022
Future minimum lease payments	$ 36	$ 31	$ 25	$ 19	$ 10	$ 9

18. Litigation

WALLBOARD PRICING CLASS ACTION LAWSUITS

In 2015, USG, our subsidiary United States Gypsum Company, our former subsidiary L&W Supply Corporation, and seven other wallboard manufacturers were named as defendants in a lawsuit filed in federal court in California by twelve homebuilders alleging that since at least September 2011, U.S. wallboard manufacturers conspired to fix and raise the price of gypsum wallboard sold in the United States and to effectuate the alleged conspiracy by ending the practice of providing job quotes on wallboard. The lawsuit was transferred to the United States District Court for the Eastern District of Pennsylvania under the title In re: Domestic Drywall Antitrust Litigation, MDL No. 2437. In the second quarter of 2016, the Court dismissed with prejudice the portions of the homebuilders' complaint alleging a conspiracy in 2014 and 2015, ruling that there were insufficient factual allegations to allow such a claim to go forward. The homebuilders' claims alleging a conspiracy prior to 2014 have not been dismissed, and the case proceeds as to those claims. USG has agreed to defend and indemnify L&W Supply Corporation with regard to this matter.

Beginning in the third quarter of 2013, class action lawsuits making similar allegations with regard to Canada were filed in Quebec, Ontario and British Columbia courts on behalf of purchasers of wallboard in Canada and naming USG, United States Gypsum Company, CGC Inc., and other wallboard manufacturers as defendants.

We believe that the cost, if any, of resolving the homebuilders' lawsuit and Canadian class action litigation will not have a material effect on our results of operations, financial position or cash flows.

ENVIRONMENTAL LITIGATION

We are involved in environmental cleanups of property that we own or have owned. In addition, we have been notified by state and federal environmental protection agencies of possible involvement as one of numerous "potentially responsible parties" in certain Superfund sites in the United States to pay for some part of the cleanup of hazardous waste. In most of these sites, our involvement is expected to be minimal. As of December 31, 2017 and December 31, 2016, we had an accrual of $17 million and $18 million, respectively, for our probable and reasonably estimable liability in connection with these matters. Our accruals take into account all known or estimated undiscounted costs associated with these sites, including site investigations and feasibility costs, site cleanup and remediation, certain legal costs, and fines and penalties, if any. However, we continue to review these accruals as additional information becomes available and revise them as appropriate. Based on the information known to us, we believe these environmental matters will not have a material effect on our results of operations, financial position or cash flows.

OTHER LITIGATION

We are named as defendants in other claims and lawsuits arising from our operations, including lawsuits or claims arising from commercial disputes, product performance, product liabilities and worksite or vehicular accidents. We believe that we have properly accrued for our probable liability in connection with these claims and suits, taking into account the probability of liability, whether our exposure can be reasonably estimated and, if so, our estimate of our liability or the range of our liability. We do not expect these or any other litigation matters involving USG to have a material effect on our results of operations, financial position or cash flows.

19. Quarterly Financial Data (unaudited)

	Quarter			
(millions, except per-share data)	First	Second	Third	Fourth
2017				
Net sales	$ 767	$ 811	$ 795	$ 831
Gross profit	164	168	163	170
Operating profit	91	96	93	87
Income (loss) from continuing operations (b)	55	46	66	(70)
(Loss) income from discontinued operations, net of tax	—	(10)	—	1
Net income (loss) (b)	55	36	66	(69)
Income per average common share:				
Basic (a)	$ 0.38	$ 0.25	$ 0.47	$ (0.49)
Diluted (a)	0.37	0.24	0.46	(0.49)
2016				
Net sales	$ 747	$ 769	$ 767	$ 734
Gross profit	181	193	181	150
Operating profit	116	122	97	59
Income from continuing operations (c)	60	67	56	28
Gain on sale of discontinued operations, net of tax	—	—	—	279
Income from discontinued operations, net of tax	7	7	6	—
Net income (c)	67	74	62	307
Income per average common share:				
Basic (a)	$ 0.46	$ 0.50	$ 0.43	$ 2.10
Diluted (a)	0.46	0.50	0.42	2.07

(a) The sum of the four quarters is not necessarily the same as the total for the year.

(b) Income from continuing operations and net income included a loss on extinguishment of debt of $22 million for the second quarter of 2017 and income tax expense of $145 million related to the 2017 Tax Act for the fourth quarter of 2017. See Notes 6 and 15, respectively.

(c) Income from continuing operations and net income included a loss on extinguishment of debt of $32 million for the fourth quarter of 2016. See Note 6.

20. Subsequent Event

On February 1, 2018, we announced that our Board of Directors approved a $250 million increase to our stock repurchase program, bringing the total authorization to $500 million. Under the program, we may repurchase shares from time to time in open market transactions or in privately-negotiated transactions in accordance with applicable securities laws. We may discontinue the program at any time. The timing and the amount of any repurchases will be determined based on market conditions and other factors. We expect that stock repurchases will be funded with available cash on hand. During 2017, we repurchased $184 million of our common stock, leaving $316 million of authorization remaining.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of USG Corporation:

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of USG Corporation and subsidiaries (the "Corporation") as of December 31, 2017 and 2016, the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows, for each of the three years in the period ended December 31, 2017, and the related notes and the schedule listed in the Index at Item 8 (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Corporation as of December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Corporation's internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 14, 2018, expressed an unqualified opinion on the Corporation's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Corporation's management. Our responsibility is to express an opinion on the Corporation's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Corporation in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ DELOITTE & TOUCHE LLP

Chicago, Illinois
February 14, 2018

We have served as the Corporation's auditor since 2002.

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USG CORPORATION
SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS

(millions)	Balance at beginning of period	Additions: Charged to costs and expenses	Additions: Charged to other accounts	Deductions (a)	Balance at end of period
Year ended December 31, 2017:					
Doubtful accounts	$ 5	$ 2	$ —	$ (1)	$ 6
Cash discounts	3	34	—	(34)	3
Income tax valuation allowance	51	124	—	—	175
Year ended December 31, 2016:					
Doubtful accounts	7	1	—	(3)	5
Cash discounts	2	34	—	(33)	3
Income tax valuation allowance	70	—	—	(19)	51
Year ended December 31, 2015:					
Doubtful accounts	14	(6)	—	(1)	7
Cash discounts	1	37	—	(36)	2
Income tax valuation allowance	1,023	—	—	(953)	70

(a) Reflects receivables written off as related to doubtful accounts, discounts allowed as related to cash discounts and reductions in the income tax valuation allowance.

Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None

Item 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our Chief Executive Officer and Chief Financial Officer, after evaluating the effectiveness of our "disclosure controls and procedures" (as defined in Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, or the Exchange Act), have concluded that, as of the end of the fiscal year covered by this report, our disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by an issuer in the reports that it files or submits under the Exchange Act is accumulated and communicated to the issuer's management, including its principal executive officer or officers and principal financial officer or officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

Management Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control system was designed to provide reasonable assurance to management and our Board of Directors regarding the preparation and fair presentation of published financial statements.

All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

Management assessed the effectiveness of our internal control over financial reporting as of December 31, 2017. In making this assessment, management used the criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on its assessment, management believes that, as of December 31, 2017, our internal control over financial reporting is effective based on those criteria.

Our independent registered public accounting firm has issued an attestation report on our internal control over financial reporting. This report appears below.

Changes in Internal Control over Financial Reporting

There were no changes in our "internal control over financial reporting" (as defined in Rule 13a-15(f) promulgated under the Exchange Act) identified in connection with the evaluation required by Rule 13a-15(d) promulgated under the Exchange Act that occurred during the fiscal quarter ended December 31, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of USG Corporation:

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of USG Corporation and subsidiaries (the "Corporation") as of December 31, 2017, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Corporation maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements and financial statement schedule as of and for the year ended December 31, 2017, of the Corporation and our report dated February 14, 2018, expressed an unqualified opinion on those financial statements and financial statement schedule.

Basis for Opinion

The Corporation's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Corporation's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Corporation in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ DELOITTE & TOUCHE LLP
Chicago, Illinois
February 14, 2018

Item 9B. OTHER INFORMATION

On February 14, 2018, our Board of Directors approved our 2018 Annual Management Incentive Program (the "2018 Program"), upon the recommendation of the Compensation and Organization Committee of our Board. Under the 2018 Program, 50% of the target incentive award for each of USG's named executive officers is based on a formula related to adjusted consolidated net earnings and 50% is based on specified operating and financial targets. Our Board also approved the following operating and financial targets for USG's named executive officers under the 2018 Program: Adjusted operating margin, UBBP adjusted EBIT and growth initiatives revenue.

PART III

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Executive Officers of the Registrant (as of February 14, 2018):

Name	Age	Position
Jennifer F. Scanlon	51	President and Chief Executive Officer
Matthew F. Hilzinger	54	Executive Vice President and Chief Financial Officer
Brian J. Cook	60	Executive Vice President and Chief Administrative Officer
Dominic A. Dannessa	61	Executive Vice President and Chief Customer and Innovation Officer
Joseph W. Holmes	56	Senior Vice President, Manufacturing, Technology and Global Operations
Christopher D. Macey	46	Senior Vice President and President, Ceilings
John M. Reale	56	Senior Vice President and President, Performance Materials
Gregory D. Salah	55	Senior Vice President and President, Gypsum
Michelle M. Warner	51	Senior Vice President, General Counsel and Corporate Secretary

Business Experience During the Last Five Years:

Jennifer F. Scanlon has served as a Director since September 2016 and President and Chief Executive Officer since November 2016. Prior thereto Ms. Scanlon held a variety of positions at USG, including Executive Vice President beginning in March 2016 and President, International beginning in September 2010. Ms. Scanlon also served as President of L&W Supply Corporation from July 2015 to October 2016 and as the chairman of the board of UBBP from its inception in February 2014 until October 2016.

Matthew F. Hilzinger has served as Executive Vice President since April 2012 and Chief Financial Officer since May 2012. Prior to joining USG, he held various positions at Exelon Corporation, a utility services holding company engaged in the energy generation and delivery businesses, including serving as Executive Vice President and Chief Integration Officer in March 2012 and Senior Vice President and Chief Financial Officer prior thereto.

Brian J. Cook has served as Executive Vice President since March 2016 and Chief Administrative Officer since September 2015. He previously held a variety of human resources and labor relations positions at USG, including Senior Vice President, Human Resources and Communications from May 2013 to August 2015 and Senior Vice President, Human Resources prior thereto.

Dominic A. Dannessa has served as Executive Vice President and Chief Customer and Innovation Officer since November 2017. He also oversees USG's Corporate Innovation Center in Libertyville, IL. Mr. Dannessa previously served as Executive Vice President, Chief Operations and Innovation Officer from March 2016 until November 2017, Senior Vice President, Operations and Chief Technology Officer from September 2015 until February 2016 and prior thereto as Senior Vice President and Chief Technology Officer.

Joseph W. Holmes has served as Senior Vice President, Manufacturing, Technology and Global Operations and as an executive officer since November 2017. Prior thereto he served as Chief Operating Officer of UBBP from its inception in February 2014 until October 2017. He previously held various roles at USG beginning more than five years ago, including Vice President, Enterprise Technology, Vice President, L&W and General Manager, USG Zawawi until the inception of UBBP in February 2014.

Christopher D. Macey has served as Senior Vice President and President, Ceilings since October 2017 and became an executive officer in November 2017. He previously held a variety of roles with USG and CGC Inc., USG's Canadian subsidiary, including General Manager, North American Ceilings from June 2015 to September 2017 and Vice President and prior thereto General Manager, CGC beginning in 2007.

John M. Reale has served as Senior Vice President and President, Performance Materials since October 2017 and became an executive officer in November 2017. Previously he served as General Manager, North American Substrates from January 2013 until September 2017 and in a variety of roles at USG prior thereto. Mr. Reale, before he was an executive officer of USG, filed a personal voluntary bankruptcy petition under Chapter 7 in the U.S. Bankruptcy Court in 2012 as a result of an unsuccessful personal business venture, which petition has since been discharged.

Gregory D. Salah has served as Senior Vice President and President, Gypsum since November 2017. Previously he served in various roles at USG, including Senior Vice President and President, North America from March 2016 to October 2017, Vice President and General Manager, North America from August 2015 to February 2016, Senior Vice President & General Manager, North American Wallboard & Surfaces, United States Gypsum Company, from December 2014 to July 2015, General Manager, US Wallboard & Surfaces from January 2013 to November 2014 and Senior Vice President, Sales and Marketing, Building Systems prior thereto.

Michelle M. Warner joined USG as Senior Vice President, General Counsel and Corporate Secretary in January 2016. Prior to joining USG, she served in various roles at Motorola Solutions, Inc., a provider of communication infrastructure, devices, accessories, software and services, including Corporate Vice President, Deputy General Counsel and Secretary from June 2013 to December 2015 and Corporate Vice President, Law, Corporate, Securities and Transactions prior thereto.

Committee Charters and Code of Business Conduct

We have adopted a code of ethics, our Code of Business Conduct, that applies to all of our directors, officers and employees. Our Code of Business Conduct, our Corporate Governance Guidelines and the charters of the committees of our Board of Directors, including the Audit Committee, Governance Committee and Compensation and Organization Committee, are available through the "Investor Relations" and "Corporate Governance" links in the "Company Information" section of our Web site at www.usg.com. We will post any amendments to the Code of Business Conduct, and any waivers that are required to be disclosed by the rules of the Securities and Exchange Commission, the NYSE or the Chicago Stock Exchange, on our Web site.

Other information required by this Item 10 is included under the headings "Nominees for Election to the Board of Directors," "Directors Continuing in Office," "Committees of the Board of Directors," "Audit Committee" and "Section 16(a) Beneficial Ownership Reporting Compliance" in the definitive Proxy Statement for our annual meeting of stockholders scheduled to be held on May 9, 2018, which information is incorporated herein by reference.

Item 11. EXECUTIVE COMPENSATION

Information required by this Item 11 is included under the headings "Compensation of Executive Officers" and "Director Compensation" in the definitive Proxy Statement for our annual meeting of stockholders scheduled to be held on May 9, 2018, which information is incorporated herein by reference.

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The following table sets forth information as of December 31, 2017 about equity securities that may be issued upon exercise of options under our LTIP, which was approved by our stockholders, and deferred stock units issued under our Non-Employee Director Compensation Program. The features of these plans are discussed further in Part II, Item 8, Financial Statements and Supplementary Data, Note 10, Share-Based Compensation.

Plan Category	Number of securities to be issued upon exercise of outstanding options and rights (a)	Weighted average exercise price of outstanding options and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reported in column one)
Equity compensation plans approved by stockholders	1,261,140	$ 15.72	6,990,836
Equity compensation plans not approved by stockholders	234,428	—	—
Total	1,495,568	$ 15.72	6,990,836

(a) Equity compensation plans not approved by stockholders includes an aggregate of 210,480 fully vested deferred stock units granted to our non-employee directors that are payable in shares of common stock and 23,948 fully vested deferred stock units granted to our non-employee directors that are payable in cash or shares of common stock, at such director's option. The deferred stock units increase or decrease in value in direct proportion to the market value of our common stock and will be paid following termination of service as a director. Amount does not include an aggregate of 611 fully vested deferred stock units granted to our non-employee directors that must be settled in cash.

(b) Weighted-average exercise price calculation for equity compensation plans not approved by stockholders does not reflect the inclusion of fully-vested deferred stock units granted to our non-employee directors because that type of award does not have an exercise feature.

Other information required by this Item 12 is included under the heading "Securities Ownership" in the definitive Proxy Statement for our annual meeting of stockholders scheduled to be held on May 9, 2018, which information is incorporated herein by reference.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Information required by this Item 13 is included under the headings "Transactions with Related Persons" and "Director Independence" in the definitive Proxy Statement for our annual meeting of stockholders scheduled to be held on May 9, 2018, which information is incorporated herein by reference.

Item 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Information required by this Item 14 is included under the heading "Independent Registered Public Accounting Firm Fees and Services" in the definitive Proxy Statement for our annual meeting of stockholders scheduled to be held on May 9, 2018, which information is incorporated herein by reference.

PART IV

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) 1 and 2. See Part II, Item 8, Financial Statements and Supplementary Data, for an index of our consolidated financial statements and supplementary data schedule.

3. The information in the Exhibit Index of this Annual Report on Form 10-K is incorporated into this Item 15(a)3 by reference.

(b) The information in the Exhibit Index of this Annual Report on Form 10-K is incorporated into this Item 15(b) by reference.

Item 16. FORM 10-K SUMMARY

None

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EXHIBIT INDEX

Exhibit Number	Exhibit
2.1	Share Sale and Subscription Agreement, dated as of October 17, 2013, by and among USG Corporation, USG Netherlands Global Holdings B.V., Boral Limited, Boral International Pty Limited, and Boral Gypsum Asia Sdn Bhd (incorporated by reference to Exhibit 2.1 to USG Corporation's Current Report on Form 8-K (File No. 001-08864) dated October 16, 2013, or the October 2013 8-K) †
2.2	Share Sale and Subscription Agreement, dated as of October 17, 2013, by and among USG Corporation, USG Foreign Investments, Ltd., USG Netherlands Global Holdings B.V., Boral Limited, Boral Building Materials Pty Limited, and Boral Australian Gypsum Limited (incorporated by reference to Exhibit 2.2 to the October 2013 8-K) †
2.3	Sale and Purchase Agreement, by and between USG Corporation and American Builders & Contractors Supply Co., Inc., dated August 27, 2016 (incorporated by reference to Exhibit 2.1 to USG Corporation's Amendment No. 1 to Current Report on Form 8-K (File No. 001-08864) dated August 29, 2016) †
3.1	Restated Certificate of Incorporation of USG Corporation (incorporated by reference to Exhibit 3.1 to USG Corporation's Current Report on Form 8-K (File No. 001-08864) dated November 14, 2017, or the November 2017 8-K)
3.2	Amended and Restated By-Laws of USG Corporation, dated as of November 9, 2017 (incorporated by reference to Exhibit 3.2 to the November 2017 8-K)
4.1	Form of Common Stock certificate (incorporated by reference to Exhibit 4.1 to USG Corporation's Current Report on Form 8-K (File No. 001-08864) dated May 12, 2016)
4.2	Rights Agreement, dated as of December 21, 2006, by and between USG Corporation and Computershare Investor Services, LLC, as rights agent (incorporated by reference to Exhibit 4.1 to USG Corporation's Registration Statement on Form 8-A (File No. 001-08864) dated December 21, 2006)
4.3	Amendment No. 1 to Rights Agreement, dated as of December 5, 2008, by and between USG Corporation and Computershare Investor Services, LLC, as rights agent (incorporated by reference to Exhibit 4.1 to USG Corporation's Amendment No. 1 to Form 8-A (File No. 001-08864) dated December 5, 2008)
4.4	Amendment No. 2 to Rights Agreement, dated as of March 22, 2013, by and between USG Corporation and Computershare Trust Company, N.A., as rights agent (successor-in-interest to Computershare Investor Services LLC) (incorporated by reference to Exhibit 4.1 to USG Corporation's Amendment No. 2 to Form 8-A (File No. 001-08864) dated March 22, 2013)
4.5	Amendment No. 3 to Rights Agreement, dated as of February 11, 2015, by and between USG Corporation and Computershare Trust Company, N.A., as rights agent (successor-in-interest to Computershare Investor Services LLC) (incorporated by reference to Exhibit 4.1 to USG Corporation's Amendment No. 3 to Form 8-A (File No. 001-08864) dated February 11, 2015)
4.6	Amendment No. 4 to Rights Agreement, dated as of November 16, 2015, by and between USG Corporation and Computershare Trust Company, N.A., as rights agent (successor-in-interest to Computershare Investor Services LLC) (incorporated by reference to Exhibit 4.1 to USG Corporation's Amendment No. 4 to Form 8-A (File No. 001-08864) dated November 16, 2015)
4.7	Indenture, dated as of November 1, 2006, by and between USG Corporation and Wells Fargo Bank, National Association, as trustee (incorporated by reference to Exhibit 4.01 to USG Corporation's Current Report on Form 8-K (File No. 001-08864) dated November 20, 2006)
4.8	Agreement of Resignation, Appointment and Acceptance, dated as of October 18, 2011, by and among USG Corporation, U.S. Bank National Association and HSBC Bank USA, National Association (incorporated by reference to Exhibit 4.1 to USG Corporation's Quarterly Report on Form 10-Q (File No. 001-08864) dated October 31, 2011)
4.9	Supplemental Indenture No. 6, dated as of February 24, 2015, by and among USG Corporation, each of United States Gypsum Company, L&W Supply Corporation, USG Foreign Investments, Ltd. and USG Interiors, LLC, as guarantors, and

U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.1 to USG Corporation's Current Report on Form 8-K (File No. 001-08864) dated February 24, 2015)

4.10 Supplemental Indenture No. 7, dated as of May 15, 2017, by and among USG Corporation, each of United States Gypsum Company, USG Foreign Investments, Ltd. and USG Interiors, LLC, as guarantors, and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.1 to USG Corporation's Current Report on Form 8-K (File No. 001-08864) dated May 15, 2017)

USG Corporation and certain of its consolidated subsidiaries are parties to other long-term debt instruments under which the total amount of securities authorized does not exceed 10% of the total assets of USG Corporation and its subsidiaries on a consolidated basis. Pursuant to paragraph (b)(4)(iii)(A) of Item 601 of Regulation S-K, USG Corporation agrees to furnish a copy of such instruments to the Securities and Exchange Commission upon request.

10.1	Shareholder’s Agreement, dated as of January 30, 2006, by and between USG Corporation and Berkshire Hathaway Inc. (incorporated by reference to Exhibit 10.3 to USG Corporation's Current Report on Form 8-K (File No. 001-08864) dated January 30, 2006)
10.2	Amended and Restated Registration Rights Agreement, dated as of November 26, 2008, by and between USG Corporation and Berkshire Hathaway Inc. (incorporated by reference to Exhibit 10.1 to USG Corporation's Current Report on Form 8-K (File No. 001-08864) dated November 26, 2008)
10.3	Shareholders Agreement, dated as of February 28, 2014, by and among USG Corporation, Boral International Pty Limited, Boral Building Materials Pty Limited, USG Netherlands Global Holdings B.V., USG Boral Building Products Pte Limited, USG Boral Building Products Pty Limited, and Boral Limited (incorporated by reference to Exhibit 10.1 to USG Corporation's Current Report on Form 8-K (File No. 001-08864) dated February 28, 2014) (Note: Portions of this document have been omitted pursuant to a Request for Confidential Treatment filed with the Securities and Exchange Commission)
10.4	Fifth Amendment and Restatement Agreement, dated as of May 1, 2017, among USG Corporation, certain of its wholly-owned domestic and Canadian subsidiaries, JPMorgan Chase Bank, N.A., as administrative agent and as an issuing bank, JPMorgan Chase Bank, N.A., Toronto Branch, as Canadian agent, and the lenders and issuing banks party thereto (incorporated by reference to Exhibit 10.1 to USG Corporation's Current Report on Form 8-K (File No. 001-08864) dated May 1, 2017, or the May 2017 8-K)
10.5	Fifth Amended and Restated Credit Agreement, dated as of May 1, 2017, among USG Corporation, as the “U.S. Borrower,” CGC Inc., a New Brunswick corporation and wholly-owned indirect subsidiary of USG Corporation, as the “Canadian Borrower,” JPMorgan Chase Bank, N.A., as administrative agent, JPMorgan Chase Bank, N.A., Toronto Branch, as Canadian agent, the lenders and issuing banks party thereto and Bank of America, N.A. and Wells Fargo Bank, National Association, as co-syndication agents (incorporated by reference to Exhibit 10.2 to the May 2017 8-K)
10.6	Amended and Restated Guarantee Agreement, dated as of October 22, 2014, among USG Corporation, CGC Inc., the subsidiary guarantors party thereto and JP Morgan Chase Bank, N.A., as administrative agent (incorporated by reference to Exhibit 10.20 to USG Corporation's Annual Report on Form 10-K (File No. 001-08864) dated February 12, 2015, or the 2014 10-K)
10.7	U.S. Pledge and Security Agreement, dated as of January 7, 2009, among USG Corporation, the other grantors party thereto and JPMorgan Chase Bank, N.A., as administrative agent (incorporated by reference to Exhibit 10.21 to the 2014 10-K)
10.8	Canadian Pledge and Security Agreement, dated as of October 22, 2014, among CGC Inc., the other grantors party thereto and JPMorgan Chase Bank, N.A., as administrative agent (incorporated by reference to Exhibit 10.22 to the 2014 10-K)
10.9	Canadian Amendment and Reaffirmation Agreement, dated as of May 1, 2017, by and between CGC Inc. and JPMorgan Chase Bank, N.A. (incorporated by reference to Exhibit 10.3 to the May 2017 8-K)
10.10	Interest and Share Purchase Agreement, dated as of September 15, 2015, by and among USG Corporation, USG Ventures-Europe GmbH, Knauf Aquapanel GmbH, Knauf/USG Verwaltungs GmbH and Knauf/USG Systems GmbH & Co. KG (incorporated by reference to Exhibit 10.2 to USG Corporation's Quarterly Report on Form 10-Q (File No. 001-08864) dated October 22, 2015, or the third quarter 2015 10-Q)
10.11	Direct Purchaser Settlement Agreement, dated February 11, 2015 (incorporated by reference to Exhibit 10.1 to USG Corporation’s Current Report on Form 8-K (File No. 001-08864) dated February 13, 2015, or the February 2015 8-K)
10.12	Indirect Purchaser Settlement Agreement, dated February 11, 2015 (incorporated by reference to Exhibit 10.2 to the February 2015 8-K)
10.13	Supply Agreement, by and among United States Gypsum Company and USG Interiors, LLC and USG Corporation, as guarantor, and L&W Supply Corporation and American Builders & Contractors Supply Co., Inc., as guarantor, dated October 31, 2016 (incorporated by reference to Exhibit 10.1 to USG Corporation’s Current Report on Form 8-K (File No.

001-08864) dated November 1, 2016) (Note: Portions of this exhibit have been omitted pursuant to a Request for Confidential Treatment filed with the Securities and Exchange Commission)

10.14	Form of Employment Agreement (incorporated by reference to Exhibit 10.1 to USG Corporation's Current Report on Form 8-K (File No. 001-08864) dated October 2, 2008, or the October 2008 8-K)*

10.15	Employment Agreement, effective as of April 16, 2012, between USG Corporation and Matthew Hilzinger (incorporated by reference to Exhibit 10.1 to USG Corporation's Current Report on Form 8-K (File No. 001-08864) dated March 26, 2012, or the March 2012 8-K)*
10.16	Form of Employment Agreement (form used since January 1, 2015) (incorporated by reference to Exhibit 10.3 to USG Corporation's Quarterly Report on Form 10-Q (File No. 001-08864) dated July 23, 2015)*
10.17	Form of Change in Control Severance Agreement (Tier 1 Benefits) (incorporated by reference to Exhibit 10.2 to the October 2008 8-K)*
10.18	Form of Change in Control Severance Agreement (Tier 2 Benefits) (incorporated by reference to Exhibit 10.3 to the October 2008 8-K)*
10.19	Change in Control Severance Agreement, dated as of April 16, 2012, by and between USG Corporation and Matthew Hilzinger (incorporated by reference to Exhibit 10.2 to the March 2012 8-K)*
10.20	Form of Change in Control Severance Agreement (form used since August 1, 2015) (incorporated by reference to Exhibit 10.1 to the third quarter 2015 10-Q)*
10.21	Form of Indemnification Agreement (incorporated by reference to Exhibit 10.14 to USG Corporation's Annual Report on Form 10-K (File No. 001-08864) dated February 15, 2008, or the 2007 10-K)*
10.22	USG Corporation Supplemental Retirement Plan (As Amended and Restated Effective as of January 1, 2007), dated December 10, 2008 (incorporated by reference to Exhibit 10.1 to USG Corporation's Annual Report on Form 10-K (File No. 001-08864) dated February 20, 2009, or the 2008 10-K)*
10.23	USG Corporation Deferred Compensation Plan (Effective as of April 1, 2007) (incorporated by reference to Exhibit 10.31 to USG Corporation's Annual Report on Form 10-K (File No. 001-08864) dated February 16, 2007)*
10.24	First Amendment of USG Corporation Deferred Compensation Plan, dated December 10, 2008 (incorporated by reference to Exhibit 10.25 to the 2008 10-K)*
10.25	Second Amendment of USG Corporation Deferred Compensation Plan, dated September 5, 2012 (incorporated by reference to Exhibit 10.1 to USG Corporation's Quarterly Report on Form 10-Q (File No. 001-08864) dated October 23, 2014)*
10.26	Third Amendment of USG Corporation Deferred Compensation Plan, dated November 21, 2014 (incorporated by reference to Exhibit 10.28 to the 2014 10-K)*
10.27	USG Corporation Management Incentive Plan (as amended and restated effective May 13, 2015) (incorporated by reference to Annex B to the Proxy Statement for the Annual Meeting of Stockholders of USG Corporation held on May 13, 2015 filed with the Securities and Exchange Commission on April 2, 2015 (File No. 001-08864), or the 2015 Proxy Statement)*
10.28	2017 Annual Management Incentive Program of USG Corporation (Executive Officers Only) (incorporated by reference to Exhibit 10.30 to USG Corporation's Annual Report on Form 10-K (File No. 001-08864) dated February 8, 2017, or the 2016 10-K)*
10.29	2018 Annual Management Incentive Program of USG Corporation (Executive Officers Only)* **
10.30	USG Corporation Long-Term Incentive Plan (as amended effective May 13, 2015) (incorporated by reference to Annex C to the 2015 Proxy Statement)*
10.31	Form of USG Corporation Nonqualified Stock Option Agreement (incorporated by reference to Exhibit 10.36 to the 2008 10-K)*
10.32	Form of USG Corporation Restricted Stock Units Agreement (incorporated by reference to Exhibit 10.37 to the 2008 10-K)*
10.33	Form of USG Corporation Nonqualified Stock Option Agreement (incorporated by reference to Exhibit 10.30 to USG Corporation's Annual Report on Form 10-K (File No. 001-08864) dated February 12, 2010)*

10.34	Form of USG Corporation Restricted Stock Units Agreement (incorporated by reference to Exhibit 10.1 to USG Corporation's Quarterly Report on Form 10-Q (File No. 001-08864) dated July 24, 2014)*
10.35	Form of USG Corporation Market Share Units Agreement (incorporated by reference to Exhibit 10.46 to the 2014 10-K)*
10.36	Form of USG Corporation Performance Shares Agreement (incorporated by reference to Exhibit 10.47 to the 2014 10-K)*

10.37	USG Corporation 2016 Long-Term Incentive Plan (incorporated by reference to Annex A to the Proxy Statement for the Annual Meeting of Stockholders of USG Corporation held on May 11, 2016 filed with the Securities and Exchange Commission on March 31, 2016 (File No. 001-08864))*
10.38	Form of USG Corporation Restricted Stock Units Agreement under the USG Corporation 2016 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.42 to the 2016 10-K)*
10.39	Form of USG Corporation Market Share Units Agreement under the USG Corporation 2016 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.43 to the 2016 10-K)*
10.40	Form of USG Corporation Performance Shares Agreement under the USG Corporation 2016 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.44 to the 2016 10-K)*
10.41	USG Corporation Stock Compensation Program for Non-Employee Directors (as Amended and Restated Effective as of January 1, 2005) (incorporated by reference to Exhibit 10.2 to USG Corporation's Current Report on Form 8-K (File No. 001-08864) dated November 14, 2005)*
10.42	Amendment No. 1 to the USG Corporation Stock Compensation Program for Non-Employee Directors (incorporated by reference to Exhibit 10.1 to USG Corporation's Quarterly Report on Form 10-Q (File No. 001-08864) dated August 3, 2006)*
10.43	Amendment No. 2 to the USG Corporation Stock Compensation Program for Non-Employee Directors (incorporated by reference to Exhibit 10.8 to USG Corporation's Quarterly Report on Form 10-Q (File No. 001-08864) dated April 30, 2007)*
10.44	USG Corporation Non-Employee Director Compensation Program (Amended and Restated February 13, 2008) (incorporated by reference to Exhibit 10.18 to the 2007 10-K)*
10.45	Amendment No. 1 to USG Corporation Non-Employee Director Compensation Program, dated November 12, 2010 (incorporated by reference to Exhibit 10.10 to USG Corporation's Annual Report on Form 10-K (File No. 001-08864) dated February 11, 2011)*
10.46	Amendment No. 2 to USG Corporation Non-Employee Director Compensation Program, dated November 10, 2011(incorporated by reference to Exhibit 10.11 to USG Corporation's Annual Report on Form 10-K (File No. 001-08864) dated February 14, 2012)*
10.47	Amendment No. 3 to USG Corporation Non-Employee Director Compensation Program, dated November 14, 2013 (incorporated by reference to Exhibit 10.14 to USG Corporation's Annual Report on Form 10-K (File No. 001-08864) dated March 3, 2014)*
10.48	Amendment No. 4 to USG Corporation Non-Employee Director Compensation Program, dated November 13, 2014 (incorporated by reference to Exhibit 10.16 to the 2014 10-K)*
10.49	Amendment No. 5 to USG Corporation Non-Employee Director Compensation Program, dated November 10, 2016 (incorporated by reference to Exhibit 10.53 to the 2016 10-K)*
10.50	USG Corporation Deferred Compensation Program for Non-Employee Directors (as Amended and Restated effective December 31, 2008) (incorporated by reference to Exhibit 10.10 to the 2008 10-K)*
10.51	First Amendment to USG Corporation Deferred Compensation Program for Non-Employee Directors (incorporated by reference to Exhibit 10.1 to USG Corporation's Quarterly Report on Form 10-Q (File No. 001-08864) dated October 26, 2017)*

Other:

21	Subsidiaries **
23.1	Consent of Independent Registered Public Accounting Firm, Deloitte & Touche LLP **

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24	Power of Attorney **
31.1	Rule 13a - 14(a) Certifications of USG Corporation's Chief Executive Officer **
31.2	Rule 13a - 14(a) Certifications of USG Corporation's Chief Financial Officer **
32.1	Section 1350 Certifications of USG Corporation's Chief Executive Officer **
32.2	Section 1350 Certifications of USG Corporation's Chief Financial Officer **
95	Mine Safety Disclosures **

101	The following financial information from USG Corporation's Annual Report on Form 10-K for the year ended December 31, 2017, formatted in XBRL (Extensible Business Reporting Language): (1) the consolidated statements of income for the years ended December 31, 2017, 2016 and 2015, (2) the consolidated statements of other comprehensive income (loss) for the years ended December 31, 2017, 2016 and 2015, (3) the consolidated balance sheets as of December 31, 2017 and 2016, (4) the consolidated statements of cash flows for the years ended December 31, 2017, 2016 and 2015, (5) the consolidated statements of stockholders' equity for the years ended December 31, 2017, 2016 and 2015 and (6) notes to the consolidated financial statements. **

*	Management contract or compensatory plan or arrangement
**	Filed or furnished herewith
†	Schedules and other similar attachments have been omitted pursuant to Item 601(b)(2) of Regulation S-K. The registrant hereby undertakes to furnish supplementally copies of any of the omitted schedules and other similar attachments upon request by the Securities and Exchange Commission, provided that the registrant may request confidential treatment for any schedule or other similar attachment so furnished.

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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

USG CORPORATION

February 14, 2018

By: /s/ Matthew F. Hilzinger
Matthew F. Hilzinger
Executive Vice President and
Chief Financial Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the date indicated.

/s/ Jennifer F. Scanlon	February 14, 2018
JENNIFER F. SCANLON Director, President and Chief Executive Officer (Principal Executive Officer)	
/s/ Matthew F. Hilzinger	February 14, 2018
MATTHEW F. HILZINGER Executive Vice President and Chief Financial Officer (Principal Financial Officer)	
/s/ Jeanette A. Press	February 14, 2018
JEANETTE A. PRESS Vice President and Controller (Principal Accounting Officer)	
JOSE ARMARIO, THOMAS A. BURKE, MATTHEW CARTER, JR., GRETCHEN R. HAGGERTY, WILLIAM H. HERNANDEZ, BRIAN A. KENNEY, RICHARD P. LAVIN, STEVEN F. LEER Directors	By: /s/ Matthew F. Hilzinger Matthew F. Hilzinger Attorney-in-fact February 14, 2018