

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

FORM 10-Q

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

For the quarterly period ended July 1, 2017

Commission file number 1-6770



MUELLER INDUSTRIES, INC.  
(Exact name of registrant as specified in its charter)

Delaware  
(State or other jurisdiction  
of incorporation or organization)

25-0790410  
(I.R.S. Employer  
Identification No.)

8285 Tournament Drive, Suite 150  
Memphis, Tennessee  
(Address of principal executive offices)

38125  
(Zip Code)

(901) 753-3200  
(Registrant's telephone number, including area code)

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 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", and "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer   
Non-accelerated filer

Accelerated filer   
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 Rule 12b-2 of the Exchange Act).

Yes  No

The number of shares of the Registrant's common stock outstanding as of July 21, 2017 was 57,627,171.

MUELLER INDUSTRIES, INC.  
FORM 10-Q  
For the Quarterly Period Ended July 1, 2017

As used in this report, the terms "Company," "Mueller," and "Registrant" mean Mueller Industries, Inc. and its consolidated subsidiaries taken as a whole, unless the context indicates otherwise.

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## PART I. FINANCIAL INFORMATION

## Item 1. Financial Statements

MUELLER INDUSTRIES, INC.  
 CONDENSED CONSOLIDATED STATEMENTS OF INCOME  
 (Unaudited)

<i>(In thousands, except per share data)</i>	For the Quarter Ended		For the Six Months Ended	
	July 1, 2017	July 2, 2016	July 1, 2017	July 2, 2016
Net sales	\$ 614,266	\$ 544,071	\$ 1,192,186	\$ 1,076,880
Cost of goods sold	524,311	456,060	1,012,738	902,702
Depreciation and amortization	8,595	9,061	16,950	17,981
Selling, general, and administrative expense	34,557	34,514	70,088	70,294
Operating income	46,803	44,436	92,410	85,903
Interest expense	(6,442)	(1,692)	(8,973)	(3,540)
Other income, net	231	515	782	760
Income before income taxes	40,592	43,259	84,219	83,123
Income tax expense	(12,650)	(14,005)	(24,579)	(28,126)
(Loss) income from unconsolidated affiliates, net of tax	(109)	(995)	(1,352)	1,927
Consolidated net income	27,833	28,259	58,288	56,924
Net income attributable to noncontrolling interests	(200)	(462)	(668)	(497)
Net income attributable to Mueller Industries, Inc.	\$ 27,633	\$ 27,797	\$ 57,620	\$ 56,427
Weighted average shares for basic earnings per share	56,906	56,511	56,843	56,489
Effect of dilutive stock-based awards	511	418	585	456
Adjusted weighted average shares for diluted earnings per share	57,417	56,929	57,428	56,945
Basic earnings per share	\$ 0.49	\$ 0.49	\$ 1.01	\$ 1.00
Diluted earnings per share	\$ 0.48	\$ 0.49	\$ 1.00	\$ 0.99
Dividends per share	\$ 0.100	\$ 0.100	\$ 8.200	\$ 0.175

See accompanying notes to condensed consolidated financial statements.

**MUELLER INDUSTRIES, INC.**  
**CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME**  
(Unaudited)

<i>(In thousands)</i>	For the Quarter Ended		For the Six Months Ended	
	July 1, 2017	July 2, 2016	July 1, 2017	July 2, 2016
Consolidated net income	\$ 27,833	\$ 28,259	\$ 58,288	\$ 56,924
Other comprehensive income (loss), net of tax:				
Foreign currency translation	906	(10,186)	8,116	(11,297)
Net change with respect to derivative instruments and hedging activities, net of tax of \$(89), \$(266), \$(185), \$(487)	261	700	317	1,294
Net change in pension and postretirement obligation adjustments, net of tax of \$172, \$(522), \$183, \$(920)	(405)	1,530	(365)	2,702
Attributable to unconsolidated affiliates, net of tax of \$(704), \$(812), \$199, \$(812)	1,247	1,438	(351)	1,438
Other, net	(236)	9	(380)	23
Total other comprehensive income (loss), net	1,773	(6,509)	7,337	(5,840)
Consolidated comprehensive income	29,606	21,750	65,625	51,084
Comprehensive (income) loss attributable to noncontrolling interests	(386)	123	(1,503)	862
Comprehensive income attributable to Mueller Industries, Inc.	\$ 29,220	\$ 21,873	\$ 64,122	\$ 51,946

See accompanying notes to condensed consolidated financial statements.

**MUELLER INDUSTRIES, INC.**  
**CONDENSED CONSOLIDATED BALANCE SHEETS**  
(Unaudited)

<i>(In thousands, except share data)</i>	July 1, 2017	December 31, 2016
<b>Assets</b>		
<b>Current assets:</b>		
Cash and cash equivalents	\$ 167,555	\$ 351,317
Accounts receivable, less allowance for doubtful accounts of \$834 in 2017 and \$637 in 2016	287,829	256,291
Inventories	252,799	242,013
Other current assets	35,568	44,702
<b>Total current assets</b>	<b>743,751</b>	<b>894,323</b>
Property, plant, and equipment, net	284,594	295,231
Goodwill, net	137,085	123,993
Intangible assets, net	36,332	36,168
Investment in unconsolidated affiliates	75,208	77,110
Other assets	20,294	20,651
<b>Total assets</b>	<b>\$ 1,297,264</b>	<b>\$ 1,447,476</b>
<b>Liabilities</b>		
<b>Current liabilities:</b>		
Current portion of debt	\$ 14,583	\$ 13,655
Accounts payable	105,880	103,175
Accrued wages and other employee costs	30,894	35,121
Other current liabilities	67,841	67,041
<b>Total current liabilities</b>	<b>219,198</b>	<b>218,992</b>
Long-term debt, less current portion	489,043	213,709
Pension liabilities	14,823	14,890
Postretirement benefits other than pensions	16,793	16,383
Environmental reserves	20,859	21,208
Deferred income taxes	19,351	19,573
Other noncurrent liabilities	11,191	6,284
<b>Total liabilities</b>	<b>791,258</b>	<b>511,039</b>
<b>Equity</b>		
Mueller Industries, Inc. stockholders' equity:		
Preferred stock - \$1.00 par value; shares authorized 5,000,000; none outstanding	—	—
Common stock - \$.01 par value; shares authorized 100,000,000; issued 80,183,004; outstanding 57,624,926 in 2017 and 57,395,209 in 2016	802	802
Additional paid-in capital	274,750	273,345
Retained earnings	727,110	1,141,831
Accumulated other comprehensive loss	(60,454)	(66,956)
Treasury common stock, at cost	(448,837)	(450,338)
<b>Total Mueller Industries, Inc. stockholders' equity</b>	<b>493,371</b>	<b>898,684</b>
Noncontrolling interests	12,635	37,753
<b>Total equity</b>	<b>506,006</b>	<b>936,437</b>
Commitments and contingencies	—	—
<b>Total liabilities and equity</b>	<b>\$ 1,297,264</b>	<b>\$ 1,447,476</b>

See accompanying notes to condensed consolidated financial statements.

**MUELLER INDUSTRIES, INC.**  
**CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(Unaudited)

(In thousands)	For the Six Months Ended	
	July 1, 2017	July 2, 2016
<b>Cash flows from operating activities</b>		
Consolidated net income	\$ 58,288	\$ 56,924
Reconciliation of consolidated net income to net cash provided by operating activities:		
Depreciation and amortization	17,093	18,162
Stock-based compensation expense	3,692	2,874
Loss (income) from unconsolidated affiliates	1,352	(1,927)
Gain on sale of business	(1,631)	—
Loss (gain) on disposals of assets	81	(555)
Gain on sales of securities	(611)	—
Impairment charges	411	—
Deferred income taxes	3	3,548
Income tax benefit from exercise of stock options	—	(186)
Changes in assets and liabilities, net of businesses acquired and sold:		
Receivables	(47,108)	(52,334)
Inventories	(10,874)	1,176
Other assets	(4,723)	17,009
Current liabilities	(1,262)	(1,314)
Other liabilities	(1,086)	(1,440)
Other, net	(1,078)	(72)
Net cash provided by operating activities	12,547	41,865
<b>Cash flows from investing activities</b>		
Capital expenditures	(11,908)	(10,248)
Acquisition of businesses, net of cash acquired	(18,419)	(20,533)
Proceeds from sale of business, net of cash sold	17,483	—
Net withdrawals from restricted cash balances	4,650	1,508
Investment in unconsolidated affiliates	(1,617)	—
Proceeds from sales of assets	1,363	1,482
Proceeds from sales of securities	1,787	—
Net cash used in investing activities	(6,661)	(27,791)
<b>Cash flows from financing activities</b>		
Dividends paid to stockholders of Mueller Industries, Inc.	(185,539)	(9,887)
Dividends paid to noncontrolling interests	(2,909)	—
Issuance of long-term debt	—	2,000
(Repayment) issuance of debt by consolidated joint ventures, net	(3,320)	4,426
Net cash (used) received to settle stock-based awards	(785)	326
Repayments of long-term debt	(611)	(500)
Income tax benefit from exercise of stock options	—	186
Net cash used in financing activities	(193,164)	(3,449)
Effect of exchange rate changes on cash	3,516	(2,308)
(Decrease) increase in cash and cash equivalents	(183,762)	8,317
Cash and cash equivalents at the beginning of the period	351,317	274,844
Cash and cash equivalents at the end of the period	\$ 167,555	\$ 283,161

See accompanying notes to condensed consolidated financial statements. Refer to Note 2 for discussion of significant noncash financing activities.

MUELLER INDUSTRIES, INC.  
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS  
(Unaudited)

**General**

Certain information and footnote disclosures normally included in annual financial statements prepared in accordance with accounting principles generally accepted in the United States (U.S. GAAP) have been condensed or omitted. Results of operations for the interim periods presented are not necessarily indicative of results which may be expected for any other interim period or for the year as a whole. This Quarterly Report on Form 10-Q should be read in conjunction with the Company's Annual Report on Form 10-K, including the annual financial statements incorporated therein.

The accompanying unaudited interim financial statements include all normal recurring adjustments which are, in the opinion of management, necessary for a fair presentation of the results for the interim periods presented herein. The first half of 2017 contained 26 weeks, while the first half of 2016 contained 27 weeks.

**Note 1 – Earnings per Common Share**

Basic per share amounts have been computed based on the average number of common shares outstanding. Diluted per share amounts reflect the increase in average common shares outstanding that would result from the assumed exercise of outstanding stock options and vesting of restricted stock awards, computed using the treasury stock method. Approximately four thousand and 418 thousand stock-based awards were excluded from the computation of diluted earnings per share for the quarters ended July 1, 2017 and July 2, 2016, respectively, because they were antidilutive.

**Note 2 – Special Dividend**

On March 9, 2017, the Company distributed a special dividend of \$3.00 in cash and \$5.00 in principal amount of the Company's 6% Subordinated Debentures (Debentures) due March 1, 2027 for each share of common stock outstanding. Interest on the Debentures is payable semiannually on September 1 and March 1, commencing September 1, 2017. At issuance, the Debentures were recorded at their estimated fair value. The fair value of the Debentures was estimated based on quoted market prices for the same or similar issues, the current rates offered to the Company for debt of the same remaining maturities, or the use of market standard models. The carrying value of the Debentures approximate fair value at July 1, 2017.

The Debentures are subordinated to all other funded debt of the Company and are callable, in whole or in part, at any time at the option of the Company, subject to declining call premiums during the first five years. The Debentures also grant each holder the right to require the Company to repurchase such holder's Debentures in the event of a change in control at declining repurchase premiums during the first five years. The Debentures may be redeemed, subject to the conditions set forth above, at the following redemption price (expressed as a percentage of principal amount) plus any accrued but unpaid interest to, but excluding, the redemption date:

If redeemed during the 12-month period beginning March 9:

Year	Redemption Price
2017	106%
2018	105
2019	104
2020	103
2021	102
2022 and thereafter	100

The effect of the special dividend was a decrease in stockholders' equity of approximately \$158.7 million, an increase in long-term debt of approximately \$284.5 million, and a decrease in cash of approximately \$174.2 million.

**Note 3 – Acquisitions and Dispositions****Acquisitions**

On May 31, 2017, the Company entered into a share purchase agreement pursuant to which the Company acquired all of the outstanding shares of Pexcor Manufacturing Company Inc. (Pexcor) and Heatlink Group Inc. (Heatlink) for approximately \$18.5 million, net of working capital adjustments. The total purchase price consisted of \$16.3 million in cash at closing and a contingent consideration arrangement which requires the Company to pay the former owners up to \$2.2 million based on EBITDA growth of the acquired companies. Pexcor and Heatlink, based out of Calgary, Canada, produce and sell a complete line of products for PEX plumbing and radiant systems. These businesses complement the Company's existing businesses within the Piping Systems segment.

The fair value of the assets acquired totaled \$10.6 million, consisting primarily of inventories of \$4.7 million, accounts receivable of \$2.9 million, property, plant, and equipment of \$2.0 million, other current assets of \$0.5 million, and other assets of \$0.5 million. The fair value of the liabilities assumed totaled \$3.9 million, consisting primarily of accounts payable of \$3.6 million and other liabilities of \$0.3 million. Of the remaining purchase price, \$11.8 million was allocated to non-deductible goodwill and intangible assets. The purchase price allocation is provisional as of July 1, 2017 and subject to change upon completion of the final valuation of the long-lived assets, working capital, and contingent consideration during the measurement period.

On April 26, 2016, the Company entered into an agreement pursuant to which the Company acquired a 60 percent equity interest in Jungwoo Metal Ind. Co., LTD (Jungwoo-Mueller) for approximately \$20.5 million in cash. Jungwoo-Mueller, which manufactures copper-based pipe joining products, is headquartered in Seoul, South Korea and serves markets worldwide. This business complements the Company's existing copper fittings business in the Piping Systems segment and is reported in the Company's Condensed Consolidated Financial Statements one month in arrears.

The fair value of the assets acquired totaled \$49.0 million, consisting primarily of property, plant, and equipment of \$24.2 million, inventories of \$17.6 million, accounts receivable of \$5.6 million, other current assets of \$1.4 million, and deferred tax assets of \$0.2 million. The fair value of the liabilities assumed totaled \$17.9 million, consisting primarily of long-term debt of \$8.7 million, accounts payable of \$7.3 million, pension liabilities of \$0.8 million, other current liabilities of \$0.5 million, and other liabilities of \$0.6 million. Of the remaining purchase price, \$1.0 million was allocated to non-deductible goodwill and intangible assets. The noncontrolling interest in Jungwoo-Mueller is \$11.6 million. The valuation of the business has been finalized. Changes to the purchase price allocation from the amounts presented in the Company's 2016 Annual Report on Form 10-K were immaterial.

**Dispositions**

On June 21, 2017, the Company entered into a definitive equity transfer agreement with Jiangsu Xingrong Hi-Tech Co. Ltd. and Jiangsu Baiyang Industries Co. Ltd. (Baiyang), together, the minority partners in Mueller-Xingrong (the Company's Chinese joint venture), pursuant to which the Company sold its 50.5 percent equity interest in Mueller-Xingrong to Baiyang for approximately \$18.3 million. Mueller-Xingrong manufactures engineered copper tube primarily for air-conditioning applications in China and was included in the Piping Systems segment. Mueller-Xingrong reported net sales of \$67.3 million and net losses of \$9 thousand in the first half of 2017 compared to net sales of \$69.6 million and net income of \$426 thousand in the first half of 2016. The carrying value of the assets disposed totaled \$56.7 million, consisting primarily of accounts receivable, inventories, and long-lived assets. The carrying value of the liabilities disposed (consisting primarily of current debt and accounts payable), noncontrolling interest, and amounts recognized in accumulated other comprehensive income (AOCI) totaled \$36.2 million. Since the disposal constituted a complete liquidation of the Company's investment in a foreign entity, the Company removed from AOCI and recognized a cumulative translation gain of \$3.8 million. As a result of the disposal, the Company recognized a net gain on the sale of this business of \$1.6 million as a reduction of selling, general, and administrative expense in the Condensed Consolidated Financial Statements.

**Note 4 – Segment Information**

Each of the Company's reportable segments is composed of certain operating segments that are aggregated primarily by the nature of products offered as follows:

**Piping Systems**

Piping Systems is composed of the following operating segments: Domestic Piping Systems Group, Great Lakes Copper, Pexcor & Heatlink, European Operations, Trading Group, and Jungwoo-Mueller (the Company's South Korean joint venture). The Domestic Piping Systems Group manufactures copper tube and fittings, plastic fittings, and line sets. These products are



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manufactured in the U.S., sold in the U.S., and exported to markets worldwide. Outside the U.S., Great Lakes Copper manufactures copper tube and line sets and sells the products primarily in the U.S. and Canada, Pexcor & Heatlink produce a complete line of products for PEX plumbing and radiant systems in Canada, and the European Operations manufacture copper tube in the U.K. which is sold primarily in Europe. The Trading Group manufactures pipe nipples and imports and resells brass and plastic plumbing valves, malleable iron fittings, faucets, and plumbing specialty products in the U.S. and Mexico. Jungwoo-Mueller manufactures copper-based joining products that are sold worldwide. The Piping Systems segment's products are sold primarily to plumbing, refrigeration, and air-conditioning wholesalers, hardware wholesalers and co-ops, building product retailers, and air-conditioning original equipment manufacturers (OEMs).

The Company disposed of Mueller-Xingrong (the Company's Chinese joint venture) on June 21, 2017. This business manufactures engineered copper tube primarily for air-conditioning applications in China.

**Industrial Metals**

Industrial Metals is composed of the following operating segments: Brass Rod & Copper Bar Products, Impacts & Micro Gauge, and Brass Value-Added Products. These businesses manufacture brass rod, impact extrusions, and forgings, as well as a wide variety of end products including plumbing brass, automotive components, valves, fittings, and gas assemblies. These products are manufactured in the U.S. and sold primarily to OEMs in the U.S., many of which are in the industrial, construction, heating, ventilation, and air-conditioning, plumbing, and refrigeration markets.

**Climate**

Climate is composed of the following operating segments: Refrigeration Products, Fabricated Tube Products, Westermeyer, and Turbotec. These domestic businesses manufacture and fabricate valves, assemblies, high pressure components, and coaxial heat exchangers primarily for the heating, ventilation, air-conditioning, and refrigeration markets in the U.S.

Summarized segment information is as follows:

<i>(In thousands)</i>	For the Quarter Ended July 1, 2017				
	Piping Systems	Industrial Metals	Climate	Corporate and Eliminations	Total
Net sales	\$ 422,844	\$ 154,504	\$ 36,636	\$ 282	\$ 614,266
Cost of goods sold	364,261	132,972	27,449	(371)	524,311
Depreciation and amortization	5,591	1,904	615	485	8,595
Selling, general, and administrative expense	18,410	2,864	2,456	10,827	34,557
Operating income	34,582	16,764	6,116	(10,659)	46,803
Interest expense					(6,442)
Other income, net					231
Income before income taxes					\$ 40,592

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Segment information (continued):

<i>(In thousands)</i>	For the Quarter Ended July 2, 2016				
	Piping Systems	Industrial Metals	Climate	Corporate and Eliminations	Total
Net sales	\$ 388,662	\$ 127,737	\$ 31,359	\$ (3,687)	\$ 544,071
Cost of goods sold	333,356	104,874	22,448	(4,618)	456,060
Depreciation and amortization	5,787	2,120	618	536	9,061
Selling, general, and administrative expense	16,560	3,619	2,456	11,879	34,514
Operating income	32,959	17,124	5,837	(11,484)	44,436
Interest expense					(1,692)
Other income, net					515
Income before income taxes					\$ 43,259

<i>(In thousands)</i>	For the Six Months Ended July 1, 2017				
	Piping Systems	Industrial Metals	Climate	Corporate and Eliminations	Total
Net sales	\$ 821,619	\$ 304,341	\$ 70,915	\$ (4,689)	\$ 1,192,186
Cost of goods sold	708,907	257,015	53,013	(6,197)	1,012,738
Depreciation and amortization	10,933	3,802	1,244	971	16,950
Selling, general, and administrative expense	36,831	6,094	4,932	22,231	70,088
Operating income	64,948	37,430	11,726	(21,694)	92,410
Interest expense					(8,973)
Other income, net					782
Income before income taxes					\$ 84,219

Segment information (continued):

(In thousands)	For the Six Months Ended July 2, 2016				
	Piping Systems	Industrial Metals	Climate	Corporate and Eliminations	Total
Net sales	\$ 757,552	\$ 262,258	\$ 62,065	\$ (4,995)	\$ 1,076,880
Cost of goods sold	647,148	214,103	46,153	(4,702)	902,702
Depreciation and amortization	11,436	4,255	1,217	1,073	17,981
Selling, general, and administrative expense	34,850	6,864	4,979	23,601	70,294
Operating income	64,118	37,036	9,716	(24,967)	85,903
Interest expense					(3,540)
Other income, net					760
Income before income taxes					\$ 83,123

**Note 5 – Inventories**

(In thousands)	July 1, 2017	December 31, 2016
Raw materials and supplies	\$ 65,739	\$ 57,387
Work-in-process	30,677	42,227
Finished goods	162,789	149,288
Valuation reserves	(6,406)	(6,889)
Inventories	\$ 252,799	\$ 242,013

**Note 6 – Derivative Instruments and Hedging Activities**

The Company's earnings and cash flows are subject to fluctuations due to changes in commodity prices, foreign currency exchange rates, and interest rates. The Company uses derivative instruments such as commodity futures contracts, foreign currency forward contracts, and interest rate swaps to manage these exposures.

All derivatives are recognized in the Condensed Consolidated Balance Sheets at their fair value. On the date the derivative contract is entered into, it is either a) designated as a hedge of (i) a forecasted transaction or the variability of cash flow to be paid (cash flow hedge) or (ii) the fair value of a recognized asset or liability (fair value hedge), or b) not designated in a hedge accounting relationship, even though the derivative contract was executed to mitigate an economic exposure (economic hedge), as the Company does not enter into derivative contracts for trading purposes. Changes in the fair value of a derivative that is qualified, designated and highly effective as a cash flow hedge are recorded in stockholders' equity within AOCI, to the extent effective, until they are reclassified to earnings in the same period or periods during which the hedged transaction affects earnings. Changes in the fair value of a derivative that is qualified, designated and highly effective as a fair value hedge, along with the gain or loss on the hedged recognized asset or liability that is attributable to the hedged risk, are recorded in current earnings. Changes in the fair value of undesignated derivatives executed as economic hedges and the ineffective portion of designated derivatives are reported in current earnings.

The Company documents all relationships between derivative instruments and hedged items, as well as the risk-management objective and strategy for undertaking various hedge transactions. This process includes linking all derivative instruments that are designated as fair value hedges to specific assets and liabilities in the Condensed Consolidated Balance Sheets and linking cash flow hedges to specific forecasted transactions or variability of cash flow.

The Company also assesses, both at the hedge's inception and on an ongoing basis, whether the designated derivative instruments that are used in hedging transactions are highly effective in offsetting changes in cash flows or fair values of hedged items. When a derivative instrument is determined not to be highly effective as a hedge or the underlying hedged transaction is no longer probable of occurring, hedge accounting is discontinued prospectively in accordance with the derecognition criteria for hedge accounting.

**Commodity Futures Contracts**

Copper and brass represent the largest component of the Company's variable costs of production. The cost of these materials is subject to global market fluctuations caused by factors beyond the Company's control. The Company occasionally enters into forward fixed-price arrangements with certain customers; the risk of these arrangements is generally managed with commodity futures contracts. These futures contracts have been designated as cash flow hedges.

At July 1, 2017, the Company held open futures contracts to purchase approximately \$14.3 million of copper over the next 11 months related to fixed price sales orders. The fair value of those futures contracts was a \$254 thousand net gain position, which was determined by obtaining quoted market prices (level 1 within the fair value hierarchy). In the next 12 months, the Company will reclassify into earnings realized gains or losses relating to cash flow hedges. At July 1, 2017, this amount was approximately \$169 thousand of deferred net gains, net of tax.

The Company may also enter into futures contracts to protect the value of inventory against market fluctuations. At July 1, 2017, the Company held open futures contracts to sell approximately \$31.8 million of copper over the next six months related to copper inventory. The fair value of those futures contracts was a \$457 thousand net loss position, which was determined by obtaining quoted market prices (level 1 within the fair value hierarchy).

**Interest Rate Swap**

On February 20, 2013, the Company entered into a two-year forward-starting interest rate swap agreement with an effective date of January 12, 2015, and an underlying notional amount of \$200.0 million, pursuant to which the Company receives variable interest payments based on one-month LIBOR and pays fixed interest at a rate of 1.4 percent. Based on the Company's current variable premium pricing on its revolving credit facility, the all-in fixed rate is 2.95 percent. The interest rate swap will mature on December 11, 2017, and is structured to offset the interest rate risk associated with the Company's floating-rate, LIBOR-based Credit Agreement. The swap was designated and accounted for as a cash flow hedge at inception. During the fourth quarter of 2016, the Company discontinued hedge accounting prospectively.

The fair value of the interest rate swap is estimated based on the present value of the difference between expected cash flows calculated at the contracted interest rate and the expected cash flows at the current market interest rate using observable benchmarks for LIBOR forward rates at the end of the period (level 2 within the fair value hierarchy). Interest payable and receivable under the swap agreement is accrued and recorded as an adjustment to interest expense. The fair value of the interest rate swap was a \$99 thousand loss position at July 1, 2017, and there was \$256 thousand of deferred losses, net of tax, included in AOCI that are expected to be reclassified into interest expense over the term of the interest rate swap.

The Company presents its derivative assets and liabilities in the Condensed Consolidated Balance Sheets on a net basis by counterparty. The following table summarizes the location and fair value of the derivative instruments and disaggregates the net derivative assets and liabilities into gross components on a contract-by-contract basis:

(In thousands)	Asset Derivatives				Liability Derivatives			
	Balance Sheet Location	Fair Value		Balance Sheet Location	Fair Value			
		July 1, 2017	December 31, 2016		July 1, 2017	December 31, 2016		
Commodity contracts - gains	Other current assets	\$ 372	\$ 1,013	Other current liabilities	\$ —	\$ 564		
Commodity contracts - losses	Other current assets	(118)	(148)	Other current liabilities	(457)	(920)		
Interest rate swap	Other current assets	—	—	Other current liabilities	(99)	(787)		
<b>Total derivatives <sup>(1)</sup></b>		<b>\$ 254</b>	<b>\$ 865</b>		<b>\$ (556)</b>	<b>\$ (1,143)</b>		

<sup>(1)</sup> Does not include the impact of cash collateral received from or provided to counterparties.

The following tables summarize the effects of derivative instruments on the Company's Condensed Consolidated Statements of Income:

(In thousands)	Location	For the Quarter Ended		For the Six Months Ended	
		July 1, 2017	July 2, 2016	July 1, 2017	July 2, 2016
Fair value hedges:					
Gain (loss) on commodity contracts (qualifying)	Cost of goods sold	\$ —	\$ (332)	\$ —	\$ (383)
Gain on hedged item - inventory	Cost of goods sold	—	288	—	350
Undesignated derivatives:					
Gain on commodity contracts (nonqualifying)	Cost of goods sold	672	1,326	(423)	1,820

The following tables summarize amounts recognized in and reclassified from AOCI during the period:

(In thousands)	For the Quarter Ended July 1, 2017			
	(Loss) Gain Recognized in AOCI (Effective Portion), Net of Tax	Classification Gains (Losses)		Loss Reclassified from AOCI (Effective Portion), Net of Tax
Cash flow hedges:				
Commodity contracts	\$ (250)	Cost of goods sold		\$ 324
Interest rate swap	—	Interest expense		149
Other	38	Other		—
<b>Total</b>	<b>\$ (212)</b>	<b>Total</b>		<b>\$ 473</b>

## Derivative Instruments and Hedging Activities (continued):

(In thousands)	For the Quarter Ended July 2, 2016			
	Gain (Loss) Recognized in AOCI (Effective Portion), Net of Tax	Classification Gains (Losses)		(Gain) Loss Reclassified from AOCI (Effective Portion), Net of Tax
Cash flow hedges:				
Commodity contracts	\$ 2,464	Cost of goods sold		\$ (1,359)
Interest rate swap	(115)	Interest expense		59
Other	(349)	Other		—
<b>Total</b>	<b>\$ 2,000</b>	<b>Total</b>		<b>\$ (1,300)</b>

(In thousands)	For the Six Months Ended July 1, 2017			
	(Loss) Gain Recognized in AOCI (Effective Portion), Net of Tax	Classification Gains (Losses)		Loss Reclassified from AOCI (Effective Portion), Net of Tax
Cash flow hedges:				
Commodity contracts	\$ (813)	Cost of goods sold		\$ 676
Interest rate swap	—	Interest expense		298
Other	156	Other		—
<b>Total</b>	<b>\$ (657)</b>	<b>Total</b>		<b>\$ 974</b>

(In thousands)	For the Six Months Ended July 2, 2016			
	Gain (Loss) Recognized in AOCI (Effective Portion), Net of Tax	Classification Gains (Losses)		(Gain) Loss Reclassified from AOCI (Effective Portion), Net of Tax
Cash flow hedges:				
Commodity contracts	\$ 3,337	Cost of goods sold		\$ (1,291)
Interest rate swap	(585)	Interest expense		128
Other	(295)	Other		—
<b>Total</b>	<b>\$ 2,457</b>	<b>Total</b>		<b>\$ (1,163)</b>

The Company enters into futures and forward contracts that closely match the terms of the underlying transactions. As a result, the ineffective portion of the open hedge contracts through July 1, 2017 was not material to the Condensed Consolidated Statements of Income.

The Company primarily enters into International Swaps and Derivatives Association master netting agreements with major financial institutions that permit the net settlement of amounts owed under their respective derivative contracts. Under these master netting agreements, net settlement generally permits the Company or the counterparty to determine the net amount payable for contracts due on the same date and in the same currency for similar types of derivative transactions. The master netting agreements generally also provide for net settlement of all outstanding contracts with a counterparty in the case of an event of default or a termination event. The Company does not offset fair value amounts for derivative instruments and fair value amounts recognized for the right to reclaim cash collateral. At July 1, 2017 and December 31, 2016, the Company had recorded restricted cash in other current

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assets of \$1.2 million and \$1.4 million, respectively, as collateral related to open derivative contracts under the master netting arrangements.

**Note 7 – Investment in Unconsolidated Affiliates**

The Company owns a 50 percent interest in Tecumseh Products Holdings LLC (Joint Venture), an unconsolidated affiliate that acquired Tecumseh Products Company (Tecumseh) during the third quarter of 2015. The Company also owns a 50 percent interest in a second unconsolidated affiliate that provided financing to Tecumseh in conjunction with the acquisition. These investments are recorded using the equity method of accounting, as the Company can exercise significant influence but does not own a majority equity interest or otherwise control the respective entities. Under the equity method of accounting, these investments are stated at initial cost and are adjusted for subsequent additional investments and the Company's proportionate share of earnings or losses and distributions.

The Company records its proportionate share of the investees' net income or loss one quarter in arrears as income (loss) from unconsolidated affiliates, net of tax, in the Condensed Consolidated Statements of Income and its proportionate share of the investees' other comprehensive income (loss), net of income taxes, in the Condensed Consolidated Statements of Comprehensive Income. In general, the equity investment in unconsolidated affiliates is equal to the current equity investment plus the entities' undistributed earnings.

The following tables present summarized financial information derived from the Company's equity method investees' combined consolidated financial statements, which are prepared in accordance with U.S. GAAP.

Current assets
Noncurrent assets
Current liabilities
Noncurrent liabilities

<i>(In thousands)</i>	For the Quarter Ended		For the Six Months Ended	
	July 1, 2017	July 2, 2016	July 1, 2017	July 2, 2016
Net sales	\$ 132,600	\$ 138,900	\$ 258,900	\$ 290,500
Gross profit	19,600	19,500	35,200	37,500
Net (loss) income	(217)	(1,990)	(2,704)	3,854

The Company's income from unconsolidated affiliates, net of tax, for the six months ended July 2, 2016 included a gain of \$17.1 million that resulted from the allocation of the purchase price, which was partially offset by restructuring and impairment charges of \$5.3 million and net losses of \$8.0 million.

On December 30, 2015, the Company entered into a joint venture agreement with Cayan Ventures and Bahrain Mumtalakat Holding Company to build a copper tube mill in Bahrain. The business will operate and brand its products under the Mueller Industries family of brands. The Company has invested approximately \$2.2 million of cash to date and will be the technical and marketing lead in return for 40 percent ownership in the joint venture.

**Note 8 – Benefit Plans**

The Company sponsors several qualified and nonqualified pension plans and other postretirement benefit plans for certain of its employees. The components of net periodic benefit cost (income) are as follows:

(In thousands)	For the Quarter Ended		For the Six Months Ended	
	July 1, 2017	July 2, 2016	July 1, 2017	July 2, 2016
<b>Pension benefits:</b>				
Service cost	\$ 36	\$ 165	\$ 71	\$ 360
Interest cost	1,653	1,969	3,318	3,944
Expected return on plan assets	(2,186)	(2,466)	(4,368)	(4,932)
Amortization of net loss	516	746	1,072	1,520
<b>Net periodic benefit cost</b>	<b>\$ 19</b>	<b>\$ 414</b>	<b>\$ 93</b>	<b>\$ 892</b>
<b>Other benefits:</b>				
Service cost	\$ 53	\$ 60	\$ 109	\$ 122
Interest cost	146	149	295	305
Amortization of prior service credit	(226)	(224)	(451)	(448)
Amortization of net gain	(15)	(20)	(20)	(18)
<b>Net periodic benefit income</b>	<b>\$ (42)</b>	<b>\$ (35)</b>	<b>\$ (67)</b>	<b>\$ (39)</b>

**Note 9 – Commitments and Contingencies**

The Company is involved in certain litigation as a result of claims that arose in the ordinary course of business, which management believes will not have a material adverse effect on the Company's financial position, results of operations, or cash flows. The Company may also realize the benefit of certain legal claims and litigation in the future; these gain contingencies are not recognized in the Condensed Consolidated Financial Statements.

**Lead Refinery Site**

U.S.S. Lead Refinery, Inc. (Lead Refinery), a non-operating wholly owned subsidiary of MRRC, has conducted corrective action and interim remedial activities (collectively, Site Activities) at Lead Refinery's East Chicago, Indiana site pursuant to the Resource Conservation and Recovery Act since December 1996. Although the Site Activities have been substantially concluded, Lead Refinery is required to perform monitoring and maintenance-related activities pursuant to a post-closure permit issued by the Indiana Department of Environmental Management effective as of March 2, 2013. Approximate costs to comply with the post-closure permit, including associated general and administrative costs, are estimated at between \$2.1 million and \$4.7 million over the next 20 years.

On April 9, 2009, pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the U.S. Environmental Protection Agency (EPA) added the Lead Refinery site and surrounding properties to the National Priorities List (NPL). On July 17, 2009, Lead Refinery received a written notice from the EPA indicating that it may be a PRP under CERCLA due to the release or threat of release of hazardous substances including lead into properties surrounding the Lead Refinery site. The EPA identified two other PRPs in connection with that matter. In November 2012, the EPA adopted a remedy for the surrounding properties and in September 2014, the EPA announced that it had entered into a settlement with the two other PRPs whereby they will pay approximately \$26.0 million to fund the cleanup of approximately 300 properties surrounding the Lead Refinery site and perform certain remedial action tasks.

On November 8, 2016, the Company, its subsidiary Arava Natural Resources Company, Inc. (Arava), and Arava's subsidiary MRRC each received general notice letters from the EPA asserting that they may be PRPs in connection with the Lead Refinery NPL site. The Company, Arava, and MRRC have denied liability for any remedial action and response costs associated with the Lead Refinery NPL site. In June 2017, the EPA requested that Lead Refinery conduct, and the Company fund, a remedial investigation and feasibility study of the Lead Refinery NPL site pursuant to a proposed administrative settlement agreement and



order on consent. The Company is evaluating the request. At this juncture, the Company is unable to determine the likelihood of a material adverse outcome or the amount or range of a potential loss with respect to any remedial action related to the Lead Refinery NPL site.

**Equal Employment Opportunity Commission Matter**

On October 5, 2016, the Company received a demand letter from the Los Angeles District Office of the United States Equal Employment Opportunity Commission (EEOC). The EEOC alleges that between May 2011 and April 2015, various Company employees were terminated in violation of the Americans with Disabilities Act, and that certain of the Company's employee leave and attendance policies were discriminatory in nature. On that basis, the EEOC's letter includes a demand for monetary relief on behalf of an identified class of 20 individuals, and an unidentified class of 150 individuals, in addition to injunctive relief.

The Company believes the EEOC's allegations are without merit. Notwithstanding the Company's position, in consultation with its liability insurers, the Company entered into a conciliation process with the EEOC for purposes of resolving the claims. On April 12, 2017, the Company received a letter from the EEOC stating that the conciliation process had concluded without a resolution of the claims, and that the matter would be referred to its Legal Department for potential litigation. Due to the procedural stage of this matter, the Company is unable to determine the likelihood of a material adverse outcome in this matter, or the amount or range of a potential loss in excess of any available insurance coverage.

**Guarantees**

Guarantees, in the form of letters of credit, are issued by the Company generally to assure the payment of insurance deductibles and certain retiree health benefits. The terms of the guarantees are generally one year but are renewable annually as required. These letters are primarily backed by the Company's revolving credit facility. The maximum payments that the Company could be required to make under its guarantees at July 1, 2017 were \$8.3 million.

**Note 10 – Income Taxes**

The Company's effective tax rate for the second quarter of 2017 was 31 percent compared with 32 percent for the same period last year. The items impacting the effective tax rate for thesecond quarter of 2017 were primarily attributable to reductions for the U.S. production activities deduction of \$0.9 million and the effect of foreign tax rates lower than statutory tax rates of \$1.6 million. These items were partially offset by the provision for state income taxes, net of the federal benefit, of \$0.8 million and miscellaneous items totaling \$0.2 million.

For the second quarter of 2016, the difference between the effective tax rate and the amount computed using the U.S. federal statutory rate was primarily attributable to reductions for the U.S. production activities deduction of \$1.0 million and the effect of foreign tax rates lower than statutory rates of \$1.4 million. These items were partially offset by the provision for state income taxes, net of the federal benefit, of \$0.8 million and miscellaneous items totaling \$0.5 million.

The Company's effective tax rate for the first half of 2017 was 29 percent compared with 34 percent for the same period last year. The items impacting the effective tax rate for thefirst half of 2017 were primarily attributable to reductions for the U.S. production activities deduction of \$1.8 million; the effect of foreign tax rates lower than statutory tax rates of \$3.0 million; the tax benefit of equity compensation deductions of \$1.7 million; and the impact of investments in unconsolidated affiliates of \$0.8 million. These items were partially offset by the provision for state income taxes, net of the federal benefit, of \$1.7 million and miscellaneous items totaling \$0.7 million.

For the first half of 2016, the difference between the effective tax rate and the amount computed using the U.S. federal statutory tax rate was primarily attributable to reductions for the U.S. production activities deduction of \$1.9 million and the effect of foreign tax rates lower than statutory rates of \$2.5 million. These items were partially offset by the provision for state income taxes, net of the federal benefit, of \$1.7 million and miscellaneous items totaling \$1.7 million.

The Company files a consolidated U.S. federal income tax return and numerous consolidated and separate-company income tax returns in many state, local, and foreign jurisdictions. The statute of limitations is open for the Company's federal tax return and most state income tax returns for 2013 and all subsequent years and is open for certain state and foreign returns for earlier tax years due to ongoing audits and differing statute periods. While the Company believes that it is adequately reserved for possible future audit adjustments, the final resolution of these examinations cannot be determined with certainty and could result in final settlements that differ from current estimates.

## Note 11 – Accumulated Other Comprehensive Income

AOCI includes certain foreign currency translation adjustments from those subsidiaries not using the U.S. dollar as their functional currency, net deferred gains and losses on certain derivative instruments accounted for as cash flow hedges, adjustments to pension and OPEB liabilities, unrealized gains and losses on marketable securities classified as available-for-sale, and other comprehensive income attributable to unconsolidated affiliates.

The following table provides changes in AOCI by component, net of taxes and noncontrolling interests (amounts in parentheses indicate debits to AOCI):

<i>(In thousands)</i>	For the Six Months Ended July 1, 2017					
	Cumulative Translation Adjustment	Unrealized (Loss) Gain on Derivatives	Pension/OPEB Liability Adjustment	Unrealized Gain (Loss) on Equity Securities	Attributable to Unconsol. Affiliates	Total
Balance as of December 31, 2016	\$ (49,965)	\$ (300)	\$ (23,046)	380	\$ 5,975	\$ (66,956)
Other comprehensive income (loss) before reclassifications	11,058	(657)	(856)	(1)	(351)	9,193
Amounts reclassified from AOCI	(3,777)	974	491	(379)	—	(2,691)
Net current-period other comprehensive income (loss)	7,281	317	(365)	(380)	(351)	6,502
Balance as of July 1, 2017	\$ (42,684)	\$ 17	\$ (23,411)	—	\$ 5,624	\$ (60,454)

<i>(In thousands)</i>	For the Six Months Ended July 2, 2016					
	Cumulative Translation Adjustment	Unrealized (Loss) Gain on Derivatives	Pension/OPEB Liability Adjustment	Unrealized Gain on Equity Securities	Attributable to Unconsol. Affiliates	Total
Balance as of December 26, 2015	\$ (24,773)	\$ (2,009)	\$ (28,429)	221	\$ —	\$ (54,990)
Other comprehensive (loss) income before reclassifications	(9,939)	2,457	1,910	23	1,438	(4,111)
Amounts reclassified from AOCI	—	(1,163)	792	—	—	(371)
Net current-period other comprehensive (loss) income	(9,939)	1,294	2,702	23	1,438	(4,482)
Balance as of July 2, 2016	\$ (34,712)	\$ (715)	\$ (25,727)	244	\$ 1,438	\$ (59,472)

Reclassification adjustments out of AOCI were as follows:

(In thousands)	Amount reclassified from AOCI				Affected line item
	For the Quarter Ended		For the Six Months Ended		
	July 1, 2017	July 2, 2016	July 1, 2017	July 2, 2016	
Unrealized losses (gains) on derivatives:					
Commodity contracts	\$ 602	\$ (2,108)	\$ 1,024	\$ (1,871)	Cost of goods sold
Interest rate swap	232	92	464	200	Interest expense
	<u>(361)</u>	<u>716</u>	<u>(514)</u>	<u>508</u>	Income tax (benefit) expense
	<u>\$ 473</u>	<u>\$ (1,300)</u>	<u>\$ 974</u>	<u>\$ (1,163)</u>	Net of tax and noncontrolling interests
Amortization of net loss and prior service cost on employee benefit plans					
	\$ 275	\$ 502	\$ 601	\$ 1,054	Selling, general, and administrative expense
	<u>(46)</u>	<u>(122)</u>	<u>(110)</u>	<u>(262)</u>	Income tax benefit
	<u>\$ 229</u>	<u>\$ 380</u>	<u>\$ 491</u>	<u>\$ 792</u>	Net of tax and noncontrolling interests
Sale of available-for-sale securities					
	\$ (357)	\$ —	\$ (611)	\$ —	Other income
	<u>138</u>	<u>—</u>	<u>232</u>	<u>—</u>	Income tax expense
	<u>\$ (219)</u>	<u>\$ —</u>	<u>\$ (379)</u>	<u>\$ —</u>	Net of tax and noncontrolling interests
Gain recognized upon sale of business					
	\$ (3,777)	\$ —	\$ (3,777)	\$ —	Selling, general, and administrative expense
	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	Income tax expense
	<u>\$ (3,777)</u>	<u>\$ —</u>	<u>\$ (3,777)</u>	<u>\$ —</u>	Net of tax and noncontrolling interests

**Note 12 – Noncontrolling Interests***(In thousands)*

	Noncontrolling Interests
Balance as of December 31, 2016	\$ 37,753
Sale of Mueller-Xingrong	(23,712 )
Dividends paid to noncontrolling interests	(2,909 )
Net income attributable to noncontrolling interests	668
Other comprehensive income attributable to noncontrolling interests, net of tax:	
Foreign currency translation	835
Balance as of July 1, 2017	\$ 12,635

**Note 13 – Recently Issued Accounting Standards**

In March 2017, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2017-07, *Compensation - Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*. The ASU requires employers that sponsor defined benefit pension and/or other postretirement benefit plans to present the service cost component of net periodic benefit cost in the same income statement line item(s) as other employee compensation costs arising from services rendered during the period and other components of net periodic benefits cost separately from the line item(s) that includes the service cost and outside of any subtotal of operating income. The guidance is effective for the Company in interim and annual periods beginning in 2018. Early adoption is permitted as of the beginning of an annual period for which financial statements have not been issued or made available for issuance. The Company does not expect the adoption of the standard to have a material impact on its Condensed Consolidated Financial Statements.

In January 2017, the FASB issued ASU No. 2017-04, *Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment*. The ASU eliminates step two from the goodwill impairment test and instead requires an entity to perform its annual, or interim, goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. The entity should recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value, not to exceed the total amount of goodwill allocated to the reporting unit. The updated guidance requires a prospective adoption. Early adoption is permitted. The guidance is effective for the Company beginning in 2020. The Company is in the process of evaluating the effects of the provisions of the ASU on its Condensed Consolidated Financial Statements.

In January 2017, the FASB issued ASU No. 2017-01, *Business Combinations (Topic 805): Clarifying the Definition of a Business*. The ASU provides guidance to assist entities in evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The updated guidance requires a prospective adoption. Early adoption is permitted. This update will be effective for the Company beginning in 2018. The Company does not expect the provisions of the ASU to have a material impact on its Condensed Consolidated Financial Statements.

In December 2016, the FASB issued ASU No. 2016-20, *Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers*. The ASU provides correction or improvement to the guidance previously issued in ASU 2014-09, *Revenue from Contracts with Customers (Topic 606)*. Under the ASU, an entity will recognize revenue to depict the transfer of promised goods or services to customers at an amount that reflects the consideration that it expects to receive in exchange for the goods or services. It also requires more detailed disclosures to enable users of financial statements to understand the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. This guidance is effective for the Company at the beginning of 2018. The Company is in the process of examining contract specific terms within each segment and assessing potential changes to its accounting policies, practices, and internal controls over financial reporting to support the standard.

In November 2016, the FASB issued ASU No. 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash*. The ASU requires entities to show the changes in the total of cash, cash equivalents, restricted cash, and restricted cash equivalents in the statement of cash flows. As a result, entities will no longer present transfers between cash and cash equivalents and restricted cash and restricted cash equivalents in the statement of cash flows. The guidance will be applied retrospectively and is effective for public business entities in interim and annual periods beginning after December 15, 2017. Early adoption is permitted. The Company does not expect the adoption of the standard to have a material impact on its Condensed Consolidated Financial Statements.

In October 2016, the FASB issued ASU No. 2016-16, *Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory*. The ASU requires companies to account for the income tax effects of intercompany transfers of assets other than inventory when the transfer occurs. Companies will still be required to defer the income tax effects of intercompany inventory transactions in an exception to the income tax accounting guidance. The guidance is effective for public business entities in annual periods beginning after December 15, 2017. Early adoption is permitted as of the beginning of an annual period. The Company is still evaluating the effects that the provisions of the ASU will have on its Condensed Consolidated Financial Statements.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*. The ASU requires an entity to recognize a right-of-use asset and lease liability for all leases with terms of more than 12 months. Recognition, measurement and presentation of expenses will depend on classification as a financing or operating lease. The amendments also require certain quantitative and qualitative disclosures about leasing arrangements. The ASU will be effective for interim and annual periods beginning after December 15, 2018. Early adoption is permitted. The updated guidance requires a modified retrospective adoption. The Company is still evaluating the effects that the provision of the ASU will have on its Condensed Consolidated Financial Statements.

#### **Note 14 – Subsequent Events**

On July 10, 2017 and July 21, 2017, the Company made payments of \$50.0 million and \$30.0 million, respectively, to reduce the debt outstanding under its Credit Agreement. The Credit Agreement provides for an unsecured \$350.0 million revolving credit facility which matures on December 6, 2021. Total borrowings under the Credit Agreement were \$200.0 million as of July 1, 2017.

#### **Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations**

##### **General Overview**

We are a leading manufacturer of copper, brass, aluminum, and plastic products. The range of these products is broad: copper tube and fittings; line sets; brass and copper alloy rod, bar, and shapes; aluminum and brass forgings; aluminum impact extrusions; plastic fittings and valves; refrigeration valves and fittings; fabricated tubular products; and steel nipples. We also resell imported brass and plastic plumbing valves, malleable iron fittings, faucets, and plumbing specialty products. Mueller's operations are located throughout the United States and in Canada, Mexico, Great Britain, South Korea, and China.

Each of our reportable segments is composed of certain operating segments that are aggregated primarily by the nature of products offered as follows:

- **Piping Systems:** The Piping Systems segment is composed of Domestic Piping Systems Group, Great Lakes Copper, Pexcor & Heatlink, European Operations, Trading Group, and Jungwoo-Mueller (our South Korean joint venture). The Domestic Piping Systems Group manufactures copper tube and fittings, plastic fittings, and line sets. These products are manufactured in the U.S., sold in the U.S., and exported to markets worldwide. Great Lakes Copper manufactures copper tube and line sets in Canada and sells the products primarily in the U.S. and Canada. Pexcor & Heatlink produce a complete line of products for PEX plumbing and radiant systems in Canada. European Operations manufacture copper tube in the United Kingdom, which is sold throughout Europe. The Trading Group manufactures pipe nipples and sources products for import distribution in North America. Jungwoo-Mueller manufactures copper-based joining products that are sold worldwide. The Piping Systems segment sells products to wholesalers in the plumbing and refrigeration markets, distributors to the manufactured housing and recreational vehicle industries, building material retailers, and air-conditioning OEMs.

The Company disposed of Mueller-Xingrong (the Company's Chinese joint venture) on June 21, 2017. This business manufactures engineered copper tube primarily for air-conditioning applications in China.

- **Industrial Metals:** The Industrial Metals segment is composed of Brass Rod & Copper Bar Products, Impacts & Micro Gauge, and Brass Value-Added Products. The segment manufactures and sells brass and copper alloy rod, bar, and shapes; aluminum and brass forgings; aluminum impact extrusions; and gas valves and assemblies. The segment manufactures and sells its products primarily to domestic OEMs in the industrial, construction, heating, ventilation, and air-conditioning, plumbing, and refrigeration markets.
- **Climate:** The Climate segment is composed of Refrigeration Products, Fabricated Tube Products, Westermeyer, and Turbotec. The segment manufactures and sells refrigeration valves and fittings, fabricated tubular products, high

pressure components, and coaxial heat exchangers. The segment sells its products primarily to the heating, ventilation, air-conditioning, and refrigeration markets in the U.S.

New housing starts and commercial construction are important determinants of our sales to the heating, ventilation, and air-conditioning, refrigeration, and plumbing markets because the principal end use of a significant portion of our products is in the construction of single and multi-family housing and commercial buildings. Repairs and remodeling projects are also important drivers of underlying demand for these products.

Residential construction activity has shown improvement in recent years, but remains at levels below long-term historical averages. Per the U.S. Census Bureau, the June 2017 seasonally adjusted annual rate of new housing starts was 1.2 million, consistent with the June 2016 rate. Mortgage rates remain at historically low levels, as the average 30-year fixed mortgage rate was 4.08 percent for the first half of 2017 and 3.65 percent for the twelve months ended December 2016. The private non-residential construction sector, which includes offices, industrial, health care, and retail projects, has shown improvement in recent years. Per the U.S. Census Bureau, the seasonally adjusted annual value of private nonresidential construction put in place was \$433.6 billion in May 2017 compared to the May 2016 rate of \$430.0 billion. We expect that most of these conditions will continue to improve.

Profitability of certain of our product lines depends upon the "spreads" between the costs of raw materials and the selling prices of our products. The open market prices for copper cathode and scrap, for example, influence the selling price of copper tube, a principal product manufactured by the Company. We attempt to minimize the effects on profitability from fluctuations in material costs by passing through these costs to our customers. Our earnings and cash flow are dependent upon these spreads that fluctuate based upon market conditions.

Earnings and profitability are also impacted by unit volumes that are subject to market trends, such as substitute products, imports, technologies, and market share. In core product lines, we intensively manage our pricing structure while attempting to maximize our profitability. From time-to-time, this practice results in lost sales opportunities and lower volume. For plumbing systems, plastics are the primary substitute product; these products represent an increasing share of consumption. U.S. consumption of copper tube is still predominantly supplied by U.S. manufacturers. For certain air-conditioning and refrigeration applications, aluminum-based systems are the primary substitution threat. We cannot predict the acceptance or the rate of switching that may occur. In recent years, brass rod consumption in the U.S. has declined due to the outsourcing of many manufactured products from offshore regions.

## Results of Operations

### Consolidated Results

The following table compares summary operating results for 2017 and 2016:

(In thousands)	Quarter Ended		Percent Change 2017 vs. 2016	Six Months Ended		Percent Change 2017 vs. 2016
	July 1, 2017	July 2, 2016		July 1, 2017	July 2, 2016	
Net sales	\$ 614,266	\$ 544,071	12.9 %	\$ 1,192,186	\$ 1,076,880	10.7 %
Operating income	46,803	44,436	5.3	92,410	85,903	7.6
Net income	27,633	27,797	(0.6)	57,620	56,427	2.1

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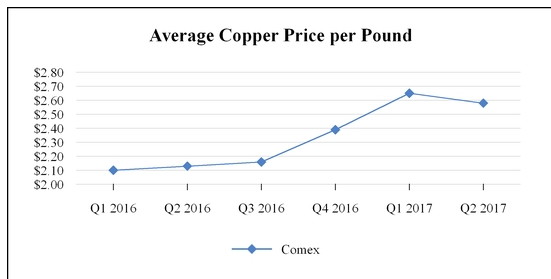
The following are components of changes in net sales compared to the prior year:

	Quarter-to-Date 2017 vs. 2016	Year-to-Date 2017 vs. 2016
Net selling price in core product lines	11.0 %	11.8 %
Unit sales volume in core product lines	—	(1.9)
Acquisitions	2.3	2.2
Other	(0.4)	(1.4)
	<u>12.9 %</u>	<u>10.7 %</u>

The increase in net sales during the second quarter of 2017 was primarily due to (i) higher net selling prices of \$59.6 million in our core product lines, primarily copper tube and brass rod, (ii) \$8.4 million of incremental sales recorded by Jungwoo Metal Ind. Co., LTD (Jungwoo-Mueller), acquired in April 2016, and (iii) \$2.4 million of sales recorded by Pexcor Manufacturing Company Inc. (Pexcor) and Heatlink Group Inc. (Heatlink), acquired in June 2017.

The increase in net sales during the first half of 2017 was primarily due to (i) higher net selling prices of \$126.7 million in our core product lines and (ii) \$19.3 million of incremental sales recorded by Jungwoo-Mueller. These increases were offset by lower unit sales volume of \$19.9 million in our core product lines.

Net selling prices generally fluctuate with changes in raw material costs. Changes in raw material costs are generally passed through to customers by adjustments to selling prices. The following graph shows the Comex average copper price per pound by quarter for the current and prior fiscal years:



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The following tables compare cost of goods sold and operating expenses as dollar amounts and as a percent of net sales for 2017 and 2016:

(In thousands)	For the Quarter Ended		For the Six Months Ended	
	July 1, 2017	July 2, 2016	July 1, 2017	July 2, 2016
Cost of goods sold	\$ 524,311	\$ 456,060	\$ 1,012,738	\$ 902,702
Depreciation and amortization	8,595	9,061	16,950	17,981
Selling, general and administrative expense	34,557	34,514	70,088	70,294
Operating expenses	\$ 567,463	\$ 499,635	\$ 1,099,776	\$ 990,977

	For the Quarter Ended		For the Six Months Ended	
	July 1, 2017	July 2, 2016	July 1, 2017	July 2, 2016
Cost of goods sold	85.4%	83.8%	84.9%	83.8%
Depreciation and amortization	1.4	1.7	1.4	1.7
Selling, general and administrative expense	5.6	6.3	5.9	6.5
Operating expenses	92.4%	91.8%	92.2%	92.0%

#### Q2 2017 compared to Q2 2016

The increase in cost of goods sold was primarily due to the increase in the average cost of copper, our principal raw material, and the increase in sales volume related to the acquisition of Jungwoo-Mueller. Depreciation and amortization decreased slightly in the second quarter of 2017 primarily as a result of several long-lived assets becoming fully depreciated and amortized. Selling, general, and administrative expense for the second quarter of 2017 was consistent with the second quarter of 2016. This included incremental expenses associated with Jungwoo-Mueller, Pexcor, and Heatlink of \$1.4 million, offset by a gain on the sale of Mueller-Xingrong of \$1.6 million.

Interest expense increased for the second quarter of 2017 primarily as a result of interest associated with our 6% Subordinated Debentures that were issued during the first quarter as part of our special dividend. Other income, net, for the second quarter of 2017 was consistent with the second quarter of 2016.

Our effective tax rate for the second quarter of 2017 was 31 percent compared with 32 percent for the same period last year. The items impacting the effective tax rate for the second quarter of 2017 were primarily attributable to reductions for the U.S. production activities deduction of \$0.9 million and the effect of foreign tax rates lower than statutory tax rates of \$1.6 million. These items were partially offset by the provision for state income taxes, net of the federal benefit, of \$0.8 million and miscellaneous items totaling \$0.2 million.

For the second quarter of 2016, the difference between the effective tax rate and the amount computed using the U.S. federal statutory rate was primarily attributable to reductions for the U.S. production activities deduction of \$1.0 million and the effect of foreign tax rates lower than statutory rates of \$1.4 million. These items were partially offset by the provision for state income taxes, net of the federal benefit, of \$0.8 million and miscellaneous items totaling \$0.5 million.

We own a 50 percent interest in Tecumseh Products Holdings LLC, an unconsolidated affiliate that acquired Tecumseh Products Company (Tecumseh) during the third quarter of 2015. We also own a 50 percent interest in a second unconsolidated affiliate that provided financing to Tecumseh in conjunction with the acquisition. We account for these investments using the equity method of accounting. For the second quarter of 2017, we recognized losses of \$0.1 million on these investments, compared to losses of \$1.0 million in the second quarter of 2016.



[INDEX](#)*2017 YTD compared to 2016 YTD*

The increase in cost of goods sold was primarily due to the increase in the average cost of copper and the increase in sales volume related to the acquisition of Jungwoo-Mueller, partially offset by lower sales volume in our core product lines. Depreciation and amortization decreased in the first half of 2017 primarily as a result of several long-lived assets becoming fully depreciated and amortized. Selling, general, and administrative expense decreased slightly for the first half of 2017 primarily as a result of the period having 26 weeks as compared to 27 weeks in first half of 2016. In addition, we recognized a gain on the sale of Mueller-Xingrong of \$1.6 million during first half of 2017. This was offset by incremental expenses associated with Jungwoo-Mueller, Pexcor, and Heatlink of \$2.2 million.

Interest expense increased in the first half of 2017 primarily as a result of interest associated with our 6% Subordinated Debentures that were issued during the first quarter as part of our special dividend. Other income, net, for the first six months of 2017 was consistent with the first six months of 2016.

Our effective tax rate for the first half of 2017 was 29 percent compared with 34 percent for the same period last year. The items impacting the effective tax rate for the first half of 2017 were primarily attributable to reductions for the U.S. production activities deduction of \$1.8 million; the effect of foreign tax rates lower than statutory tax rates of \$3.0 million; the tax benefit of equity compensation deductions of \$1.7 million; and the impact of investments in unconsolidated affiliates of \$0.8 million. These items were partially offset by the provision for state income taxes, net of the federal benefit, of \$1.7 million and miscellaneous items totaling \$0.7 million.

For the first half of 2016, the difference between the effective tax rate and the amount computed using the U.S. federal statutory tax rate was primarily attributable to reductions for the U.S. production activities deduction of \$1.9 million and the effect of foreign tax rates lower than statutory rates of \$2.5 million. These items were partially offset by the provision for state income taxes, net of the federal benefit, of \$1.7 million and miscellaneous items totaling \$1.7 million.

During the first half of 2017, we recognized losses of \$1.4 million on our investment in unconsolidated affiliates. During the first half of 2016, we recognized \$1.9 million of income on these investments. This included the gain that resulted from the allocation of the purchase price recorded by our equity method investees, which was partially offset by restructuring and impairment charges and net losses.

**Piping Systems Segment**

The following table compares summary operating results for 2017 and 2016 for the businesses comprising our Piping Systems segment:

<i>(In thousands)</i>	For the Quarter Ended		Percent Change 2017 vs. 2016	For the Six Months Ended		Percent Change 2017 vs. 2016
	July 1, 2017	July 2, 2016		July 1, 2017	July 2, 2016	
Net sales	\$ 422,844	\$ 388,662	8.8%	\$ 821,619	\$ 757,552	8.5%
Operating income	34,582	32,959	4.9	64,948	64,118	1.3

The following are components of changes in net sales compared to the prior year:

	Quarter-to-Date 2017 vs. 2016	Year-to-Date 2017 vs. 2016
Net selling price in core product lines	10.7 %	11.5 %
Unit sales volume in core product lines	(2.5)	(3.8)
Acquisitions	2.6	2.7
Other	(2.0)	(1.9)
	8.8 %	8.5 %

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The increase in net sales during the second quarter of 2017 was primarily attributable to (i) higher net selling prices in the segment's core product lines, primarily copper tube, of \$41.4 million, (ii) \$8.4 million of incremental sales recorded by Jungwoo-Mueller, and (iii) \$2.4 million of sales recorded by Pexcor and Heatlink. These increases were offset by lower unit sales volume of \$9.7 million in the segment's core product lines.

Net sales during the first half of 2017 increased primarily as a result of (i) higher net selling prices in the segment's core product lines of \$87.1 million and (ii) \$19.3 million of incremental sales recorded by Jungwoo-Mueller. These increases were offset by (i) a reduction in unit sales volume of \$28.6 million in the segment's core product lines and (ii) a decrease in net sales of \$7.4 million in the segment's non-core product lines.

The following tables compare cost of goods sold and operating expenses as dollar amounts and as a percent of net sales for 2017 and 2016:

<i>(In thousands)</i>	For the Quarter Ended		For the Six Months Ended	
	July 1, 2017	July 2, 2016	July 1, 2017	July 2, 2016
Cost of goods sold	\$ 364,261	\$ 333,356	\$ 708,907	\$ 647,148
Depreciation and amortization	5,591	5,787	10,933	11,436
Selling, general and administrative expense	18,410	16,560	36,831	34,850
Operating expenses	\$ 388,262	\$ 355,703	\$ 756,671	\$ 693,434

	For the Quarter Ended		For the Six Months Ended	
	July 1, 2017	July 2, 2016	July 1, 2017	July 2, 2016
Cost of goods sold	86.1%	85.8%	86.3%	85.4%
Depreciation and amortization	1.3	1.5	1.3	1.5
Selling, general and administrative expense	4.4	4.2	4.5	4.6
Operating expenses	91.8%	91.5%	92.1%	91.5%

The increase in cost of goods sold during the second quarter of 2017 was primarily due to the increase in the average cost of copper and the increase in sales volume related to the acquisition of Jungwoo-Mueller, partially offset by the decrease in sales volume in certain other businesses. Depreciation and amortization decreased slightly as a result of several long-lived assets becoming fully depreciated and amortized. Selling, general, and administrative expense increased for the second quarter of 2017 primarily as a result of (i) higher employee compensation costs, including incentive compensation, of \$1.1 million and (ii) incremental expenses associated with Jungwoo-Mueller, Pexcor, and Heatlink of \$1.4 million, partially offset by a gain on the sale of Mueller-Xingrong of \$1.6 million.

The increase in cost of goods sold during the first half of 2017 was primarily due to the increase in the average cost of copper and the increase in sales volume related to the acquisition of Jungwoo-Mueller, partially offset by the decrease in sales volume. Depreciation and amortization decreased slightly as a result of several long-lived assets becoming fully depreciated and amortized. Selling, general, and administrative expenses increased for the first half of 2017, primarily due to (i) incremental expenses associated with Jungwoo-Mueller, Pexcor, and Heatlink of \$2.2 million and (ii) foreign currency transaction losses of \$0.9 million. This was partially offset by a gain on the sale of Mueller-Xingrong of \$1.6 million during first half of 2017.

**Industrial Metals Segment**

The following table compares summary operating results for 2017 and 2016 for the businesses comprising our Industrial Metals segment:

<i>(In thousands)</i>	For the Quarter Ended		Percent Change 2017 vs. 2016	For the Six Months Ended		Percent Change 2017 vs. 2016
	July 1, 2017	July 2, 2016		July 1, 2017	July 2, 2016	
Net sales	\$ 154,504	\$ 127,737	21.0 %	\$ 304,341	\$ 262,258	16.0 %
Operating income	16,764	17,124	(2.1)	37,430	37,036	1.1

The following are components of changes in net sales compared to the prior year:

	Quarter-to-Date 2017 vs. 2016	Year-to-Date 2017 vs. 2016
Net selling price in core product lines	14.6 %	15.3 %
Unit sales volume in core product lines	7.8	3.3
Other	(1.4)	(2.6)
	<u>21.0 %</u>	<u>16.0 %</u>

The increase in net sales during the second quarter of 2017 was primarily due to (i) higher net selling prices of \$18.2 million and (ii) higher unit sales volume of \$9.7 million in the segment's core product lines, primarily brass rod. This increase was offset by lower sales of \$5.9 million in the segment's non-core product lines.

The increase in net sales during the first half of 2017 was primarily due to (i) higher net selling prices of \$39.6 million and (ii) higher unit sales volume of \$8.6 million in the segment's core product lines. These increases were offset by lower sales of \$12.9 million in the segment's non-core product lines.

The following tables compare cost of goods sold and operating expenses as dollar amounts and as a percent of net sales for 2017 and 2016:

<i>(In thousands)</i>	For the Quarter Ended		For the Six Months Ended	
	July 1, 2017	July 2, 2016	July 1, 2017	July 2, 2016
Cost of goods sold	\$ 132,972	\$ 104,874	\$ 257,015	\$ 214,103
Depreciation and amortization	1,904	2,120	3,802	4,255
Selling, general and administrative expense	2,864	3,619	6,094	6,864
Operating expenses	\$ 137,740	\$ 110,613	\$ 266,911	\$ 225,222

	For the Quarter Ended		For the Six Months Ended	
	July 1, 2017	July 2, 2016	July 1, 2017	July 2, 2016
Cost of goods sold	86.1 %	82.1 %	84.4 %	81.6 %
Depreciation and amortization	1.2	1.7	1.2	1.6
Selling, general and administrative expense	1.8	2.8	2.1	2.7
Operating expenses	<u>89.1 %</u>	<u>86.6 %</u>	<u>87.7 %</u>	<u>85.9 %</u>

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The increase in cost of goods sold during the second quarter of 2017 was primarily due to the increase in the average cost of copper and the increase in sales volume in the segment's core product lines. Depreciation and amortization decreased slightly as a result of several fixed assets becoming fully depreciated. Selling, general, and administrative expenses decreased primarily as a result of fixed asset impairment charges of \$0.6 million recognized during the second quarter of 2016 that were absent during the second quarter of 2017.

The increase in cost of goods sold during the first half of 2017 was primarily due to the increase in the average cost of copper and the increase in sales volume in the segment's core product lines, partially offset by the decrease in sales volume in the segment's non-core product lines. Depreciation and amortization decreased slightly as a result of several fixed assets becoming fully depreciated. Selling, general, and administrative expenses decreased primarily as a result of fixed asset impairment charges of \$0.6 million recognized during the first half of 2016 that were absent during the first half of 2017.

**Climate Segment**

The following table compares summary operating results for 2017 and 2016 for the businesses comprising our Climate segment:

<i>(In thousands)</i>	For the Quarter Ended		Percent Change 2017 vs. 2016	For the Six Months Ended		Percent Change 2017 vs. 2016
	July 1, 2017	July 2, 2016		July 1, 2017	July 2, 2016	
Net sales	\$ 36,636	\$ 31,359	16.8%	\$ 70,915	\$ 62,065	14.3%
Operating income	6,116	5,837	4.8	11,726	9,716	20.7

Sales for the second quarter and the first half of 2017 increased primarily as a result of an increase in volume and product mix.

The following tables compare cost of goods sold and operating expenses as dollar amounts and as a percent of net sales for 2017 and 2016:

<i>(In thousands)</i>	For the Quarter Ended		For the Six Months Ended	
	July 1, 2017	July 2, 2016	July 1, 2017	July 2, 2016
Cost of goods sold	\$ 27,449	\$ 22,448	\$ 53,013	\$ 46,153
Depreciation and amortization	615	618	1,244	1,217
Selling, general and administrative expense	2,456	2,456	4,932	4,979
Operating expenses	\$ 30,520	\$ 25,522	\$ 59,189	\$ 52,349

	For the Quarter Ended		For the Six Months Ended	
	July 1, 2017	July 2, 2016	July 1, 2017	July 2, 2016
Cost of goods sold	74.9%	71.6%	74.8%	74.4%
Depreciation and amortization	1.7	2.0	1.8	2.0
Selling, general and administrative expense	6.7	7.8	6.9	7.9
Operating expenses	83.3%	81.4%	83.5%	84.3%

Cost of goods sold increased during the second quarter of 2017 primarily due to the increase in volume and improved product mix within the segment. Depreciation and amortization and selling, general, and administrative expenses for the second quarter of 2017 were consistent with the expense recorded for the second quarter of 2016.

The increase in cost of goods sold during the first half of 2017 was related to the increase in volume and improved product mix within the segment. Depreciation and amortization and selling, general, and administrative expenses were consistent with the first half of 2016.

#### Liquidity and Capital Resources

The following table presents selected financial information for the first half of 2017 and 2016:

<i>(In thousands)</i>	2017	2016
Increase (decrease) in:		
Cash and cash equivalents	\$ (183,762)	\$ 8,317
Property, plant, and equipment, net	(10,637)	17,715
Total debt	276,262	13,862
Working capital, net of cash and current debt	33,912	52,950
Net cash provided by operating activities	12,547	41,865
Net cash used in investing activities	(6,661)	(27,791)
Net cash used in financing activities	(193,164)	(3,449)

#### *Cash Provided by Operating Activities*

During the six months ended July 1, 2017, net cash provided by operating activities was primarily attributable to net consolidated net income of \$58.3 million and depreciation and amortization of \$17.1 million. This cash increase was offset by an increase in receivables of \$47.1 million and an increase in inventories of \$10.9 million. The fluctuations were primarily due to increased sales volume in certain businesses and additional working capital needs in the first half of 2017.

During the six months ended July 2, 2016, net cash provided by operating activities was primarily attributable to consolidated net income of \$56.9 million, depreciation and amortization of \$18.2 million, and a decrease in other assets of \$17.0 million. These cash increases were partially offset by an increase in receivables of \$52.3 million. The fluctuations were primarily due to increased sales volume in certain businesses and additional working capital needs in the first half of 2016.

#### *Cash Used in Investing Activities*

The major components of net cash used in investing activities during the six months ended July 1, 2017 included \$18.4 million for the purchase of Pexcor and Heatlink, net of cash acquired, and capital expenditures of \$11.9 million. These uses of cash were offset by \$17.5 million of proceeds, net of cash sold, from the sale of our 50.5 percent equity interest in Mueller-Xingrong and net withdrawals from restricted cash balances of \$4.7 million.

The major components of net cash used in investing activities during the six months ended July 2, 2016 included \$20.5 million for the purchase of a 60.0 percent equity interest in Jungwoo-Mueller, net of cash acquired, and capital expenditures of \$10.2 million. This was offset by \$1.5 million in proceeds from the sale of properties and net withdrawals from restricted cash balances of \$1.5 million.

#### *Cash Used in Financing Activities*

For the six months ended July 1, 2017, net cash used in financing activities consisted primarily of \$185.5 million used for the payment of the special dividend and the regular quarterly dividends to stockholders of the Company, \$3.3 million used for repayment of debt by Mueller-Xingrong and Jungwoo-Mueller, and \$2.9 million used for payment of dividends to noncontrolling interests.

For the six months ended July 2, 2016, net cash used in financing activities consisted primarily of \$9.9 million used for payment of regular quarterly dividends to stockholders of the Company. This was partially offset by issuance of debt of \$6.4 million.

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*Liquidity and Outlook*

We believe that cash provided by operations, funds available under the credit agreement, and cash on hand will be adequate to meet our liquidity needs, including working capital, capital expenditures, and debt payment obligations. As of July 1, 2017 our current ratio was 3.4 to 1.

We have significant environmental remediation obligations which we expect to pay over future years. Cash used for environmental remediation activities was approximately \$0.3 million during the first half of 2017. We expect to spend approximately \$0.4 million for the remainder of 2017 for ongoing environmental remediation activities.

The Company declared and paid a quarterly cash dividend of 10.0 cents per common share during the first and second quarters of 2017, 7.5 cents per common share in the first quarter of 2016, and 10.0 cents per common share in the second quarter of 2016. Additionally, during the first quarter of 2017 the Company distributed a special dividend composed of \$3.00 in cash and \$5.00 in principal amount of the Company's 6% Subordinated Debentures (Debentures) due 2027 for each share of common stock outstanding. Payment of dividends in the future is dependent upon our financial condition, cash flows, capital requirements, earnings, and other factors.

*Long-Term Debt*

The Company's Credit Agreement provides for an unsecured \$350.0 million revolving credit facility which matures on December 6, 2021. Total borrowings under the Credit Agreement were \$200.0 million at July 1, 2017. The Credit Agreement backed approximately \$8.3 million in letters of credit at the end of the second quarter of 2017.

The Debentures distributed as part of our special dividend are subordinated to all other funded debt of the Company and are callable, in whole or in part, at any time at the option of the Company, subject to declining call premiums during the first five years. The Debentures also grant each holder the right to require the Company to repurchase such holder's Debentures in the event of a change in control at declining repurchase premiums during the first five years. Interest is payable semiannually on September 1 and March 1, commencing September 1, 2017. Total Debentures outstanding as of July 1, 2017 were \$284.5 million.

As of July 1, 2017, the Company's total debt was \$503.6 million or 49.9 percent of its total capitalization.

On July 10, 2017 and July 21, 2017, the Company made payments of \$50.0 million and \$30.0 million, respectively, to reduce the debt outstanding under its Credit Agreement.

Covenants contained in the Company's financing obligations require, among other things, the maintenance of minimum levels of tangible net worth and the satisfaction of certain minimum financial ratios. As of July 1, 2017, the Company was in compliance with all of its debt covenants.

*Share Repurchase Program*

The Board of Directors has extended, until October 2017, its authorization to repurchase up to 20 million shares of the Company's common stock through open market transactions or through privately negotiated transactions. We have no obligation to repurchase any shares and may cancel, suspend, or extend the time period for the repurchase of shares at any time. Any repurchases will be funded primarily through existing cash and cash from operations. We may hold any shares repurchased in treasury or use a portion of the repurchased shares for employee benefit plans, as well as for other corporate purposes. From its initial authorization in 1999 through July 1, 2017, the Company has repurchased approximately 4.7 million shares under this authorization.

*Contractual Cash Obligations*

There have been no significant changes in our contractual cash obligations reported at December 31, 2016 other than the debt and interest payments on the Debentures due in 2027 and the payments on the Credit Agreement due in 2021.

**Item 3. Quantitative and Qualitative Disclosures About Market Risk**

The Company is exposed to market risk from changes in raw material and energy costs, interest rates, and foreign currency exchange rates. To reduce such risks, we may periodically use financial instruments. Hedging transactions are authorized and executed pursuant to policies and procedures. Further, we do not buy or sell financial instruments for trading purposes.

**Cost and Availability of Raw Materials and Energy**

Raw materials, primarily copper and brass, represent the largest component of the Company's variable costs of production. The cost of these materials is subject to global market fluctuations caused by factors beyond our control. Significant increases in the cost of metal, to the extent not reflected in prices for the Company's finished products, or the lack of availability could materially and adversely affect our business, results of operations, and financial condition.

The Company occasionally enters into future fixed-price arrangements with certain customers. We may utilize futures contracts to hedge risks associated with these fixed-price arrangements. We may also utilize futures contracts to manage price risk associated with inventory. Depending on the nature of the hedge, changes in the fair value of the futures contracts will either be offset against the change in fair value of the inventory through earnings or recognized as a component of accumulated other comprehensive income (AOCI) and reflected in earnings upon the sale of inventory. Periodic value fluctuations of the contracts generally offset the value fluctuations of the underlying fixed-price transactions or inventory. At July 1, 2017, we held open futures contracts to purchase approximately \$4.3 million of copper over the next 11 months related to fixed-price sales orders and to sell approximately \$31.8 million of copper over the next six months related to copper inventory.

We may enter into futures contracts or forward fixed-price arrangements with certain vendors to manage price risk associated with natural gas purchases. The effective portion of gains and losses with respect to these positions are deferred in equity as a component of AOCI and reflected in earnings upon consumption of natural gas. Periodic value fluctuations of the contracts generally offset the value fluctuations of the underlying natural gas prices. As of July 1, 2017, we held no open futures contracts to purchase natural gas.

**Interest Rates**

At July 1, 2017, we had variable-rate debt outstanding of \$203.8 million. At this borrowing level, a hypothetical 10 percent increase in interest rates would have had an insignificant unfavorable impact on our pretax earnings and cash flows. The primary interest rate exposure on variable-rate debt is based on LIBOR.

Included in the variable-rate debt outstanding is the Company's \$200.0 million Credit Agreement which bears interest based on LIBOR. We have reduced our exposure to increases in LIBOR by entering into interest rate swap contracts. These contracts were designated as cash flow hedges through December 2016, at which time the Company discontinued hedge accounting prospectively. The fair value of these contracts have been recorded in the Condensed Consolidated Balance Sheets, and the related gains and losses on the contracts were deferred in stockholders' equity as a component of AOCI through December 2016, but are reported in current earnings subsequent to that date. Deferred gains or losses on the contracts are recognized in interest expense in the period in which the related interest payment previously being hedged is expensed.

**Foreign Currency Exchange Rates**

Foreign currency exposures arising from transactions include firm commitments and anticipated transactions denominated in a currency other than an entity's functional currency. The Company and its subsidiaries generally enter into transactions denominated in their respective functional currencies. We may utilize certain futures or forward contracts with financial institutions to hedge foreign currency transactional exposures. Gains and losses with respect to these positions are deferred in equity as a component of AOCI and reflected in earnings upon collection of receivables or payment of commitments. At July 1, 2017, we had open forward contracts with a financial institution to sell approximately 4.5 million euros, 23.6 million Swedish kronor, and 8.8 million Norwegian kroner through October 2017.

The Company's primary foreign currency exposure arises from foreign-denominated revenues and profits and their translation into U.S. dollars. The primary currencies to which we are exposed include the Canadian dollar, the British pound sterling, the euro, the Mexican peso, the South Korean won, and the Chinese renminbi. The Company generally views as long-term its investments in foreign subsidiaries with a functional currency other than the U.S. dollar. As a result, we generally do not hedge these net investments.

**Cautionary Statement Regarding Forward Looking Information**

This Quarterly Report contains various forward-looking statements and includes assumptions concerning the Company's operations, future results, and prospects. These forward-looking statements are based on current expectations and are subject to risk and uncertainties, and may be influenced by factors that could cause actual outcomes and results to be materially different from those predicted. The forward-looking statements reflect knowledge and information available as of the date of preparation of the Quarterly Report, and the Company undertakes no obligation to update these forward-looking statements. We identify the

forward-looking statements by using the words “anticipates,” “believes,” “expects,” “intends” or similar expressions in such statements.

In connection with the “safe harbor” provisions of the Private Securities Litigation Reform Act of 1995, the Company provides the following cautionary statement identifying important economic, political, and technological factors, among others, which could cause actual results or events to differ materially from those set forth in or implied by the forward-looking statements and related assumptions. In addition to those factors discussed under “Risk Factors” in the Annual Report on Form 10-K for the year ended December 31, 2016, such factors include: (i) the current and projected future business environment, including interest rates and capital and consumer spending; (ii) the domestic housing and commercial construction industry environment; (iii) availability and price fluctuations in commodities (including copper, natural gas, and other raw materials, including crude oil that indirectly affects plastic resins); (iv) competitive factors and competitor responses to the Company’s initiatives; (v) stability of government laws and regulations, including taxes; (vi) availability of financing; and (vii) continuation of the environment to make acquisitions, domestic and foreign, including regulatory requirements and market values of candidates.

**Item 4. Controls and Procedures**

**Evaluation of Disclosure Controls and Procedures**

The Company maintains disclosure controls and procedures designed to ensure information required to be disclosed in Company reports filed under the Securities Exchange Act of 1934, as amended (the Exchange Act), is recorded, processed, summarized, and reported within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures are designed to provide reasonable assurance that information required to be disclosed in Company reports filed under the Exchange Act is accumulated and communicated to management, including the Company’s Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

The Company’s management, with the participation of the Company’s Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the Company’s disclosure controls and procedures pursuant to Rule 13a-15(e) of the Exchange Act as of July 1, 2017. Based on that evaluation, the Company’s Chief Executive Officer and Chief Financial Officer have concluded that the Company’s disclosure controls and procedures are effective as of July 1, 2017 to ensure that information required to be disclosed in Company reports filed under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in the SEC rules and forms and (ii) accumulated and communicated to management, including the Company’s principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

**Changes in Internal Control over Financial Reporting**

There were no changes in the Company’s internal control over financial reporting during the Company’s fiscal quarter ending July 1, 2017, that have materially affected, or are reasonably likely to materially affect, the Company’s internal control over financial reporting.

**PART II. OTHER INFORMATION**

**Item 1. Legal Proceedings**

*General*

The Company is involved in certain litigation as a result of claims that arose in the ordinary course of business. Additionally, the Company may realize the benefit of certain legal claims and litigation in the future; these gain contingencies are not recognized in the Condensed Consolidated Financial Statements.

**Item 1A. Risk Factors**

The Company is exposed to risk as it operates its businesses. To provide a framework to understand the operating environment of the Company, we have provided a brief explanation of the more significant risks associated with our businesses in our 2016 Annual Report on Form 10-K. There have been no material changes in risk factors that were previously disclosed in our 2016 Annual Report on Form 10-K.



**Item 2. Unregistered Sales of Equity Securities and Use of Proceeds**

*Issuer Purchases of Equity Securities*

The Company's Board of Directors has extended, until October 2017, its authorization to repurchase up to 20 million shares of the Company's common stock through open market transactions or through privately negotiated transactions. The Company has no obligation to repurchase any shares and may cancel, suspend, or extend the time period for the repurchase of shares at any time. Any repurchases will be funded primarily through existing cash and cash from operations. The Company may hold any shares repurchased in treasury or use a portion of the repurchased shares for employee benefit plans, as well as for other corporate purposes. From its initial authorization in 1999 through July 1, 2017, the Company had repurchased approximately 4.7 million shares under this authorization. Below is a summary of the Company's stock repurchases for the period ended July 1, 2017.

	(a) Total Number of Shares Purchased		(b) Average Price Paid per Share	(c) Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	(d) Maximum Number of Shares That May Yet Be Purchased Under the Plans or Programs	
April 2 - April 29, 2017	—	(2)	\$ —	—	—	15,287,060 (1)
April 30 - May 27, 2017	3,052	(2)	\$ 27.59	—	—	
May 28 - July 1, 2017	1,219	(2)	\$ 30.25	—	—	

(1) Shares available to be purchased under the Company's 20 million share repurchase authorization until October 2017. The extension of the authorization was announced on October 27, 2016.

(2) Shares tendered to the Company by holders of stock-based awards in payment of the purchase price and/or withholding taxes upon exercise and/or vesting. Also includes shares resulting from restricted stock forfeitures.

**Item 5. Other Information**

*Election of Directors*

On July 24, 2017, the Company's Board of Directors (the Board) elected Charles P. Herzog Jr. to the Board effective July 31, 2017. At the time of election, the Board did not appoint Mr. Herzog to any committees of the Board.

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**Item 6. Exhibits**

31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.CAL	XBRL Taxonomy Extension Calculation Linkbase
101.DEF	XBRL Taxonomy Extension Definition Linkbase
101.INS	XBRL Instance Document
101.LAB	XBRL Taxonomy Extension Label Linkbase
101.PRE	XBRL Presentation Linkbase Document
101.SCH	XBRL Taxonomy Extension Schema

Items 3 and 4 are not applicable and have been omitted.

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.

MUELLER INDUSTRIES, INC.

/s/ Jeffrey A. Martin

Jeffrey A. Martin  
Chief Financial Officer and Treasurer  
(Principal Financial and Accounting Officer)

July 26, 2017  
Date

/s/ Anthony J. Steinriede

Anthony J. Steinriede  
Vice President – Corporate Controller

July 26, 2017  
Date

## EXHIBIT INDEX

<u>Exhibits</u>	<u>Description</u>
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## CERTIFICATION

I, Gregory L. Christopher, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Mueller Industries, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)), for the registrant and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
  - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: July 26, 2017

/s/ Gregory L. Christopher  
Gregory L. Christopher  
Chief Executive Officer

## CERTIFICATION

I, Jeffrey A. Martin, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Mueller Industries, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)), for the registrant and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
  - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: July 26, 2017

/s/ Jeffrey A. Martin  
Jeffrey A. Martin  
Chief Financial Officer

CERTIFICATION PURSUANT TO

18 U.S.C. SECTION 1350,

AS ADOPTED PURSUANT TO SECTION 906

OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Mueller Industries, Inc. (the "Company") on Form 10-Q for the period ending July 1, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Gregory L. Christopher, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ GREGORY L. CHRISTOPHER  
Gregory L. Christopher  
Chief Executive Officer  
July 26, 2017

CERTIFICATION PURSUANT TO

18 U.S.C. SECTION 1350,

AS ADOPTED PURSUANT TO SECTION 906

OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Mueller Industries, Inc. (the "Company") on Form 10-Q for the period ending July 1, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jeffrey A. Martin, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ JEFFREY A. MARTIN

Jeffrey A. Martin  
Chief Financial Officer  
July 26, 2017