

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

FORM 10-Q

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

For the quarterly period ended **June 30, 2019**

or

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

For the transition period from _____ to _____

Commission File Number: 1-14303

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
(Exact Name of Registrant as Specified in Its Charter)

Delaware
(State or Other Jurisdiction of Incorporation or Organization)

38-3161171
(I.R.S. Employer Identification No.)

One Dauch Drive, Detroit , Michigan
(Address of Principal Executive Offices)

48211-1198
(Zip Code)

(313) 758-2000
(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 every Interactive Data File required to be submitted 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 such files). Yes No

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

Large accelerated filer Accelerated filer Non-accelerated filer 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

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, par value \$0.01 per share	AXL	New York Stock Exchange

As of July 30, 2019, the latest practicable date, the number of shares of the registrant's Common Stock, par value \$0.01 per share, outstanding was 112,475,824 shares.

Internet Website Access to Reports

The website for American Axle & Manufacturing Holdings, Inc. is www.aam.com. Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13 or 15(d) of the Exchange Act are available free of charge through our website as soon as reasonably practicable after they are electronically filed with, or furnished to, the Securities and Exchange Commission (SEC). The SEC also maintains a website at www.sec.gov that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC.

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
FORM 10-Q
FOR THE QUARTER ENDED JUNE 30, 2019
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FORWARD-LOOKING STATEMENTS

In this Quarterly Report on Form 10-Q (Quarterly Report), we make statements concerning our expectations, beliefs, plans, objectives, goals, strategies, and future events or performance. Such statements are “forward-looking” statements within the meaning of the Private Securities Litigation Reform Act of 1995 and relate to trends and events that may affect our future financial position and operating results. The terms such as “will,” “may,” “could,” “would,” “plan,” “believe,” “expect,” “anticipate,” “intend,” “project,” “target,” and similar words or expressions, as well as statements in future tense, are intended to identify forward-looking statements.

Forward-looking statements should not be read as a guarantee of future performance or results, and will not necessarily be accurate indications of the times at, or by, which such performance or results will be achieved. Forward-looking statements are based on information available at the time those statements are made and/or management’s good faith belief as of that time with respect to future events and are subject to risks and may differ materially from those expressed in or suggested by the forward-looking statements.

Important factors that could cause such differences include, but are not limited to:

- reduced purchases of our products by General Motors Company (GM), FCA US LLC (FCA), or other customers;
- our ability to respond to changes in technology, increased competition or pricing pressures;
- our ability to develop and produce new products that reflect market demand;
- our ability or our customers' and suppliers' ability to successfully launch new product programs on a timely and cost efficient basis;
- lower-than-anticipated market acceptance of new or existing products;
- our ability to attract new customers and programs for new products;
- an impairment of our goodwill, other intangible assets, or long-lived assets if our business or market conditions indicate that the carrying values of those assets exceed their fair values;
- reduced demand for our customers' products (particularly light trucks and sport utility vehicles (SUVs) produced by GM and FCA);
- risks inherent in our global operations (including tariffs and the potential consequences thereof to us, our suppliers, and our customers and their suppliers, adverse changes in trade agreements, such as NAFTA, or proposed trade agreements, such as the USMCA, immigration policies, political stability, taxes and other law changes, potential disruptions of production and supply, and currency rate fluctuations);
- a significant disruption in operations at one or more of our key manufacturing facilities;
- global economic conditions;
- liabilities arising from warranty claims, product recall or field actions, product liability and legal proceedings to which we are or may become a party, or the impact of product recall or field actions on our customers;
- risks related to a failure of our information technology systems and networks, and risks associated with current and emerging technology threats and damage from computer viruses, unauthorized access, cyber attack and other similar disruptions;
- supply shortages or price increases in raw material and/or freight, utilities or other operating supplies for us or our customers as a result of natural disasters or otherwise;
- our ability to successfully integrate the business and information systems of MPG and to realize the anticipated benefits of the merger;
- negative or unexpected tax consequences;
- our ability to achieve the level of cost reductions required to sustain global cost competitiveness;
- our ability to realize the expected revenues from our new and incremental business backlog;
- our suppliers', our customers' and their suppliers' ability to maintain satisfactory labor relations and avoid work stoppages;
- our ability to maintain satisfactory labor relations and avoid work stoppages;
- price volatility in, or reduced availability of, fuel;
- potential liabilities or litigation relating to, or assumed in, the MPG merger;
- potential adverse reactions or changes to business relationships resulting from the completion of the merger with MPG;
- our ability to protect our intellectual property and successfully defend against assertions made against us;
- our ability to attract and retain key associates;
- availability of financing for working capital, capital expenditures, research and development (R&D) or other general corporate purposes including acquisitions, as well as our ability to comply with financial covenants;
- our customers' and suppliers' availability of financing for working capital, capital expenditures, R&D or other general corporate purposes;
- changes in liabilities arising from pension and other postretirement benefit obligations;
- risks of noncompliance with environmental laws and regulations or risks of environmental issues that could result in unforeseen costs at our current and former facilities, or reputational damage;
- adverse changes in laws, government regulations or market conditions affecting our products or our customers' products;
- our ability or our customers' and suppliers' ability to comply with regulatory requirements and the potential costs of such compliance; and
- other unanticipated events and conditions that may hinder our ability to compete.

It is not possible to foresee or identify all such factors and we make no commitment to update any forward-looking statement or to disclose any facts, events or circumstances after the date hereof that may affect the accuracy of any forward-looking statement.

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF INCOME
(Unaudited)

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2019	2018	2019	2018
	<i>(in millions, except per share data)</i>			
Net sales	\$ 1,704.3	\$ 1,900.9	\$ 3,423.5	\$ 3,759.3
Cost of goods sold	1,456.0	1,569.5	2,953.0	3,111.6
Gross profit	248.3	331.4	470.5	647.7
Selling, general and administrative expenses	91.3	95.0	182.0	192.3
Amortization of intangible assets	24.9	24.8	49.9	49.7
Restructuring and acquisition-related costs	12.2	36.8	24.3	55.1
Gain on sale of business	—	(15.5)	—	(15.5)
Operating income	119.9	190.3	214.3	366.1
Interest expense	(56.2)	(54.4)	(109.6)	(107.6)
Investment income	0.5	0.5	1.2	1.0
Other income (expense)				
Debt refinancing and redemption costs	(2.4)	(4.3)	(2.4)	(14.6)
Gain on settlement of capital lease	—	15.6	—	15.6
Other income (expense), net	(3.1)	5.6	(6.1)	0.2
Income before income taxes	58.7	153.3	97.4	260.7
Income tax expense	6.0	2.0	3.0	19.9
Net income	\$ 52.7	\$ 151.3	\$ 94.4	\$ 240.8
Net income attributable to noncontrolling interests	(0.2)	(0.2)	(0.3)	(0.3)
Net income attributable to AAM	\$ 52.5	\$ 151.1	\$ 94.1	\$ 240.5
Basic earnings per share	\$ 0.45	\$ 1.31	\$ 0.81	\$ 2.09
Diluted earnings per share	\$ 0.45	\$ 1.30	\$ 0.81	\$ 2.08

See accompanying notes to condensed consolidated financial statements.

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(Unaudited)

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2019	2018	2019	2018
	<i>(in millions)</i>			
Net income	\$ 52.7	\$ 151.3	\$ 94.4	\$ 240.8
Other comprehensive income (loss)				
Defined benefit plans, net of tax ^(a)	1.1	12.2	1.8	13.5
Foreign currency translation adjustments	4.9	(81.0)	2.4	(43.1)
Changes in cash flow hedges, net of tax ^(b)	(15.8)	(7.9)	(18.3)	7.2
Other comprehensive loss	(9.8)	(76.7)	(14.1)	(22.4)
Comprehensive income	\$ 42.9	\$ 74.6	\$ 80.3	\$ 218.4
Net income attributable to noncontrolling interests	(0.2)	(0.2)	(0.3)	(0.3)
Comprehensive income attributable to AAM	\$ 42.7	\$ 74.4	\$ 80.0	\$ 218.1

(a) Amounts are net of tax of \$(0.2) million and \$(0.5) million for the three and six months ended June 30, 2019, and \$(4.1) million and \$(4.5) million for the three and six months ended June 30, 2018, respectively.

(b) Amounts are net of tax of \$4.7 million and \$6.2 million for the three and six months ended June 30, 2019 and \$(0.1) million and \$(1.2) million for the three and six months ended June 30, 2018, respectively.

See accompanying notes to condensed consolidated financial statements.

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS

	June 30, 2019	December 31, 2018
	<i>(Unaudited)</i>	
	<i>(in millions)</i>	
Assets		
Current assets		
Cash and cash equivalents	\$ 248.8	\$ 476.4
Accounts receivable, net	1,138.0	966.5
Inventories, net	459.9	459.7
Prepaid expenses and other	130.0	127.2
Total current assets	1,976.7	2,029.8
Property, plant and equipment, net	2,544.4	2,514.4
Deferred income taxes	51.9	45.5
Goodwill	1,140.9	1,141.8
Other intangible assets, net	1,063.1	1,111.1
GM postretirement cost sharing asset	224.1	219.4
Other assets and deferred charges	546.8	448.7
Total assets	\$ 7,547.9	\$ 7,510.7
Liabilities and Stockholders' Equity		
Current liabilities		
Current portion of long-term debt	\$ 26.0	\$ 121.6
Accounts payable	853.4	840.2
Accrued compensation and benefits	159.6	179.0
Deferred revenue	33.6	44.3
Accrued expenses and other	194.5	171.7
Total current liabilities	1,267.1	1,356.8
Long-term debt, net	3,674.2	3,686.8
Deferred revenue	87.5	77.6
Deferred income taxes	67.4	92.6
Postretirement benefits and other long-term liabilities	879.5	810.6
Total liabilities	5,975.7	6,024.4
Stockholders' equity		
Common stock, par value \$0.01 per share; 150.0 million shares authorized; 120.1 million shares issued as of June 30, 2019 and 118.9 million shares issued as of December 31, 2018	1.2	1.2
Paid-in capital	1,303.8	1,292.6
Retained earnings	827.2	703.5
Treasury stock at cost, 7.6 million shares as of June 30, 2019 and 7.2 million shares as of December 31, 2018	(209.3)	(201.8)
Accumulated other comprehensive loss		
Defined benefit plans, net of tax	(239.8)	(213.9)
Foreign currency translation adjustments	(94.2)	(96.6)
Unrecognized loss on cash flow hedges, net of tax	(19.4)	(1.1)
Total AAM stockholders' equity	1,569.5	1,483.9
Noncontrolling interests in subsidiaries	2.7	2.4
Total stockholders' equity	1,572.2	1,486.3
Total liabilities and stockholders' equity	\$ 7,547.9	\$ 7,510.7

See accompanying notes to condensed consolidated financial statements.

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

	Six Months Ended	
	June 30,	
	2019	2018
	<i>(in millions)</i>	
Operating activities		
Net income	\$ 94.4	\$ 240.8
Adjustments to reconcile net income to net cash provided by operating activities		
Depreciation and amortization	277.3	258.0
Impairment of long-lived assets	—	23.9
Deferred income taxes	(31.8)	38.0
Stock-based compensation	11.2	13.7
Pensions and other postretirement benefits, net of contributions	(9.5)	(0.6)
Gain on sale of business	—	(15.5)
Loss (Gain) on disposal of property, plant and equipment, net	1.1	(4.9)
Debt refinancing and redemption costs and (gain) on settlement of capital lease	2.4	(0.8)
Changes in operating assets and liabilities		
Accounts receivable	(170.5)	(225.7)
Inventories	—	(47.4)
Accounts payable and accrued expenses	24.5	83.7
Deferred revenue	0.1	8.1
Other assets and liabilities	(62.3)	(81.9)
Net cash provided by operating activities	<u>136.9</u>	<u>289.4</u>
Investing activities		
Purchases of property, plant and equipment	(237.5)	(273.0)
Proceeds from sale of property, plant and equipment	1.7	0.9
Investment in joint venture	(2.2)	—
Purchase buyouts of leased equipment	—	(0.5)
Proceeds from sale of business, net	—	47.1
Acquisition of business	—	(1.3)
Net cash used in investing activities	<u>(238.0)</u>	<u>(226.8)</u>
Financing activities		
Payments of long-term debt and finance lease obligations	(128.2)	(528.7)
Proceeds from issuance of long-term debt	8.0	461.9
Debt issuance costs	—	(6.8)
Purchase of noncontrolling interest	—	(2.2)
Purchase of treasury stock	(7.5)	(3.6)
Net cash used in financing activities	<u>(127.7)</u>	<u>(79.4)</u>
Effect of exchange rate changes on cash	1.2	(4.3)
Net decrease in cash, cash equivalents and restricted cash	<u>(227.6)</u>	<u>(21.1)</u>
Cash, cash equivalents and restricted cash at beginning of period	<u>478.9</u>	<u>376.8</u>
Cash, cash equivalents and restricted cash at end of period	<u>\$ 251.3</u>	<u>\$ 355.7</u>
Supplemental cash flow information		
Interest paid	\$ 102.1	\$ 104.4

Income taxes paid, net of refunds

\$ 34.6 \$ 19.6

See accompanying notes to condensed consolidated financial statements.

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Unaudited)

	Common Stock					Accumulated		Noncontrolling
	Shares	Par	Paid-in	Retained	Treasury	Other Comprehensive	Interest	
	Outstanding	Value	Capital	Earnings	Stock	Income (Loss)	in Subsidiaries	
Balance at January 1, 2018	111.3	\$ 1.2	\$ 1,264.6	\$ 761.0	\$ (198.1)	\$ (292.7)	\$ 4.0	
Net income	—	—	—	89.4	—	—	0.1	
Exercise of stock options and vesting of restricted stock units and performance shares	0.6	—	—	—	—	—	—	
Stock-based compensation	—	—	6.6	—	—	—	—	
Purchase of treasury stock	(0.2)	—	—	—	(3.5)	—	—	
Changes in cash flow hedges	—	—	—	—	—	15.1	—	
Foreign currency translation adjustments	—	—	—	—	—	37.9	—	
Defined benefit plans, net	—	—	—	—	—	1.3	—	
Purchase of noncontrolling interest	—	—	—	—	—	—	(0.9)	
Balance at March 31, 2018	111.7	\$ 1.2	\$ 1,271.2	\$ 850.4	\$ (201.6)	\$ (238.4)	\$ 3.2	
Net income	—	—	—	151.1	—	—	0.2	
Stock-based compensation	—	—	7.1	—	—	—	—	
Purchase of treasury stock	—	—	—	—	(0.1)	—	—	
Changes in cash flow hedges	—	—	—	—	—	(7.9)	—	
Foreign currency translation adjustments	—	—	—	—	—	(81.0)	—	
Defined benefit plans, net	—	—	—	—	—	12.2	—	
Purchase of noncontrolling interest	—	—	—	—	—	—	(1.4)	
Balance at June 30, 2018	111.7	\$ 1.2	\$ 1,278.3	\$ 1,001.5	\$ (201.7)	\$ (315.1)	\$ 2.0	
Balance at January 1, 2019	111.7	\$ 1.2	\$ 1,292.6	\$ 703.5	\$ (201.8)	\$ (311.6)	\$ 2.4	
Net income	—	—	—	41.6	—	—	0.1	
Vesting of restricted stock units and performance shares	1.2	—	—	—	—	—	—	
Stock-based compensation	—	—	5.5	—	—	—	—	
Modified-retrospective application of ASU 2016-02	—	—	—	1.9	—	—	—	
Adoption of ASU 2018-02	—	—	—	27.7	—	(27.7)	—	
Purchase of treasury stock	(0.4)	—	—	—	(7.3)	—	—	
Changes in cash flow hedges	—	—	—	—	—	(2.5)	—	
Foreign currency translation adjustments	—	—	—	—	—	(2.5)	—	
Defined benefit plans, net	—	—	—	—	—	0.7	—	
Balance at March 31, 2019	112.5	\$ 1.2	\$ 1,298.1	\$ 774.7	\$ (209.1)	\$ (343.6)	\$ 2.5	
Net income	—	—	—	52.5	—	—	0.2	
Stock-based compensation	—	—	5.7	—	—	—	—	
Purchase of treasury stock	—	—	—	—	(0.2)	—	—	
Changes in cash flow hedges	—	—	—	—	—	(15.8)	—	
Foreign currency translation adjustments	—	—	—	—	—	4.9	—	
Defined benefit plans, net	—	—	—	—	—	1.1	—	
Balance at June 30, 2019	112.5	\$ 1.2	\$ 1,303.8	\$ 827.2	\$ (209.3)	\$ (353.4)	\$ 2.7	

See accompanying notes to condensed consolidated financial statements.

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
June 30, 2019
(Unaudited)

1. ORGANIZATION AND BASIS OF PRESENTATION

Organization We are a global Tier 1 supplier to the automotive industry. We design, engineer and manufacture driveline, metal forming and casting products that are making the next generation of vehicles smarter, lighter, safer and more efficient. We employ over 25,000 associates, operating at nearly 90 facilities in 17 countries, to support our customers on global and regional platforms with a focus on quality, operational excellence and technology leadership.

In the first quarter of 2019, we initiated a new global restructuring program (the 2019 Program) to further streamline our business by consolidating our four existing segments into three segments. This activity occurred through the disaggregation of our Powertrain segment, with a portion moving into our Driveline segment and a portion moving into our Metal Forming segment. See Note 3 - Restructuring and Acquisition-Related Costs for more detail on this reorganization.

Basis of Presentation We have prepared the accompanying interim condensed consolidated financial statements in accordance with the instructions to Form 10-Q under the Securities Exchange Act of 1934. These condensed consolidated financial statements are unaudited but include all normal recurring adjustments, which we consider necessary for a fair presentation of the information set forth herein. Results of operations for the periods presented are not necessarily indicative of the results for the full fiscal year.

The balance sheet at December 31, 2018 presented herein has been derived from the audited consolidated financial statements at that date but does not include all of the information and footnotes required by accounting principles generally accepted in the United States of America (GAAP) for complete consolidated financial statements.

In order to prepare the accompanying interim condensed consolidated financial statements, we are required to make estimates and assumptions that affect the reported amounts and disclosures in our interim condensed consolidated financial statements. Actual results could differ from those estimates.

For further information, refer to the audited consolidated financial statements and notes included in our Annual Report on Form 10-K for the year ended December 31, 2018.

Effect of New Accounting Standards

Accounting Standard Update 2018-15

On August 15, 2018, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2018-15 - *Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement that is a Service Contract (Topic 350-40)*. ASU 2018-15 aligns the requirements for capitalizing implementation costs incurred in a cloud computing or hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. This guidance becomes effective at the beginning of our 2020 fiscal year and may be applied either retrospectively or prospectively. We expect to adopt this guidance prospectively on January 1, 2020 and we are currently assessing the impact that this standard will have on our consolidated financial statements.

Accounting Standards Update 2018-02

On February 14, 2018, the FASB issued ASU 2018-02 - *Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income (Topic 220)*. ASU 2018-02 allows companies the option to reclassify disproportionate tax effects in accumulated other comprehensive income (AOCI) caused by the 2017 Tax Cuts and Jobs Act, also known as stranded tax effects, to retained earnings. ASU 2018-02 also requires expanded disclosures related to disproportionate income tax effects from AOCI, some of which are applicable to all companies regardless of whether the option to reclassify the stranded tax effects is exercised. This guidance became effective on January 1, 2019, and we elected to reclassify the stranded tax effects caused by the 2017 Tax Cuts and Jobs Act, resulting in a decrease in Accumulated other comprehensive income (loss) and an increase in Retained earnings of \$27.7 million at January 1, 2019.

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Accounting Standards Update 2016-02

On February 25, 2016, the FASB issued ASU 2016-02 - *Leases (Topic 842)*, and has subsequently issued ASU 2017-13 - *Revenue Recognition (Topic 605)*, *Revenue from Contracts with Customers (Topic 606)*, *Leases (Topic 840)* and *Leases (Topic 842)* (collectively the Lease ASUs) which supersede the existing lease accounting guidance and establish new criteria for recognizing lease assets and liabilities. The most significant impact of these updates, to AAM, is that a lessee is required to recognize a "right-of-use" asset and lease liability for operating lease agreements that were not previously included on the balance sheet under previous lease guidance. Expense recognition in the statement of income, along with cash flow statement classification for both financing (capital) and operating leases under the new standard are not significantly changed from previous lease guidance. This guidance became effective for AAM on January 1, 2019. See Note 2 - Leasing for additional detail regarding the adoption of ASU 2016-02.

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

2. LEASING

On January 1, 2019, we adopted new accounting guidance under Accounting Standards Codification Topic 842 (ASC 842) *Leases*. ASC 842 superseded prior lease accounting guidance and established new criteria for recognizing right-of-use assets and lease liabilities for operating lease arrangements on our Condensed Consolidated Balance Sheet. We elected to adopt this guidance utilizing the optional transition method that allowed us to not retrospectively revise prior period balance sheets to include operating leases, and to only include the disclosures required under ASC 842 for the periods subsequent to adoption.

We have concluded that when an agreement grants us the right to substantially all of the economic benefits associated with an identified asset, and we are able to direct the use of that asset throughout the term of the agreement, we have a lease. We lease certain facilities and furniture under finance leases, and we also lease certain commercial office and production facilities, manufacturing machinery and equipment, vehicles and other assets under operating leases. Some of our leases include options to extend or terminate the leases and these options have been included in the relevant lease term to the extent that they are reasonably certain to be exercised.

The lease consideration for some of our facilities and machinery and equipment is variable, as it is based on various indices or usage of the underlying assets, respectively. Variable lease payments based on indices have been included in the related right-of-use assets and lease liabilities on our Condensed Consolidated Balance Sheet, while variable lease payments based on usage of the underlying asset have been excluded as they do not represent present rights or obligations.

Lease cost consists of the following:

	Three Months Ended	Six Months Ended
	June 30,	June 30,
	2019	2019
	<i>(in millions)</i>	
Finance lease cost		
Amortization of right-of-use assets	\$ 0.2	\$ 0.4
Interest on lease liabilities	—	0.1
Total finance lease cost	0.2	0.5
Operating lease cost	6.7	13.4
Short-term lease cost	1.7	3.4
Variable lease cost	2.3	4.2
Total lease cost	<u>\$ 10.9</u>	<u>\$ 21.5</u>

For the three months ended June 30, 2019, \$8.2 million and \$2.5 million were recorded to Cost of goods sold and Selling, general and administrative expense, respectively, on our Condensed Consolidated Statement of Income, as compared to \$7.2 million and \$2.4 million, respectively, for the three months ended June 30, 2018. For the six months ended June 30, 2019, \$16.0 million and \$5.0 million were recorded to Cost of goods sold and Selling, general and administrative expense, respectively, on our Condensed Consolidated Statement of Income, as compared to \$14.3 million and \$5.0 million, respectively for the six months ended June 30, 2018.

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

The following table summarizes additional information related to our lease agreements.

	Six Months Ended	
	June 30,	
	2019	
	<i>(in millions, except lease term and rate)</i>	
Cash paid for amounts included in measurement of lease liabilities		
Operating cash flows from finance leases	\$	0.1
Operating cash flows from operating leases		13.6
Financing cash flows from finance leases		0.4
Weighted-average remaining lease term - finance leases		3.1 years
Weighted-average remaining lease term - operating leases		5.1 years
Weighted-average discount rate - finance leases		8.1%
Weighted-average discount rate - operating leases		6.3%

As the rate implicit in the lease is typically unknown, the discount rate used to determine the lease liability for the majority of our leases is the collateralized incremental borrowing rate in the applicable geographic area for a similar term and amount as the lease agreement.

Future undiscounted minimum payments under non-cancelable leases are as follows:

	Finance Leases		Operating Leases	
	<i>(in millions)</i>			
2019 (excluding the six months ended June 30, 2019)	\$	0.5	\$	13.0
2020		1.1		24.0
2021		1.0		16.8
2022		0.9		12.8
2023		0.9		7.9
Thereafter		—		19.0
Total future undiscounted minimum lease payments		4.4		93.5
Less: Impact of discounting		(1.4)		(14.1)
Total	\$	3.0	\$	79.4

For the full year 2019, we expect payments for short-term leases to be approximately \$5.0 million.

The right-of-use assets and lease liabilities recorded on our Condensed Consolidated Balance Sheet as of June 30, 2019 are as follows:

	Finance Leases		Operating Leases	
	<i>(in millions)</i>			
Property, plant and equipment, net	\$	3.0	\$	—
Other assets and deferred charges		—		79.4
Total	\$	3.0	\$	79.4
Accrued expenses and other	\$	0.8	\$	22.0
Postretirement benefits and other long-term liabilities		2.2		57.4
Total	\$	3.0	\$	79.4

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

ASC 842 Adoption of Practical Expedients

We have elected to adopt, for all classes of underlying assets, a package of practical expedients provided under ASC 842 that allow us to 1) not reassess whether existing or expired contracts contain or contained a lease; 2) not reassess the lease classification (operating or financing) of our existing leases at adoption; and 3) not reassess initial direct costs for existing leases.

ASC 842 also provides a practical expedient that allows companies to exclude balance sheet recognition of right-of-use assets and associated liabilities for lease terms of 12 months or less, which we have elected as part of our adoption of ASC 842 for all classes of underlying assets. We do not include right-of-use assets and operating lease liabilities on our Condensed Consolidated Balance Sheet for leases with a term of 12 months or less.

We have also elected to adopt the practical expedient under ASC 842 to not separate lease and non-lease components in contracts that contain both. These lease agreements are accounted for as a single lease component for all classes of underlying assets.

Leases Not Yet Commenced

As of June 30, 2019, we have entered into additional operating leases that have not yet commenced of approximately \$23 million, which primarily reflects the lease of a production facility with a term of 15 years that is expected to commence in 2019.

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

3. RESTRUCTURING AND ACQUISITION-RELATED COSTS

In 2016, AAM initiated actions under a global restructuring program (the 2016 Program) focused on creating a more streamlined organization in addition to reducing our cost structure and preparing for acquisition and integration activities. We incurred severance charges totaling \$2.8 million and implementation costs totaling \$29.6 million under the 2016 Program. There were no charges incurred under the 2016 Program during the first six months of 2019 and we do not expect to incur any additional restructuring charges under the 2016 Program in future periods.

In the first quarter of 2019, we initiated a new global restructuring program (the 2019 Program) to further streamline our business by consolidating our four existing segments into three segments. This activity occurred through the disaggregation of our Powertrain segment, with a portion moving into our Driveline segment and a portion moving into our Metal Forming segment. The primary objectives of this consolidation are to finalize the integration of Metaldyne Performance Group, Inc. (MPG), align AAM's product and process technologies, and to achieve efficiencies within our corporate and business unit support teams to reduce cost in our business.

A summary of our restructuring activity for the first six months of 2019 and 2018 is shown below:

	Severance Charges	Implementation Costs	Asset Impairment Charges	Total
	<i>(in millions)</i>			
Accrual as of December 31, 2017	\$ 0.3	\$ —	\$ —	\$ 0.3
Charges	2.0	5.5	23.9	31.4
Cash utilization	(0.4)	(5.1)	—	(5.5)
Non-cash utilization	—	—	(23.9)	(23.9)
Accrual as of June 30, 2018	<u>\$ 1.9</u>	<u>\$ 0.4</u>	<u>\$ —</u>	<u>\$ 2.3</u>
Accrual as of December 31, 2018	<u>\$ 2.4</u>	<u>\$ 1.6</u>	<u>\$ —</u>	<u>\$ 4.0</u>
Charges	8.2	8.9	—	17.1
Cash utilization	(7.9)	(7.1)	—	(15.0)
Accrual as of June 30, 2019	<u><u>\$ 2.7</u></u>	<u><u>\$ 3.4</u></u>	<u><u>\$ —</u></u>	<u><u>\$ 6.1</u></u>

As part of our restructuring actions, we incurred total severance charges of approximately \$8.2 million and \$2.0 million, as well as total implementation costs of approximately \$8.9 million and \$5.5 million, during the six months ended June 30, 2019 and 2018, respectively. We expect to incur approximately \$25 million to \$30 million of total restructuring charges in 2019, including costs incurred under the 2019 Program.

In the second quarter of 2018, we initiated actions to exit operations at manufacturing facilities in our Metal Forming segment and former Powertrain segment. As a result of these actions, we were required to assess the associated long-lived assets for impairment. Based on our analysis, assets that were not to be redeployed to other AAM facilities were determined to be fully impaired resulting in a charge of \$23.9 million in the second quarter of 2018. See Note 7 - Fair Value for further detail.

In 2017, we completed the acquisitions of MPG and USM Mexico Manufacturing LLC (USM Mexico). During the six months ended June 30, 2019, we incurred the following integration charges related to these acquisitions:

	Integration Expenses
	<i>(in millions)</i>
Charges for the six months ended June 30, 2019	\$ 7.2
Total restructuring and acquisition-related charges	<u><u>\$ 24.3</u></u>

These integration expenses primarily reflect costs incurred for information technology systems and ongoing operational activities incurred in conjunction with the acquisitions. Total restructuring charges and acquisition-related charges are presented on a separate line item titled Restructuring and acquisition-related costs in our Condensed Consolidated Statements of Income, and totaled \$12.2 million and \$24.3 million for the three and six months ended June 30, 2019, respectively, and \$36.8 million and \$55.1 million for the three and six months ended June 30, 2018, respectively.

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

4. GOODWILL AND OTHER INTANGIBLE ASSETS

Goodwill The following table provides a reconciliation of changes in goodwill for the six months ended June 30, 2019:

	Driveline	Metal Forming	Powertrain	Casting	Consolidated
	<i>(in millions)</i>				
Balance as of December 31, 2018	\$ 212.1	\$ 552.4	\$ 377.3	\$ —	\$ 1,141.8
Reorganization	187.2	190.1	(377.3)	—	—
Foreign currency translation	(1.1)	0.2	—	—	(0.9)
Balance as of June 30, 2019	\$ 398.2	\$ 742.7	\$ —	\$ —	\$ 1,140.9

In the first quarter of 2019, we initiated a global restructuring program (the 2019 Program) to further streamline our business by consolidating our four existing segments into three segments. See Note 3 - Restructuring and Acquisition-Related Costs for further detail on this reorganization of our segments. Prior to this reorganization, our Powertrain segment was also a reporting unit for purposes of measuring and reporting goodwill. The goodwill that was previously attributable to the Powertrain reporting unit was reallocated to the Driveline and Metal Forming reporting units based on the relative fair value of the respective portions that became attributable to those reporting units.

The initiation of the 2019 Program and the reorganization of our business represented a triggering event in the first quarter of 2019 to test goodwill for impairment prior to reallocating the Powertrain goodwill to Driveline and Metal Forming. No impairment was identified as a result of completing this goodwill impairment test.

Other Intangible Assets The following table provides a reconciliation of the gross carrying amount and associated accumulated amortization for AAM's other intangible assets, which are all subject to amortization:

	June 30,			December 31,		
	2019			2018		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
	<i>(in millions)</i>					
Capitalized computer software	\$ 41.0	\$ (24.5)	\$ 16.5	\$ 38.0	\$ (20.1)	\$ 17.9
Customer platforms	952.2	(158.7)	793.5	952.2	(123.5)	828.7
Customer relationships	147.0	(21.3)	125.7	147.0	(16.5)	130.5
Technology and other	156.0	(28.6)	127.4	156.2	(22.2)	134.0
Total	\$ 1,296.2	\$ (233.1)	\$ 1,063.1	\$ 1,293.4	\$ (182.3)	\$ 1,111.1

Amortization expense for our intangible assets was \$24.9 million and \$49.9 million for the three and six months ended June 30, 2019, respectively, and \$24.8 million and \$49.7 million for the three and six months ended June 30, 2018, respectively. Estimated amortization expense for each of the full years 2019 through 2023 is approximately \$100 million.

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

5. INVENTORIES

We state our inventories at the lower of cost or net realizable value. The cost of our inventories is determined using the first-in first-out method. When we determine that our gross inventories exceed usage requirements, or if inventories become obsolete or otherwise not saleable, we record a provision for such loss as a component of our inventory accounts.

Inventories consist of the following:

	June 30, 2019	December 31, 2018
	<i>(in millions)</i>	
Raw materials and work-in-progress	\$ 390.7	\$ 375.1
Finished goods	91.0	99.0
Gross inventories	481.7	474.1
Inventory valuation reserves	(21.8)	(14.4)
Inventories, net	\$ 459.9	\$ 459.7

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

6. LONG-TERM DEBT

Long-term debt consists of the following:

	June 30, 2019	December 31, 2018
	<i>(in millions)</i>	
Revolving Credit Facility	\$ —	\$ —
Term Loan A Facility	81.3	83.8
Term Loan B Facility	1,507.4	1,511.2
7.75% Notes due 2019	—	100.0
6.625% Notes due 2022	450.0	450.0
6.50% Notes due 2027	500.0	500.0
6.25% Notes due 2026	400.0	400.0
6.25% Notes due 2025	700.0	700.0
Foreign credit facilities and other	122.6	127.1
Capital lease obligations	—	3.4
Total debt	<u>3,761.3</u>	<u>3,875.5</u>
Less: Current portion of long-term debt	<u>26.0</u>	<u>121.6</u>
Long-term debt	<u>3,735.3</u>	<u>3,753.9</u>
Less: Debt issuance costs	<u>61.1</u>	<u>67.1</u>
Long-term debt, net	<u>\$ 3,674.2</u>	<u>\$ 3,686.8</u>

Senior Secured Credit Facilities In 2017, American Axle & Manufacturing Holdings, Inc. (Holdings) and American Axle & Manufacturing, Inc. (AAM, Inc.) entered into a credit agreement (the Credit Agreement). In connection with the Credit Agreement, Holdings, AAM, Inc. and certain of their restricted subsidiaries entered into a Collateral Agreement and Guarantee Agreement with the financial institutions party thereto. The Credit Agreement includes a \$100.0 million term loan A facility (the Term Loan A Facility), a \$1.55 billion term loan B facility (the Term Loan B Facility) and a \$932 million multi-currency revolving credit facility (the Revolving Credit Facility, and together with the Term Loan A Facility and the Term Loan B Facility, the Senior Secured Credit Facilities). The proceeds of the Revolving Credit Facility are used for general corporate purposes.

At June 30, 2019, we had \$894.3 million available under the Revolving Credit Facility. This availability reflects a reduction of \$37.7 million for standby letters of credit issued against the facility.

The Senior Secured Credit Facilities provide back-up liquidity for our foreign credit facilities. We intend to use the availability of long-term financing under the Senior Secured Credit Facilities to refinance any current maturities related to such debt agreements that are not otherwise refinanced on a long-term basis in their local markets, except where otherwise reclassified to Current portion of long-term debt on our Condensed Consolidated Balance Sheet.

Subsequent Event On July 29, 2019, Holdings, AAM, Inc., and certain subsidiaries of Holdings entered into the First Amendment (First Amendment) to the Credit Agreement (as amended by the First Amendment, the Amended Credit Agreement). The First Amendment, among other things, established \$340 million in incremental term loan A commitments under the Amended Credit Agreement with a maturity date of July 29, 2024 (Term Loan A Facility due 2024), extended the maturity date of the Revolving Credit Facility from April 6, 2022 to July 29, 2024 and modified the applicable margin with respect to interest rates under the Term Loan A Facility due 2024 and interest rates and commitment fees under the Revolving Credit Facility. The applicable margin and the maturity date for the Term Loan B Facility remain unchanged. The proceeds of \$340 million were used to repay all of the outstanding loans under the existing Term Loan A Facility and a portion of the outstanding Term Loan B Facility, resulting in no additional indebtedness.

Foreign credit facilities We utilize local currency credit facilities to finance the operations of certain foreign subsidiaries. At June 30, 2019, \$119.6 million was outstanding under our foreign credit facilities, as compared to \$127.1 million at December 31, 2018. At June 30, 2019, an additional \$87.7 million was available under our foreign credit facilities.

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

The weighted-average interest rate of our long-term debt outstanding was 6.0% at June 30, 2019 and 5.9% at December 31, 2018.

Capital lease obligations Upon our adoption of ASC 842 *Leases*, our capital (finance) lease obligations are now presented in Accrued expenses and other, and Postretirement benefits and other long-term liabilities on our Condensed Consolidated Balance Sheet. See Note 2 - Leasing for additional detail regarding our adoption of ASC 842.

Redemption of 7.75% Notes due 2019 In May 2019, we voluntarily redeemed the remaining balance outstanding under our 7.75% Notes due 2019. This resulted in a principal payment of \$100 million and \$0.3 million in accrued interest. We also expensed approximately \$0.1 million for the write-off of the unamortized debt issuance costs that we had been amortizing over the expected life of the borrowing, and approximately \$2.2 million for an early redemption premium.

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

7. FAIR VALUE

Accounting Standards Codification 820 - *Fair Value Measurement* defines fair value as “the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.” The definition is based on an exit price rather than an entry price, regardless of whether the entity plans to hold or sell the asset. This guidance also establishes a fair value hierarchy to prioritize inputs used in measuring fair value as follows:

- Level 1: Observable inputs such as quoted prices in active markets;
- Level 2: Inputs, other than quoted prices in active markets, that are observable either directly or indirectly; and
- Level 3: Unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

Financial instruments The estimated fair value of our financial assets and liabilities that are recognized at fair value on a recurring basis, using available market information and other observable data, are as follows:

	June 30, 2019		December 31, 2018		Input
	Carrying Amount	Fair Value	Carrying Amount	Fair Value	
	<i>(in millions)</i>				
Balance Sheet Classification					
Cash equivalents	\$ 54.2	\$ 54.2	\$ 44.0	\$ 44.0	Level 1
Prepaid expenses and other					
Cash flow hedges - currency forward contracts	3.2	3.2	1.3	1.3	Level 2
Cash flow hedges - variable-to-fixed interest rate swap	1.3	1.3	0.9	0.9	Level 2
Nondesignated - currency forward contracts	1.3	1.3	0.6	0.6	Level 2
Other assets and deferred charges					
Cash flow hedges - currency forward contracts	1.6	1.6	0.4	0.4	Level 2
Cash flow hedges - variable-to-fixed interest rate swap	3.4	3.4	1.6	1.6	Level 2
Accrued expenses and other					
Cash flow hedges - currency forward contracts	—	—	0.8	0.8	Level 2
Cash flow hedges - variable-to-fixed interest rate swap	8.2	8.2	0.7	0.7	Level 2
Nondesignated - currency forward contracts	0.1	0.1	0.4	0.4	Level 2
Postretirement benefits and other long-term liabilities					
Cash flow hedges - currency forward contracts	—	—	0.9	0.9	Level 2
Cash flow hedges - variable-to-fixed interest rate swap	20.1	20.1	6.9	6.9	Level 2

The carrying values of our cash, accounts receivable, accounts payable and accrued liabilities approximate their fair values due to the short-term maturities of these instruments. The carrying values of our borrowings under the foreign credit facilities approximate their fair value due to the frequent resetting of the interest rates.

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

We estimated the fair value of the amounts outstanding on our debt using available market information and other observable data, to be as follows:

	June 30, 2019		December 31, 2018		Input
	Carrying Amount	Fair Value	Carrying Amount	Fair Value	
<i>(in millions)</i>					
Revolving Credit Facility	\$ —	\$ —	\$ —	\$ —	Level 2
Term Loan A Facility	81.3	79.5	83.8	79.5	Level 2
Term Loan B Facility	1,507.4	1,469.7	1,511.2	1,420.6	Level 2
7.75% Notes due 2019	—	—	100.0	102.1	Level 2
6.625% Notes due 2022	450.0	457.9	450.0	444.4	Level 2
6.50% Notes due 2027	500.0	497.5	500.0	446.3	Level 2
6.25% Notes due 2026	400.0	393.5	400.0	358.0	Level 2
6.25% Notes due 2025	700.0	688.6	700.0	636.7	Level 2

Long-Lived Assets During the second quarter of 2018, we recorded asset impairment charges as a result of restructuring actions initiated during the quarter. See Note 3 - Restructuring and Acquisition-Related Costs for further detail. There were no such impairment charges incurred during the six months ended June 30, 2019.

The following table summarizes the impairments of long-lived assets measured at fair value on a nonrecurring basis subsequent to initial recognition:

Balance Sheet Classification	Fair Value at June 30, 2018	Asset Impairment for the Six Months Ended June 30, 2018
Property, plant and equipment, net	\$ —	\$ 23.6
Other assets and deferred charges	—	0.3

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

8. DERIVATIVES

Our business and financial results are affected by fluctuations in global financial markets, including interest rates and currency exchange rates. Our hedging policy has been developed to manage these risks to an acceptable level based on management's judgment of the appropriate trade-off between risk, opportunity and cost. We do not hold financial instruments for trading or speculative purposes.

Currency derivative contracts From time to time, we use foreign currency forward contracts to reduce the effects of fluctuations in exchange rates relating to certain foreign currencies. As of June 30, 2019, we have currency forward contracts outstanding with a total notional amount of \$175.2 million that hedge our exposure to changes in foreign currency exchange rates for certain payroll expenses into the second quarter of 2022 and other items into the fourth quarter of 2019.

Variable-to-fixed interest rate swap In 2018, we entered into a variable-to-fixed interest rate swap to reduce the variability of cash flows associated with interest payments on our variable rate debt. In the second quarter of 2019, we discontinued this variable-to-fixed interest rate swap, which was a liability of \$9.7 million on the date that it was discontinued.

Also in the second quarter of 2019, we entered into a new variable-to-fixed interest rate swap to reduce the variability of cash flows associated with interest payments on our variable rate debt. We have the following notional amounts hedged in relation to our variable-to-fixed interest rate swap: \$1.0 billion through May 2020, \$900.0 million through May 2021, \$750.0 million through May 2022, \$600.0 million through May 2023 and \$500.0 million through May 2024.

The following table summarizes the reclassification of derivative gains and losses into net income from accumulated other comprehensive income (loss) for those derivative instruments designated as cash flow hedges under ASC 815 - *Derivatives and Hedging*:

	Location of Gain (Loss) Reclassified into Net Income	Gain (Loss) Reclassified During				Total of Financial Statement Line Item 2019	Gain (Loss) Expected to be Reclassified During the Next 12 Months
		Three Months Ended		Six Months Ended			
		June 30,		June 30,			
		2019	2018	2019	2018		
<i>(in millions)</i>							
Currency forward contracts	Cost of Goods Sold	\$ 0.7	\$ (0.8)	\$ 0.9	\$ (2.8)	\$ 2,953.0	\$ 3.2
Variable-to-fixed interest rate swap	Interest Expense	0.7	0.9	1.9	1.3	(109.6)	(6.9)

See Note 13 - Reclassifications Out of Accumulated Other Comprehensive Income (Loss) (AOCI) for amounts recognized in other comprehensive income (loss) during the three and six months ended June 30, 2019 and 2018.

The following table summarizes the amount and location of gains and losses recognized in the Condensed Consolidated Statements of Income for those derivative instruments not designated as hedging instruments under ASC 815:

	Location of Gain (Loss) Recognized in Net Income	Gain (Loss) Recognized During				Total of Financial Statement Line Item 2019
		Three Months Ended		Six Months Ended		
		June 30,		June 30,		
		2019	2018	2019	2018	
<i>(in millions)</i>						
Currency forward contracts	Cost of Goods Sold	\$ 0.6	\$ (3.5)	\$ 1.8	\$ 0.5	\$ 2,953.0
Currency forward contracts	Other Income (Expense), net	(0.4)	1.8	(0.6)	1.8	(6.1)

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

9. EMPLOYEE BENEFIT PLANS

The components of net periodic benefit cost (credit) are as follows:

	Pension Benefits			
	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2019	2018	2019	2018
	<i>(in millions)</i>			
Service cost	\$ 0.4	\$ 1.0	\$ 0.7	\$ 2.1
Interest cost	7.1	6.8	14.2	13.7
Expected asset return	(10.3)	(11.5)	(20.6)	(23.0)
Amortized loss	1.5	2.2	3.2	4.4
Amortized prior service cost	—	0.1	—	0.1
Curtailement	—	—	—	3.2
Net periodic benefit cost (credit)	<u>\$ (1.3)</u>	<u>\$ (1.4)</u>	<u>\$ (2.5)</u>	<u>\$ 0.5</u>

	Other Postretirement Benefits			
	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2019	2018	2019	2018
	<i>(in millions)</i>			
Service cost	\$ 0.1	\$ 0.1	\$ 0.2	\$ 0.2
Interest cost	3.2	3.1	6.4	6.2
Amortized loss	—	0.2	0.1	0.4
Amortized prior service credit	(0.4)	(0.6)	(0.8)	(1.3)
Net periodic benefit cost	<u>\$ 2.9</u>	<u>\$ 2.8</u>	<u>\$ 5.9</u>	<u>\$ 5.5</u>

The noncurrent liabilities associated with our pension and other postretirement benefit plans are classified as Postretirement benefits and other long-term liabilities on our Condensed Consolidated Balance Sheets. As of June 30, 2019 and December 31, 2018, we have a noncurrent pension liability of \$120.3 million and \$128.6 million, respectively. As of June 30, 2019 and December 31, 2018, we have a noncurrent other postretirement benefits liability of \$504.5 million and \$506.5 million, respectively.

Due to the availability of our pre-funded pension balances (previous contributions in excess of prior required pension contributions) related to certain of our U.S. pension plans, we expect our regulatory pension funding requirements in 2019 to be approximately \$2.2 million. We expect our cash payments for other postretirement benefit obligations in 2019, net of GM cost sharing, to be approximately \$17.7 million.

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

10. PRODUCT WARRANTIES

We record a liability for estimated warranty obligations at the dates our products are sold. These estimates are established using sales volumes and internal and external warranty data where there is no payment history and historical information about the average cost of warranty claims for customers with prior claims. We estimate our costs based on the contractual arrangements with our customers, existing customer warranty terms and internal and external warranty data, which includes a determination of our warranty claims and actions taken to improve product quality and minimize warranty claims. We continuously evaluate these estimates and our customers' administration of their warranty programs. We closely monitor actual warranty claim data and adjust the liability, as necessary, on a quarterly basis.

The following table provides a reconciliation of changes in the product warranty liability:

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2019	2018	2019	2018
	<i>(in millions)</i>			
Beginning balance	\$ 56.2	\$ 53.6	\$ 57.7	\$ 49.5
Accruals	5.0	6.2	9.4	10.5
Payments	(3.6)	(0.6)	(7.3)	(1.1)
Adjustment to prior period accruals	(2.0)	(0.2)	(4.3)	(0.2)
Foreign currency translation	0.1	(0.6)	0.2	(0.3)
Ending balance	<u>\$ 55.7</u>	<u>\$ 58.4</u>	<u>\$ 55.7</u>	<u>\$ 58.4</u>

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

11. INCOME TAXES

We adjust our effective tax rate each quarter based on our estimated annual effective tax rate. We also record the tax impact of certain discrete, unusual or infrequently occurring items, including changes in judgment about valuation allowances and effects of changes in tax laws or rates, in the interim period in which they occur. In addition, jurisdictions with a projected loss for the year or a year-to-date loss where no tax benefit can be recognized are excluded from the estimated annual effective tax rate. The impact of such an exclusion could result in a higher or lower effective tax rate during a particular quarter, based upon the mix and timing of actual earnings versus annual projections.

Income tax was expense of \$6.0 million for the three months ended June 30, 2019, an effective income tax rate of 10.2%, as compared to \$2.0 million for the three months ended June 30, 2018, an effective income tax rate of 1.3%. Income tax expense was \$3.0 million for the six months ended June 30, 2019, an effective income tax rate of 3.1%, as compared to \$19.9 million for the six months ended June 30, 2018, an effective income tax rate of 7.6%.

Our effective income tax rate for the three months ended June 30, 2019 is higher than our effective income tax rate for the three months ended June 30, 2018 primarily due to the impact of discrete income tax items recognized in the second quarter of 2018. During the second quarter of 2018, we recognized a discrete tax benefit as a result of finalizing an advance pricing agreement in a foreign jurisdiction, which resulted in a reduction of our liability for unrecognized income tax benefits and related interest and penalties of \$20.0 million. Also in the second quarter of 2018, we recognized a discrete tax expense related to the sale of the aftermarket business associated with our former Powertrain segment.

Our effective income tax rate for the six months ended June 30, 2019 is lower than our effective income tax rate for the six months ended June 30, 2018. As part of the Tax Cuts and Jobs Act in 2017, a one-time transition tax (Transition Tax) was imposed on certain foreign earnings for which U.S. income tax was previously deferred. The Department of Treasury and Internal Revenue Service issued final regulations on February 5, 2019 regarding the Transition Tax, which changed the manner in which we are required to compute the Transition Tax when it is recognized over a two-year period. The application of the final regulations resulted in a \$9.3 million income tax benefit, which has been recorded in the six months ended June 30, 2019, the period in which the final regulations were issued. Our effective income tax rate for the six months ended June 30, 2018 was also impacted by the net effect of the discrete items discussed for the three months ended June 30, 2018 above.

For the three and six months ended June 30, 2019 and 2018, our effective income tax rates vary from the U.S. federal statutory rate of 21% primarily due to favorable foreign tax rates, as well as the impact of tax credits and the effect of the discrete items described above.

We operate in multiple jurisdictions throughout the world and the income tax returns of several subsidiaries in various tax jurisdictions are currently under examination. We are currently under a U.S. federal income tax examination for the year 2015. We continue to have years subject to income tax examination in certain significant tax jurisdictions from 2013 to present. Based on the status of ongoing tax audits, and the protocol of finalizing audits by the relevant tax authorities, it is not possible to estimate the impact of changes, if any, to previously recorded uncertain tax positions. As of June 30, 2019 and December 31, 2018, we have recorded a liability for unrecognized income tax benefits and related interest and penalties of \$51.3 million and \$45.6 million, respectively.

During the next 12 months, we may finalize an advance pricing agreement in a foreign jurisdiction, which could result in a cash payment to the relevant tax authorities and a reduction of our liability for unrecognized tax benefits and related interest and penalties. Although it is difficult to estimate with certainty the amount of any audit settlement, we do not expect any potential settlement to be materially different from what we have recorded in unrecognized tax benefits. We will continue to monitor the progress and conclusions of all ongoing audits and other communications with tax authorities, and will adjust our estimated liability as necessary.

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

12. EARNINGS PER SHARE (EPS)

We present earnings per share using the two-class method. This method allocates undistributed earnings between common shares and non-vested share based payment awards that entitle the holder to non-forfeitable dividend rights. Our participating securities include non-vested restricted stock units.

The following table sets forth the computation of our basic and diluted EPS available to shareholders of common stock (excluding participating securities):

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2019	2018	2019	2018
	<i>(in millions, except per share data)</i>			
Numerator				
Net income attributable to AAM	\$ 52.5	\$ 151.1	\$ 94.1	\$ 240.5
Less: Net income attributable to participating securities	(1.5)	(4.9)	(2.7)	(6.8)
Net income attributable to common shareholders - Basic and Dilutive	<u>\$ 51.0</u>	<u>\$ 146.2</u>	<u>\$ 91.4</u>	<u>\$ 233.7</u>
Denominators				
Basic common shares outstanding -				
Weighted-average shares outstanding	115.8	115.4	115.6	114.8
Less: Participating securities	(3.3)	(3.7)	(3.4)	(3.3)
Weighted-average common shares outstanding	<u>112.5</u>	<u>111.7</u>	<u>112.2</u>	<u>111.5</u>
Effect of dilutive securities -				
Dilutive stock-based compensation	<u>0.3</u>	<u>0.6</u>	<u>0.4</u>	<u>0.6</u>
Diluted shares outstanding -				
Adjusted weighted-average shares after assumed conversions	<u>112.8</u>	<u>112.3</u>	<u>112.6</u>	<u>112.1</u>
Basic EPS	<u>\$ 0.45</u>	<u>\$ 1.31</u>	<u>\$ 0.81</u>	<u>\$ 2.09</u>
Diluted EPS	<u>\$ 0.45</u>	<u>\$ 1.30</u>	<u>\$ 0.81</u>	<u>\$ 2.08</u>

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

13. RECLASSIFICATIONS OUT OF ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS) (AOCI)

Reclassification adjustments and other activity impacting accumulated other comprehensive income (loss) during the three months ended June 30, 2019 and June 30, 2018 are as follows (*in millions*):

	Defined Benefit Plans	Foreign Currency Translation Adjustments	Unrecognized Gain (Loss) on Cash Flow Hedges	Total
Balance at March 31, 2019	\$ (240.9)	\$ (99.1)	\$ (3.6)	\$ (343.6)
Other comprehensive income (loss) before reclassifications	—	4.9	(19.1)	(14.2)
Income tax effect of other comprehensive income (loss) before reclassifications	—	—	4.6	4.6
Amounts reclassified from accumulated other comprehensive loss	1.3 (a)	—	(1.4) (b)	(0.1)
Income taxes reclassified into net income	(0.2)	—	0.1	(0.1)
Net change in accumulated other comprehensive loss	1.1	4.9	(15.8)	(9.8)
Balance at June 30, 2019	<u>\$ (239.8)</u>	<u>\$ (94.2)</u>	<u>\$ (19.4)</u>	<u>\$ (353.4)</u>

	Defined Benefit Plans	Foreign Currency Translation Adjustments	Unrecognized Gain (Loss) on Cash Flow Hedges	Total
Balance at March 31, 2018	\$ (250.7)	\$ 3.8	\$ 8.5	\$ (238.4)
Other comprehensive income (loss) before reclassifications	14.7	(81.2)	(7.7)	(74.2)
Income tax effect of other comprehensive income (loss) before reclassifications	(3.6)	—	(0.4)	(4.0)
Amounts reclassified from accumulated other comprehensive income (loss)	1.6 (a)	0.2	(0.1) (b)	1.7
Income taxes reclassified into net income	(0.5)	—	0.3	(0.2)
Net change in accumulated other comprehensive income (loss)	12.2	(81.0)	(7.9)	(76.7)
Balance at June 30, 2018	<u>\$ (238.5)</u>	<u>\$ (77.2)</u>	<u>\$ 0.6</u>	<u>\$ (315.1)</u>

(a) The amount reclassified from AOCI included \$1.2 million in cost of goods sold (COGS) and \$0.1 million in SG&A for the three months ended June 30, 2019 and \$1.6 million in COGS for the three months ended June 30, 2018.

(b) The amounts reclassified from AOCI included \$(0.7) million in COGS and \$(0.7) million in interest expense for the three months ended June 30, 2019 and \$0.8 million in COGS and \$(0.9) million in interest expense for the three months ended June 30, 2018.

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Reclassification adjustments and other activity impacting accumulated other comprehensive income (loss) during the six months ended June 30, 2019 and June 30, 2018 are as follows (in millions):

	Defined Benefit Plans	Foreign Currency Translation Adjustments	Unrecognized Gain (Loss) on Cash Flow Hedges	Total
Balance at December 31, 2018	\$ (213.9)	\$ (96.6)	\$ (1.1)	\$ (311.6)
Other comprehensive income (loss) before reclassifications	(27.9) (a)	2.4	(21.7)	(47.2)
Income tax effect of other comprehensive income (loss) before reclassifications	—	—	5.8	5.8
Amounts reclassified from accumulated other comprehensive loss	2.5 (b)	—	(2.8) (c)	(0.3)
Income taxes reclassified into net income	(0.5)	—	0.4	(0.1)
Net change in accumulated other comprehensive loss	(25.9)	2.4	(18.3)	(41.8)
Balance at June 30, 2019	<u>\$ (239.8)</u>	<u>\$ (94.2)</u>	<u>\$ (19.4)</u>	<u>\$ (353.4)</u>

	Defined Benefit Plans	Foreign Currency Translation Adjustments	Unrecognized Gain (Loss) on Cash Flow Hedges	Total
Balance at December 31, 2017	\$ (252.0)	\$ (34.1)	\$ (6.6)	\$ (292.7)
Other comprehensive income (loss) before reclassifications	14.7	(43.3)	6.9	(21.7)
Income tax effect of other comprehensive income (loss) before reclassifications	(3.6)	—	(1.5)	(5.1)
Amounts reclassified from accumulated other comprehensive income (loss)	3.3 (b)	0.2	1.5 (c)	5.0
Income taxes reclassified into net income	(0.9)	—	0.3	(0.6)
Net change in accumulated other comprehensive income (loss)	13.5	(43.1)	7.2	(22.4)
Balance at June 30, 2018	<u>\$ (238.5)</u>	<u>\$ (77.2)</u>	<u>\$ 0.6</u>	<u>\$ (315.1)</u>

(a) ASU 2018-02 became effective on January 1, 2019, and we elected to reclassify the stranded tax effects caused by the 2017 Tax Cuts and Jobs Act, resulting in a decrease in Accumulated other comprehensive income (loss) of \$27.7 million at January 1, 2019. See Note 1 - Organization and Basis of Presentation for further detail.

(b) The amount reclassified from AOCI included \$2.4 million in cost of goods sold (COGS) and \$0.1 million in SG&A for the six months ended June 30, 2019 and \$3.0 million in COGS and \$0.3 million in SG&A for the six months ended June 30, 2018.

(c) The amounts reclassified from AOCI included \$(0.9) million in COGS and \$(1.9) million in interest expense for the six months ended June 30, 2019 and \$2.8 million in COGS and \$(1.3) million in interest expense for the six months ended June 30, 2018.

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

14. REVENUE FROM CONTRACTS WITH CUSTOMERS

Disaggregation of Net Sales

Net sales recognized from contracts with customers, disaggregated by segment and geographical location, are presented in the following table for the three and six months ended June 30, 2019 and 2018. Net sales are attributed to regions based on the location of production. Intersegment sales have been excluded from the table.

In the first quarter of 2019, we reorganized our business to disaggregate our former Powertrain business unit, with a portion moving to our Driveline business unit and a portion moving to our Metal Forming business unit. As a result, the Powertrain amounts previously reported for the three and six months ended June 30, 2018 have been reclassified to Driveline and Metal Forming.

	Three Months Ended June 30, 2019			
	Driveline	Metal Forming	Casting	Total
North America	\$ 888.3	\$ 301.4	\$ 186.9	\$ 1,376.6
Asia	135.0	7.9	—	142.9
Europe	90.8	67.2	—	158.0
South America	25.9	0.9	—	26.8
Total	\$ 1,140.0	\$ 377.4	\$ 186.9	\$ 1,704.3

	Three Months Ended June 30, 2018			
	Driveline	Metal Forming	Casting	Total
North America	\$ 985.2	\$ 327.1	\$ 209.7	\$ 1,522.0
Asia	177.9	12.5	—	190.4
Europe	78.5	77.5	—	156.0
South America	31.0	1.5	—	32.5
Total	\$ 1,272.6	\$ 418.6	\$ 209.7	\$ 1,900.9

	Six Months Ended June 30, 2019			
	Driveline	Metal Forming	Casting	Total
North America	\$ 1,741.4	\$ 606.8	\$ 384.2	\$ 2,732.4
Asia	288.3	15.4	—	303.7
Europe	192.4	139.9	—	332.3
South America	51.7	3.4	—	55.1
Total	\$ 2,273.8	\$ 765.5	\$ 384.2	\$ 3,423.5

	Six Months Ended June 30, 2018			
	Driveline	Metal Forming	Casting	Total
North America	\$ 1,946.4	\$ 666.7	\$ 419.5	\$ 3,032.6
Asia	320.9	24.8	—	345.7
Europe	155.3	159.0	—	314.3
South America	64.3	2.4	—	66.7
Total	\$ 2,486.9	\$ 852.9	\$ 419.5	\$ 3,759.3

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Contract Assets and Liabilities

The following table summarizes our beginning and ending balances for accounts receivable and contract liabilities associated with our contracts with customers:

	Accounts Receivable, Net	Contract Liabilities (Current)	Contract Liabilities (Long-term)
December 31, 2018	\$ 966.5	\$ 44.3	\$ 77.6
June 30, 2019	1,138.0	33.6	87.5
Increase/(decrease)	\$ 171.5	\$ (10.7)	\$ 9.9

Contract liabilities relate to deferred revenue associated with various settlements and commercial agreements for which we have a future performance obligation to the customer. We recognize this deferred revenue into revenue over the life of the associated program as we satisfy our performance obligations to the customer. We do not have contract assets as defined in ASC 606.

During the three and six months ended June 30, 2019, we amortized \$14.9 million and \$27.8 million, respectively, of previously recorded contract liabilities into revenue as we satisfied performance obligations with our customers.

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

15. SEGMENT REPORTING

Subsequent to the acquisition of MPG in 2017, our business was organized into four segments: Driveline, Metal Forming, Powertrain and Casting. In the first quarter of 2019, we reorganized our business to disaggregate our former Powertrain segment, with a portion moving to our Driveline segment and a portion moving to our Metal Forming segment. As a result, our business is now organized into Driveline, Metal Forming and Casting segments, with each representing a reportable segment under ASC 280 *Segment Reporting*. The Powertrain Sales and Segment Adjusted EBITDA amounts previously reported for the three and six months ended June 30, 2018, as well as the Total Assets previously reported for Powertrain as of December 31, 2018, have been reclassified to Driveline and Metal Forming in the tables below.

The results of each segment are regularly reviewed by the chief operating decision maker to assess the performance of the segment and make decisions regarding the allocation of resources to the segments.

Our product offerings by segment are as follows:

- Driveline products consist primarily of front and rear axles, driveshafts, differential assemblies, clutch modules, balance shaft systems, disconnecting driveline technology, and electric and hybrid driveline products and systems for light trucks, SUVs, crossover vehicles, passenger cars and commercial vehicles;
- Metal Forming products consist primarily of axle and transmission shafts, ring and pinion gears, differential gears and assemblies, connecting rods and variable valve timing products for Original Equipment Manufacturers and Tier 1 automotive suppliers; and
- Casting products consist primarily of both thin wall castings and high strength ductile iron castings, as well as transmission pump bodies, steering knuckles, control arms, brake anchors and calipers, and ball joint housings for the global light vehicle, commercial and industrial markets.

We use Segment Adjusted EBITDA as the measure of earnings to assess the performance of each segment and determine the resources to be allocated to the segments. We define EBITDA to be earnings before interest expense, income taxes, depreciation and amortization. Segment Adjusted EBITDA is defined as EBITDA for our reportable segments excluding the impact of restructuring and acquisition-related costs, debt refinancing and redemption costs, gain on the sale of a business, goodwill impairments and non-recurring items.

The following tables represent information by reportable segment for the three months ended June 30, 2019 and 2018 (*in millions*):

	Three Months Ended June 30, 2019			
	Driveline	Metal Forming	Casting	Total
Sales	\$ 1,141.1	\$ 484.2	\$ 220.7	\$ 1,846.0
Less: intersegment sales	1.1	106.8	33.8	141.7
Net external sales	\$ 1,140.0	\$ 377.4	\$ 186.9	\$ 1,704.3
Segment Adjusted EBITDA	\$ 152.9	\$ 88.0	\$ 25.1	\$ 266.0

	Three Months Ended June 30, 2018			
	Driveline	Metal Forming	Casting	Total
Sales	\$ 1,274.3	\$ 530.4	\$ 243.2	\$ 2,047.9
Less: intersegment sales	1.7	111.8	33.5	147.0
Net external sales	\$ 1,272.6	\$ 418.6	\$ 209.7	\$ 1,900.9
Segment Adjusted EBITDA	\$ 204.3	\$ 116.7	\$ 26.9	\$ 347.9

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

The following tables represent information by reportable segment for the six months ended June 30, 2019 and 2018 (*in millions*):

	Six Months Ended June 30, 2019			
	Driveline	Metal Forming	Casting	Total
Sales	\$ 2,275.8	\$ 967.5	\$ 446.0	\$ 3,689.3
Less: intersegment sales	2.0	202.0	61.8	265.8
Net external sales	\$ 2,273.8	\$ 765.5	\$ 384.2	\$ 3,423.5
Segment Adjusted EBITDA	\$ 290.1	\$ 173.3	\$ 47.6	\$ 511.0

	Six Months Ended June 30, 2018			
	Driveline	Metal Forming	Casting	Total
Sales	\$ 2,490.4	\$ 1,072.7	\$ 482.2	\$ 4,045.3
Less: intersegment sales	3.5	219.8	62.7	286.0
Net external sales	\$ 2,486.9	\$ 852.9	\$ 419.5	\$ 3,759.3
Segment Adjusted EBITDA	\$ 394.0	\$ 222.4	\$ 48.5	\$ 664.9

The following table represents total assets by segment as of June 30, 2019 and December 31, 2018 (*in millions*):

	Driveline	Metal Forming	Casting	Corporate and Elims	Total
	Total Assets as of June 30, 2019	\$ 3,621.5	\$ 2,657.2	\$ 673.4	\$ 595.8
Total Assets as of December 31, 2018	3,529.2	2,723.0	664.7	593.8	7,510.7

The following table represents a reconciliation of Total Segment Adjusted EBITDA to consolidated income before income taxes for the three months and six months ended June 30, 2019 and 2018 (*in millions*):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Total Segment Adjusted EBITDA	\$ 266.0	\$ 347.9	\$ 511.0	\$ 664.9
Interest expense	(56.2)	(54.4)	(109.6)	(107.6)
Depreciation and amortization	(136.5)	(130.2)	(277.3)	(258.0)
Restructuring and acquisition-related costs	(12.2)	(36.8)	(24.3)	(55.1)
Gain on sale of business	—	15.5	—	15.5
Gain on settlement of capital lease	—	15.6	—	15.6
Debt refinancing and redemption costs	(2.4)	(4.3)	(2.4)	(14.6)
Income before income taxes	<u>\$ 58.7</u>	<u>\$ 153.3</u>	<u>\$ 97.4</u>	<u>\$ 260.7</u>

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

16. SUPPLEMENTAL GUARANTOR CONDENSED CONSOLIDATING FINANCIAL STATEMENTS

Holdings has no significant assets other than its 100% ownership in AAM, Inc. and Metaldyne Performance Group, Inc. (MPG Inc.), and no direct subsidiaries other than AAM, Inc. and MPG Inc. The 6.625% Notes, 6.50% Notes, 6.25% Notes (due 2026), and 6.25% Notes (due 2025) are senior unsecured obligations of AAM, Inc.; all of which are fully and unconditionally guaranteed, on a joint and several basis, by Holdings and substantially all domestic subsidiaries of AAM, Inc. and MPG Inc.

These Condensed Consolidating Financial Statements are prepared under the equity method of accounting whereby the investments in subsidiaries are recorded at cost and adjusted for the parent's share of the subsidiaries' cumulative results of operations, capital contributions and distributions, and other equity changes.

Condensed Consolidating Statements of Income

Three Months Ended June 30,

(in millions)

	Holdings	AAM Inc.	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Elims	Consolidated
2019						
Net sales						
External	\$ —	\$ 223.9	\$ 516.9	\$ 963.5	\$ —	\$ 1,704.3
Intercompany	—	0.3	74.1	10.1	(84.5)	—
Total net sales	—	224.2	591.0	973.6	(84.5)	1,704.3
Cost of goods sold	—	226.6	532.3	781.6	(84.5)	1,456.0
Gross profit (loss)	—	(2.4)	58.7	192.0	—	248.3
Selling, general and administrative expenses	—	70.5	7.6	13.2	—	91.3
Amortization of intangible assets	—	1.4	22.6	0.9	—	24.9
Restructuring and acquisition-related costs	—	4.6	4.7	2.9	—	12.2
Operating income (loss)	—	(78.9)	23.8	175.0	—	119.9
Non-operating income (expense), net	—	(62.5)	1.8	(0.5)	—	(61.2)
Income (loss) before income taxes	—	(141.4)	25.6	174.5	—	58.7
Income tax expense (benefit)	—	1.4	(0.2)	4.8	—	6.0
Earnings from equity in subsidiaries	52.5	57.3	32.9	—	(142.7)	—
Net income (loss) before royalties	52.5	(85.5)	58.7	169.7	(142.7)	52.7
Royalties	—	84.8	0.7	(85.5)	—	—
Net income (loss) after royalties	52.5	(0.7)	59.4	84.2	(142.7)	52.7
Net income attributable to noncontrolling interests	—	—	—	(0.2)	—	(0.2)
Net income (loss) attributable to AAM	\$ 52.5	\$ (0.7)	\$ 59.4	\$ 84.0	\$ (142.7)	\$ 52.5
Other comprehensive income (loss), net of tax	(9.8)	(14.8)	5.6	8.7	0.5	(9.8)
Comprehensive income (loss) attributable to AAM	\$ 42.7	\$ (15.5)	\$ 65.0	\$ 92.7	\$ (142.2)	\$ 42.7

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

	Holdings	AAM Inc.	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Elims	Consolidated
2018						
Net sales						
External	\$ —	\$ 302.8	\$ 572.6	\$ 1,025.5	\$ —	\$ 1,900.9
Intercompany	—	2.3	78.0	10.8	(91.1)	—
Total net sales	—	305.1	650.6	1,036.3	(91.1)	1,900.9
Cost of goods sold	—	305.7	542.3	812.6	(91.1)	1,569.5
Gross profit (loss)	—	(0.6)	108.3	223.7	—	331.4
Selling, general and administrative expenses	—	60.2	19.9	14.9	—	95.0
Amortization of intangible assets	—	1.4	22.5	0.9	—	24.8
Restructuring and acquisition-related costs	—	9.8	26.8	0.2	—	36.8
Gain on sale of business	—	—	(15.5)	—	—	(15.5)
Operating income (loss)	—	(72.0)	54.6	207.7	—	190.3
Non-operating income (expense), net	—	(63.3)	3.2	23.1	—	(37.0)
Income (loss) before income taxes	—	(135.3)	57.8	230.8	—	153.3
Income tax expense (benefit)	—	8.0	0.1	(6.1)	—	2.0
Earnings from equity in subsidiaries	151.1	106.3	67.3	—	(324.7)	—
Net income (loss) before royalties	151.1	(37.0)	125.0	236.9	(324.7)	151.3
Royalties	—	85.0	0.9	(85.9)	—	—
Net income after royalties	151.1	48.0	125.9	151.0	(324.7)	151.3
Net income attributable to noncontrolling interests	—	—	—	(0.2)	—	(0.2)
Net income attributable to AAM	\$ 151.1	\$ 48.0	\$ 125.9	\$ 150.8	\$ (324.7)	\$ 151.1
Other comprehensive loss, net of tax	(76.7)	(29.2)	(75.3)	(81.0)	185.5	(76.7)
Comprehensive income attributable to AAM	\$ 74.4	\$ 18.8	\$ 50.6	\$ 69.8	\$ (139.2)	\$ 74.4

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Condensed Consolidating Statements of Income

Six Months Ended June 30,

(in millions)

	Holdings	AAM Inc.	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Elims	Consolidated
2019						
Net sales						
External	\$ —	\$ 506.1	\$ 1,055.3	\$ 1,862.1	\$ —	\$ 3,423.5
Intercompany	—	1.0	142.8	20.7	(164.5)	—
Total net sales	—	507.1	1,198.1	1,882.8	(164.5)	3,423.5
Cost of goods sold	—	499.9	1,082.6	1,535.0	(164.5)	2,953.0
Gross profit	—	7.2	115.5	347.8	—	470.5
Selling, general and administrative expenses	—	140.0	15.6	26.4	—	182.0
Amortization of intangible assets	—	2.9	45.2	1.8	—	49.9
Restructuring and acquisition-related costs	—	10.9	8.2	5.2	—	24.3
Operating income (loss)	—	(146.6)	46.5	314.4	—	214.3
Non-operating income (expense), net	—	(121.3)	4.7	(0.3)	—	(116.9)
Income (loss) before income taxes	—	(267.9)	51.2	314.1	—	97.4
Income tax expense (benefit)	—	(14.7)	0.1	17.6	—	3.0
Earnings from equity in subsidiaries	94.1	81.4	67.1	—	(242.6)	—
Net income (loss) before royalties	94.1	(171.8)	118.2	296.5	(242.6)	94.4
Royalties	—	154.6	1.5	(156.1)	—	—
Net income (loss) after royalties	94.1	(17.2)	119.7	140.4	(242.6)	94.4
Net income attributable to noncontrolling interests	—	—	—	(0.3)	—	(0.3)
Net income (loss) attributable to AAM	\$ 94.1	\$ (17.2)	\$ 119.7	\$ 140.1	\$ (242.6)	\$ 94.1
Other comprehensive income (loss), net of tax	(14.1)	(13.8)	3.3	6.9	3.6	(14.1)
Comprehensive income (loss) attributable to AAM	\$ 80.0	\$ (31.0)	\$ 123.0	\$ 147.0	\$ (239.0)	\$ 80.0

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

	Holdings	AAM Inc.	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Elims	Consolidated
2018						
Net sales						
External	\$ —	\$ 604.3	\$ 1,154.9	\$ 2,000.1	\$ —	\$ 3,759.3
Intercompany	—	3.3	156.0	20.3	(179.6)	—
Total net sales	—	607.6	1,310.9	2,020.4	(179.6)	3,759.3
Cost of goods sold	—	583.9	1,119.1	\$ 1,588.2	(179.6)	3,111.6
Gross profit	—	23.7	191.8	432.2	—	647.7
Selling, general and administrative expenses	—	120.0	41.8	30.5	—	192.3
Amortization of intangible assets	—	2.9	45.1	1.7	—	49.7
Restructuring and acquisition-related costs	—	26.1	27.9	1.1	—	55.1
Gain on sale of business	—	—	(15.5)	—	—	(15.5)
Operating income (loss)	—	(125.3)	92.5	398.9	—	366.1
Non-operating income (expense), net	—	(133.8)	8.2	20.2	—	(105.4)
Income (loss) before income taxes	—	(259.1)	100.7	419.1	—	260.7
Income tax expense	—	9.1	0.5	10.3	—	19.9
Earnings from equity in subsidiaries	240.5	173.5	107.8	—	(521.8)	—
Net income (loss) before royalties	240.5	(94.7)	208.0	408.8	(521.8)	240.8
Royalties	—	169.2	1.9	(171.1)	—	—
Net income after royalties	240.5	74.5	209.9	237.7	(521.8)	240.8
Net income attributable to noncontrolling interests	—	—	—	(0.3)	—	(0.3)
Net income attributable to AAM	\$ 240.5	\$ 74.5	\$ 209.9	\$ 237.4	\$ (521.8)	\$ 240.5
Other comprehensive loss, net of tax	(22.4)	(3.6)	(40.2)	(37.3)	81.1	(22.4)
Comprehensive income attributable to AAM	\$ 218.1	\$ 70.9	\$ 169.7	\$ 200.1	\$ (440.7)	\$ 218.1

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Condensed Consolidating Balance Sheets

(in millions)

	Holdings	AAM Inc.	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Elims	Consolidated
June 30, 2019						
Assets						
Current assets						
Cash and cash equivalents	\$ —	\$ 71.2	\$ 0.1	\$ 177.5	\$ —	\$ 248.8
Accounts receivable, net	—	116.2	313.3	708.5	—	1,138.0
Intercompany receivables	—	4,574.2	4,316.7	171.3	(9,062.2)	—
Inventories, net	—	45.9	169.6	244.4	—	459.9
Prepaid expenses and other	—	32.9	5.1	92.0	—	130.0
Total current assets	—	4,840.4	4,804.8	1,393.7	(9,062.2)	1,976.7
Property, plant and equipment, net	—	291.4	741.6	1,511.4	—	2,544.4
Goodwill	—	—	719.0	421.9	—	1,140.9
Intangible assets, net	—	16.5	1,016.4	30.2	—	1,063.1
Intercompany notes and accounts receivable	—	1,324.2	179.9	—	(1,504.1)	—
Other assets and deferred charges	—	331.3	184.3	307.2	—	822.8
Investment in subsidiaries	2,884.0	2,330.9	1,798.5	—	(7,013.4)	—
Total assets	\$ 2,884.0	\$ 9,134.7	\$ 9,444.5	\$ 3,664.4	\$ (17,579.7)	\$ 7,547.9
Liabilities and Stockholders' Equity						
Current liabilities						
Current portion of long-term debt	\$ —	\$ 6.4	\$ 3.0	\$ 16.6	\$ —	\$ 26.0
Accounts payable	—	115.4	252.7	485.3	—	853.4
Intercompany payables	—	3,587.9	5,468.4	5.9	(9,062.2)	—
Accrued expenses and other	—	146.1	43.5	198.1	—	387.7
Total current liabilities	—	3,855.8	5,767.6	705.9	(9,062.2)	1,267.1
Intercompany notes and accounts payable	1,311.8	28.4	—	163.9	(1,504.1)	—
Long-term debt, net	—	3,571.1	—	103.1	—	3,674.2
Other long-term liabilities	—	502.4	312.5	219.5	—	1,034.4
Total liabilities	1,311.8	7,957.7	6,080.1	1,192.4	(10,566.3)	5,975.7
Total AAM Stockholders' equity	1,569.5	1,177.0	3,364.4	2,469.3	(7,010.7)	1,569.5
Noncontrolling interests in subsidiaries	2.7	—	—	2.7	(2.7)	2.7
Total stockholders' equity	1,572.2	1,177.0	3,364.4	2,472.0	(7,013.4)	1,572.2
Total liabilities and stockholders' equity	\$ 2,884.0	\$ 9,134.7	\$ 9,444.5	\$ 3,664.4	\$ (17,579.7)	\$ 7,547.9

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

	Holdings	AAM Inc.	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Elims	Consolidated
December 31, 2018						
Assets						
Current assets						
Cash and cash equivalents	\$ —	\$ 36.7	\$ 0.2	\$ 439.5	\$ —	\$ 476.4
Accounts receivable, net	—	122.7	287.7	556.1	—	966.5
Intercompany receivables	—	3,337.2	2,356.3	93.5	(5,787.0)	—
Inventories, net	—	42.5	157.7	259.5	—	459.7
Prepaid expenses and other	—	34.4	6.0	86.8	—	127.2
Total current assets	—	3,573.5	2,807.9	1,435.4	(5,787.0)	2,029.8
Property, plant and equipment, net	—	275.8	758.6	1,480.0	—	2,514.4
Goodwill	—	—	719.0	422.8	—	1,141.8
Intangible assets, net	—	18.6	1,059.6	32.9	—	1,111.1
Intercompany notes and accounts receivable	—	1,316.8	144.5	—	(1,461.3)	—
Other assets and deferred charges	—	319.8	126.4	267.4	—	713.6
Investment in subsidiaries	2,790.5	2,241.5	1,748.7	—	(6,780.7)	—
Total assets	<u>\$ 2,790.5</u>	<u>\$ 7,746.0</u>	<u>\$ 7,364.7</u>	<u>\$ 3,638.5</u>	<u>\$ (14,029.0)</u>	<u>\$ 7,510.7</u>
Liabilities and Stockholders' Equity						
Current liabilities						
Current portion of long-term debt	\$ —	\$ 100.0	\$ —	\$ 21.6	\$ —	\$ 121.6
Accounts payable	—	94.2	246.5	499.5	—	840.2
Intercompany payables	—	2,050.0	3,615.7	121.3	(5,787.0)	—
Accrued expenses and other	—	169.0	35.8	190.2	—	395.0
Total current liabilities	—	2,413.2	3,898.0	832.6	(5,787.0)	1,356.8
Intercompany notes and accounts payable	1,304.2	12.5	—	144.6	(1,461.3)	—
Long-term debt, net	—	3,578.3	3.0	105.5	—	3,686.8
Other long-term liabilities	—	508.9	271.7	200.2	—	980.8
Total liabilities	1,304.2	6,512.9	4,172.7	1,282.9	(7,248.3)	6,024.4
Total AAM Stockholders' equity	1,483.9	1,233.1	3,192.0	2,353.2	(6,778.3)	1,483.9
Noncontrolling interests in subsidiaries	2.4	—	—	2.4	(2.4)	2.4
Total stockholders' equity	<u>1,486.3</u>	<u>1,233.1</u>	<u>3,192.0</u>	<u>2,355.6</u>	<u>(6,780.7)</u>	<u>1,486.3</u>
Total liabilities and stockholders' equity	<u>\$ 2,790.5</u>	<u>\$ 7,746.0</u>	<u>\$ 7,364.7</u>	<u>\$ 3,638.5</u>	<u>\$ (14,029.0)</u>	<u>\$ 7,510.7</u>

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Condensed Consolidating Statements of Cash Flows

Six Months Ended June 30,

(in millions)

	Holdings	AAM Inc.	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Elims	Consolidated
2019						
Net cash provided by (used in) operating activities	\$ —	\$ 186.8	\$ 65.2	\$ (115.1)	\$ —	\$ 136.9
Investing activities						
Purchases of property, plant and equipment	—	(32.8)	(60.4)	(144.3)	—	(237.5)
Proceeds from sale of property, plant and equipment	—	—	1.7	—	—	1.7
Investment in joint ventures	—	—	—	(2.2)	—	(2.2)
Intercompany activity	—	—	(6.4)	6.4	—	—
Net cash used in investing activities	—	(32.8)	(65.1)	(140.1)	—	(238.0)
Financing activities						
Net debt activity	—	(112.0)	(0.2)	(8.0)	—	(120.2)
Purchase of treasury stock	(7.5)	—	—	—	—	(7.5)
Intercompany activity	7.5	(7.5)	—	—	—	—
Net cash used in financing activities	—	(119.5)	(0.2)	(8.0)	—	(127.7)
Effect of exchange rate changes on cash	—	—	—	1.2	—	1.2
Net increase (decrease) in cash, cash equivalents and restricted cash	—	34.5	(0.1)	(262.0)	—	(227.6)
Cash, cash equivalents and restricted cash at beginning of period	—	36.7	2.7	439.5	—	478.9
Cash, cash equivalents and restricted cash at end of period	\$ —	\$ 71.2	\$ 2.6	\$ 177.5	\$ —	\$ 251.3

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

	Holdings	AAM Inc.	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Elims	Consolidated
2018						
Net cash provided by operating activities	\$ —	\$ 152.3	\$ 8.6	\$ 128.5	\$ —	\$ 289.4
Investing activities						
Purchases of property, plant and equipment	—	(40.3)	(74.5)	(158.2)	—	(273.0)
Proceeds from sale of property, plant and equipment	—	—	0.5	0.4	—	0.9
Purchase buyouts of leased equipment	—	—	(0.5)	—	—	(0.5)
Proceeds from sale of business, net	—	—	42.7	4.4	—	47.1
Acquisition of business, net of cash acquired	—	—	—	(1.3)	—	(1.3)
Net cash used in investing activities	—	(40.3)	(31.8)	(154.7)	—	(226.8)
Financing activities						
Net debt activity	—	(111.2)	(0.4)	44.8	—	(66.8)
Debt issuance costs	—	(6.8)	—	—	—	(6.8)
Purchase of treasury stock	(3.6)	—	—	—	—	(3.6)
Purchase of noncontrolling interest	—	—	(2.2)	—	—	(2.2)
Intercompany activity	3.6	(3.6)	28.5	(28.5)	—	—
Net cash provided by (used in) financing activities	—	(121.6)	25.9	16.3	—	(79.4)
Effect of exchange rate changes on cash	—	—	—	(4.3)	—	(4.3)
Net increase (decrease) in cash, cash equivalents and restricted cash	—	(9.6)	2.7	(14.2)	—	(21.1)
Cash, cash equivalents and restricted cash at beginning of period	—	91.9	0.1	284.8	—	376.8
Cash, cash equivalents and restricted cash at end of period	\$ —	\$ 82.3	\$ 2.8	\$ 270.6	\$ —	\$ 355.7

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

This management's discussion and analysis (MD&A) should be read in conjunction with the unaudited condensed consolidated financial statements and notes appearing elsewhere in this Quarterly Report and our Annual Report on Form 10-K for the year ended December 31, 2018.

Unless the context otherwise requires, references to "we," "our," "us" or "AAM" shall mean collectively (i) American Axle & Manufacturing Holdings, Inc. (Holdings), a Delaware corporation, (ii) American Axle & Manufacturing, Inc. (AAM, Inc.), a Delaware corporation, and its direct and indirect subsidiaries, and, (iii) Metaldyne Performance Group, Inc. (MPG) and its direct and indirect subsidiaries. AAM Inc. and MPG are wholly-owned subsidiaries of Holdings.

COMPANY OVERVIEW

We are a global Tier 1 supplier to the automotive industry. We design, engineer and manufacture driveline, metal forming and casting products that are making the next generation of vehicles smarter, lighter, safer and more efficient. We employ over 25,000 associates, operating at nearly 90 facilities in 17 countries, to support our customers on global and regional platforms with a focus on quality, operational excellence and technology leadership.

We are a primary supplier of driveline components to General Motors Company (GM) for its full-size rear-wheel drive (RWD) light trucks and SUVs manufactured in North America, supplying a significant portion of GM's rear axle and four-wheel drive and all-wheel drive (4WD/AWD) axle requirements for these vehicle platforms. We also supply GM with various products from our Metal Forming and Casting segments. Sales to GM were approximately 39% of our consolidated net sales in the first six months of 2019, 42% of our consolidated net sales in the first six months of 2018 and 41% of our consolidated net sales for the full year of 2018.

We also supply driveline system products to FCA US LLC (FCA) for heavy-duty Ram full-size pickup trucks and its derivatives, the AWD Jeep Cherokee, and a passenger car driveshaft program. In addition, we sell various products to FCA from our Metal Forming and Casting segments. Sales to FCA were approximately 14% of our consolidated net sales in the first six months of 2019, and 13% of our consolidated net sales in the first six months of 2018 and for the full year 2018.

In 2019, we initiated a new global restructuring program (the 2019 Program) to further streamline our business by consolidating our four existing segments into three segments. This activity occurred through the disaggregation of our former Powertrain segment, with a portion moving into our Driveline segment and a portion moving into our Metal Forming segment. The primary objectives of this consolidation are to finalize the integration of MPG, align AAM's product and process technologies, and to achieve efficiencies within our corporate and business unit support teams to reduce cost in our business. Throughout this MD&A, amounts previously reported for the Powertrain segment have been reclassified to the Driveline and Metal Forming segments accordingly.

RESULTS OF OPERATIONS — THREE MONTHS ENDED JUNE 30, 2019 AS COMPARED TO THREE MONTHS ENDED JUNE 30, 2018

Net Sales Net sales were \$1,704.3 million in the second quarter of 2019 as compared to \$1,900.9 million in the second quarter of 2018. Our change in sales in the second quarter of 2019, as compared to the second quarter of 2018, primarily reflects the impact of lower full-size truck sales resulting from the in-sourcing by our largest customer of a portion of a replacement program that launched in the second half of 2018, as well as lower volumes on certain crossover vehicle programs that we support. Net sales in the second quarter of 2019, as compared to the second quarter of 2018, were also negatively impacted by approximately \$34 million associated with the effect of metal market pass-throughs to our customers and the impact of foreign exchange related to translation adjustments. These factors were partially offset by the impact of program launches associated with our new business backlog.

Cost of Goods Sold Cost of goods sold was \$1,456.0 million in the second quarter of 2019, as compared to \$1,569.5 million in the second quarter of 2018. The change in cost of goods sold principally reflects the impact of lower production volumes. This was partially offset by the impact of costs associated with program launches from our new business backlog, higher material and freight costs, including tariffs, and an increase in depreciation expense of approximately \$6 million as a result of significant program launch activity in 2018.

For the three months ended June 30, 2019, material costs were approximately 57% of total costs of goods sold, as compared to approximately 59% for the three months ended June 30, 2018.

Gross Profit Gross profit was \$248.3 million in the second quarter of 2019 as compared to \$331.4 million in the second quarter of 2018. Gross margin was 14.6% in the second quarter of 2019 as compared to 17.4% in the second quarter of 2018. Gross profit and gross margin were impacted by the factors discussed in Net Sales and Cost of Goods Sold above.

Selling, General and Administrative Expenses (SG&A) SG&A (including research and development (R&D)) was \$91.3 million or 5.4% of net sales in the second quarter of 2019 as compared to \$95.0 million or 5.0% of net sales in the second quarter of 2018. R&D spending was approximately \$33.2 million in the second quarter of 2019 as compared to \$34.1 million in the second quarter of 2018. The change in SG&A in the three months ended June 30, 2019, as compared to the three months ended June 30, 2018, is primarily attributable to lower compensation-related expense and a decrease in R&D spending.

Amortization of Intangible Assets Amortization expense related to intangible assets was \$24.9 million for the three months ended June 30, 2019 and \$24.8 million for the three months ended June 30, 2018.

Restructuring and Acquisition-Related Costs Restructuring and acquisition-related costs were \$12.2 million in the second quarter of 2019, as compared to \$36.8 million in the second quarter of 2018. As part of our restructuring actions, we incurred severance charges of approximately \$4.1 million, as well as implementation costs of approximately \$4.6 million during the three months ended June 30, 2019. This compares to severance charges of \$1.8 million and implementation charges of \$1.6 million for the three months ended June 30, 2018.

During the three months ended June 30, 2019, we incurred \$3.5 million of integration expenses primarily associated with the integration of MPG. This compares to \$9.5 million of integration expenses incurred during the three months ended June 30, 2018. Integration expenses reflect costs incurred for information technology systems, ongoing operational activities, and consulting fees incurred in conjunction with acquisitions.

In the second quarter of 2018, we initiated actions to exit operations at manufacturing facilities in our Metal Forming and former Powertrain segments. As a result of these actions, we were required to assess the associated long-lived assets for impairment. Based on our analysis, assets that were not to be redeployed to other AAM facilities were determined to be fully impaired resulting in a charge of \$23.9 million for the three months ended June 30, 2018.

Gain on Sale of Business In April 2018, we completed the sale of the aftermarket business associated with our former Powertrain segment for approximately \$50 million. As a result, we recorded a \$15.5 million pre-tax gain, which is presented in the Gain on sale of business line item of our Condensed Consolidated Statement of Income for the three months ended June 30, 2018.

Operating Income Operating income was \$119.9 million in the second quarter of 2019, as compared to \$190.3 million in the second quarter of 2018. Operating margin was 7.0% in the second quarter of 2019, as compared to 10.0% in the second quarter of 2018. The changes in operating income and operating margin were due to factors discussed in Net Sales, Cost of Goods Sold, SG&A, Restructuring and Acquisition-Related Costs, and Gain on Sale of Business above.

Interest Expense and Investment Income Interest expense was \$56.2 million in the second quarter of 2019, as compared to \$54.4 million in the second quarter of 2018. Investment income was \$0.5 million in the second quarter of both 2019 and 2018. The weighted-average interest rate of our long-term debt outstanding was 5.9% in the second quarter of 2019 and 5.8% in the second quarter of 2018.

Debt Refinancing and Redemption Costs In May 2019, we voluntarily redeemed the remaining balance outstanding under our 7.75% Notes due 2019. This resulted in a principal payment of \$100 million and \$0.3 million in accrued interest. We also expensed approximately \$0.1 million for the write-off of the unamortized debt issuance costs that we had been amortizing over the expected life of the borrowing, and approximately \$2.2 million for an early redemption premium.

In the second quarter of 2018, we redeemed the remaining \$16.9 million of 6.25% Notes due 2021, resulting in expense of \$0.2 million. Also in the second quarter of 2018, we voluntarily redeemed a portion of our 6.625% Notes due 2022. This resulted in a principal payment of \$100 million, and a payment of \$0.8 million in accrued interest. We expensed approximately \$0.8 million for the write-off of a portion of the unamortized debt issuance costs that we had been amortizing over the expected life of the borrowing, and \$3.3 million for an early redemption premium.

Gain on Settlement of Capital Lease In the second quarter of 2018, we reached a settlement agreement related to a capital lease obligation that we had recognized as a result of the acquisition of MPG. This settlement resulted in a gain of \$15.6 million, including accrued interest.

Other Income (Expense), Net Other income (expense), net includes the net effect of foreign exchange gains and losses, our proportionate share of earnings from equity in unconsolidated subsidiaries, and all components of net periodic pension and postretirement benefit costs other than service cost. Other income (expense), net was expense of \$3.1 million in the second quarter of 2019, as compared to income of \$5.6 million in the second quarter of 2018. The change in other income (expense), net was primarily attributable to foreign exchange losses in 2019, as compared to foreign exchange gains in 2018.

Income Tax Expense Income tax expense was \$6.0 million for the three months ended June 30, 2019, as compared to \$2.0 million for the three months ended June 30, 2018. Our effective income tax rate was 10.2% in the second quarter of 2019, as compared to 1.3% in the second quarter of 2018.

Our effective income tax rate for the three months ended June 30, 2019 is higher than our effective income tax rate for the three months ended June 30, 2018 primarily due to the impact of discrete income tax items recognized in the second quarter of 2018. During the second quarter of 2018, we recognized a discrete tax benefit as a result of finalizing an advance pricing agreement in a foreign jurisdiction, which resulted in a reduction of our liability for unrecognized income tax benefits and related interest and penalties of \$20.0 million. Also in the second quarter of 2018, we recognized a discrete tax expense related to the sale of the aftermarket business associated with our former Powertrain segment. For the three months ended June 30, 2019 and 2018, our effective income tax rates vary from the U.S. federal statutory rate of 21% primarily due to favorable foreign tax rates, as well as the impact of tax credits and the effect of the discrete items described above.

Net Income Attributable to AAM and Earnings Per Share (EPS) Net income attributable to AAM was \$52.5 million in the second quarter of 2019, as compared to \$151.1 million in the second quarter of 2018. Diluted EPS was \$0.45 per share in the second quarter of 2019, as compared to \$1.30 per share in the second quarter of 2018.

Net income attributable to AAM and EPS for the second quarters of 2019 and 2018 were primarily impacted by the factors discussed above.

RESULTS OF OPERATIONS — SIX MONTHS ENDED JUNE 30, 2019 AS COMPARED TO SIX MONTHS ENDED JUNE 30, 2018

Net Sales Net sales were \$3,423.5 million in the first six months of 2019 as compared to \$3,759.3 million in the first six months of 2018. Our change in sales in the first six months of 2019, as compared to the first six months of 2018, primarily reflects the impact of lower full-size truck sales resulting from the in-sourcing by our largest customer of a portion of a replacement program that launched in the second half of 2018, as well as the impact of customer downtime as a result of program changeovers in the first quarter of 2019 and lower volumes on certain crossover vehicle programs that we support. Net sales for the six months ended June 30, 2019, as compared to the six months ended June 30, 2018, were also negatively impacted by approximately \$46 million associated with the effect of metal market pass-throughs to our customers and the impact of foreign exchange related to translation adjustments. These factors were partially offset by the impact of program launches associated with our new business backlog.

Cost of Goods Sold Cost of goods sold was \$2,953.0 million in the first six months of 2019 as compared to \$3,111.6 million in the first six months of 2018. The change in cost of goods sold principally reflects the impact of lower production volumes. This was partially offset by the impact of costs associated with program launches from our new business backlog, higher material and freight costs, including tariffs, and an increase in depreciation expense of approximately \$19 million as a result of significant program launch activity in 2018.

For the six months ended June 30, 2019, material costs were approximately 57% of total costs of goods sold as compared to approximately 59% for the six months ended June 30, 2018.

Gross Profit Gross profit was \$470.5 million in the first six months of 2019 as compared to \$647.7 million in the first six months of 2018. Gross margin was 13.7% in the first six months of 2019 as compared to 17.2% in the first six months of 2018. Gross profit and gross margin were impacted by the factors discussed in Net Sales and Cost of Goods Sold above.

SG&A SG&A (including R&D) was \$182.0 million or 5.3% of net sales in the first six months of 2019 as compared to \$192.3 million or 5.1% of net sales in the first six months of 2018. R&D spending was approximately \$67.5 million in the first six months of 2019 as compared to \$72.6 million in the first six months of 2018. The change in SG&A in the first six months of 2019, as compared to the first six months of 2018, is primarily attributable to lower compensation-related expense and a decrease in R&D spending.

Amortization of Intangible Assets Amortization expense related to intangible assets for the six months ended June 30, 2019 was \$49.9 million as compared to \$49.7 million for the six months ended June 30, 2018.

Restructuring and Acquisition-Related Costs Restructuring and acquisition-related costs were \$24.3 million for the six months ended June 30, 2019, as compared to \$55.1 million for the six months ended June 30, 2018. As part of our restructuring actions, we incurred severance charges of approximately \$8.2 million and \$2.0 million, as well as implementation costs, including professional expenses, of approximately \$8.9 million and \$5.5 million, during the six months ended June 30, 2019 and 2018, respectively. We expect to incur approximately \$25 million to \$30 million of total restructuring charges in 2019, including costs incurred under the 2019 Program.

During the six months ended June 30, 2019, we incurred \$7.2 million of integration expenses primarily associated with the acquisition of MPG. This compares to \$1.1 million of acquisition-related costs and \$22.6 million of integration expenses incurred during the six months ended June 30, 2018. We expect to incur total integration charges of approximately \$15 million to \$20 million in 2019 as we further the integration of MPG.

Acquisition-related costs primarily consist of advisory, legal, accounting, valuation and certain other professional or consulting fees incurred. Integration expenses reflect costs incurred for information technology systems, ongoing operational activities, and consulting fees incurred in conjunction with acquisitions.

In the first six months of 2018, we initiated actions to exit operations at manufacturing facilities in our Metal Forming and former Powertrain segments. As a result of these actions, we were required to assess the associated long-lived assets for impairment. Based on our analysis, assets that were not to be redeployed to other AAM facilities were determined to be fully impaired resulting in a charge of \$23.9 million for the six months ended June 30, 2018.

Gain on Sale of Business In April 2018, we completed the sale of the aftermarket business associated with our former Powertrain segment for approximately \$50 million. As a result, we recorded a \$15.5 million pre-tax gain, which is presented in the Gain on sale of business line item of our Condensed Consolidated Statement of Income for the six months ended June 30, 2018.

Operating Income Operating income was \$214.3 million in the first six months of 2019 as compared to \$366.1 million in the first six months of 2018. Operating margin was 6.3% in the first six months of 2019 as compared to 9.7% in the first six months of 2018. The changes in operating income and operating margin were due to factors discussed in Net Sales, Cost of Goods Sold, SG&A, Restructuring and Acquisition-Related Costs and Gain on Sale of Business above.

Interest Expense and Investment Income Interest expense was \$109.6 million in the first six months of 2019 as compared to \$107.6 million in the first six months of 2018. Investment income was \$1.2 million in the first six months of 2019 as compared to \$1.0 million in the first six months of 2018.

The weighted-average interest rate of our long-term debt outstanding was 5.9% for the six months ended June 30, 2019 and 5.8% for the six months ended June 30, 2018. We expect our interest expense for the full year 2019 to be approximately \$215 million to \$225 million.

Debt Refinancing and Redemption Costs In May 2019, we voluntarily redeemed the remaining balance outstanding under our 7.75% Notes due 2019. This resulted in a principal payment of \$100 million and \$0.3 million in accrued interest. We also expensed approximately \$0.1 million for the write-off of the unamortized debt issuance costs that we had been amortizing over the expected life of the borrowing, and approximately \$2.2 million for an early redemption premium.

In March 2018, we made a tender offer for our 6.25% Notes due 2021. Under this tender offer, we retired \$383.1 million of the 6.25% Notes due 2021. We redeemed the remaining \$16.9 million of the 6.25% Notes due 2021 during the second quarter of 2018. During the six months ended June 30, 2018, we expensed \$2.5 million for the write-off of the remaining unamortized debt issuance costs that we had been amortizing over the expected life of the borrowing and \$8.0 million in tender premiums.

In May 2018, we voluntarily redeemed a portion of our 6.625% Notes due 2022. This resulted in a principal payment of \$100.0 million, and a payment of \$0.8 million in accrued interest. During the six months ended June 30, 2018, we expensed \$0.8 million for the write-off of a portion of the remaining unamortized debt issuance costs that we had been amortizing over the expected life of the borrowing and \$3.3 million for an early redemption premium.

Gain on Settlement of Capital Lease In the second quarter of 2018, we reached a settlement agreement related to a capital lease obligation that we had recognized as a result of the acquisition of MPG. This settlement resulted in a gain of \$15.6 million, including accrued interest.

Other Income (Expense), Net Other income (expense), net includes the net effect of foreign exchange gains and losses, our proportionate share of earnings from equity in unconsolidated subsidiaries, and all components of net periodic pension and postretirement benefit costs other than service cost. Other income (expense), net was expense of \$6.1 million in the first six months of 2019 as compared to income of \$0.2 million in the first six months of 2018. The change in other income (expense), net was primarily attributable to foreign exchange losses in 2019, as compared to foreign exchange gains in 2018.

Income Tax Expense Income tax expense was \$3.0 million for the six months ended June 30, 2019 as compared to \$19.9 million for the six months ended June 30, 2018. Our effective income tax rate was 3.1% in the first six months of 2019 as compared to 7.6% in the first six months of 2018.

As part of the Tax Cuts and Jobs Act in 2017, a one-time transition tax (Transition Tax) was imposed on certain foreign earnings for which U.S. income tax was previously deferred. The Department of Treasury and Internal Revenue Service issued final regulations on February 5, 2019 regarding the Transition Tax, which changed the manner in which we are required to compute the Transition Tax when it is recognized over a two-year period. The application of the final regulations resulted in a \$9.3 million income tax benefit, which has been recorded in the six months ended June 30, 2019, the period in which the final regulations were issued.

Also, in the six months ended June 30, 2018, we recognized a discrete tax benefit as a result of finalizing an advance pricing agreement in a foreign jurisdiction, which resulted in a reduction of our liability for unrecognized income tax benefits and related interest and penalties of \$20.0 million. In addition, we recognized a discrete tax expense in the six months ended June 30, 2018 related to the sale of the aftermarket business associated with our former Powertrain segment.

For the six months ended June 30, 2019 and 2018, our effective income tax rates vary from the U.S. federal statutory rate of 21% primarily due to favorable foreign tax rates, as well as the impact of tax credits and the effect of the discrete items described above.

Net Income Attributable to AAM and Earnings Per Share (EPS) Net income attributable to AAM was \$94.1 million in the first six months of 2019 as compared to \$240.5 million in the first six months of 2018. Diluted EPS was \$0.81 per share in the first six months of 2019 as compared to \$2.08 per share in the first six months of 2018.

Net income attributable to AAM and EPS for the first six months of 2019 and 2018 were primarily impacted by the factors discussed above.

SEGMENT REPORTING

In the first quarter of 2019, we reorganized our business to disaggregate our former Powertrain segment, with a portion moving to our Driveline segment and a portion moving to our Metal Forming segment. As a result, our business is now organized into Driveline, Metal Forming and Casting segments, with each representing a reportable segment under ASC 280 *Segment Reporting*. The Powertrain amounts previously reported for the three and six months ended June 30, 2018 have been reclassified to Driveline and Metal Forming.

The results of each segment are regularly reviewed by the chief operating decision maker to assess the performance of the segment and make decisions regarding the allocation of resources to the segments.

Our product offerings by segment are as follows:

- Driveline products consist primarily of front and rear axles, driveshafts, differential assemblies, clutch modules, balance shaft systems, disconnecting driveline technology, and electric and hybrid driveline products and systems for light trucks, SUVs, crossover vehicles, passenger cars and commercial vehicles;
- Metal Forming products consist primarily of axle and transmission shafts, ring and pinion gears, differential gears and assemblies, connecting rods and variable valve timing products for Original Equipment Manufacturers and Tier 1 automotive suppliers; and
- Casting products consist of both thin wall castings and high strength ductile iron castings, as well as transmission pump bodies, steering knuckles, control arms, brake anchors and calipers, and ball joint housings for the global light vehicle, commercial and industrial markets.

The following table represents sales by reportable segment for the three and six months ended June 30, 2019 and 2018 (*in millions*):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Driveline	\$ 1,141.1	\$ 1,274.3	\$ 2,275.8	\$ 2,490.4
Metal Forming	484.2	530.4	967.5	1,072.7
Casting	220.7	243.2	446.0	482.2
Eliminations	(141.7)	(147.0)	(265.8)	(286.0)
Net Sales	\$ 1,704.3	\$ 1,900.9	\$ 3,423.5	\$ 3,759.3

The change in Driveline sales for the three and six months ended June 30, 2019, as compared to the three and six months ended June 30, 2018, primarily reflect the impact of lower full-size truck sales resulting from the in-sourcing by our largest customer of a portion of a replacement program that launched in the second half of 2018, as well as lower volumes on certain crossover vehicle programs that we support. This was partially offset by the impact of program launches associated with our new business backlog.

Driveline sales were also negatively impacted by approximately \$23 million for the second quarter of 2019, as compared to the second quarter of 2018, and \$43 million for the six months ended June 30, 2019, as compared to the six months ended June 30, 2018, associated with the effect of metal market pass-throughs to our customers and the impact of foreign exchange related to translation adjustments.

The change in net sales in our Metal Forming segment in the three and six months ended June 30, 2019, as compared to the three and six months ended June 30, 2018, reflect lower global automotive production volumes, as well as a reduction in intersegment sales to our Driveline segment due to the factors discussed for Driveline above. Also for the three and six months ended June 30, 2019, as compared to the three and six months ended June 30, 2018, Metal Forming sales were negatively impacted by approximately \$9 million associated with the effect of metal market pass-throughs to our customers and the impact of foreign exchange related to translation adjustments.

The change in net sales in our Casting segment in the three and six months ended June 30, 2019, as compared to the three and six months ended June 30, 2018, reflect lower production volumes. For the six months ended June 30, 2019, as compared to the six months ended June 30, 2018, net sales for the Casting segment increased by approximately \$8 million related to metal market pass-throughs and price increases to customers.

We use Segment Adjusted EBITDA as the measure of earnings to assess the performance of each segment and determine the resources to be allocated to the segments. We define EBITDA to be earnings before interest expense, income taxes, depreciation and amortization. Segment Adjusted EBITDA is defined as EBITDA for our reportable segments excluding the impact of restructuring and acquisition-related costs, debt refinancing and redemption costs, gain on the sale of a business, goodwill impairments and non-recurring items.

The amounts for Segment Adjusted EBITDA for the three and six months ended June 30, 2019 and 2018 are as follows (*in millions*):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Driveline	\$ 152.9	\$ 204.3	\$ 290.1	\$ 394.0
Metal Forming	88.0	116.7	173.3	222.4
Casting	25.1	26.9	47.6	48.5
Total Segment adjusted EBITDA	\$ 266.0	\$ 347.9	\$ 511.0	\$ 664.9

For the three and six months ended June 30, 2019, as compared to the three and six months ended June 30, 2018, the change in Segment Adjusted EBITDA for the Driveline segment was primarily attributable to lower production volumes, as well as increased costs associated with global launch activity. For the six months ended June 30, 2019, as compared to the six months ended June 30, 2018, Segment Adjusted EBITDA for the Driveline segment was also impacted by a change in product mix due to customer downtime as a result of program changeovers in the first quarter of 2019 and an increase of approximately \$12 million in material and freight costs, including tariffs.

The change in Metal Forming Segment Adjusted EBITDA for the three and six months ended June 30, 2019, as compared to the three and six months ended June 30, 2018, was primarily attributable to lower production volumes, as well as an increase in net manufacturing costs, including higher material, freight and tariff costs.

The change in Casting Segment Adjusted EBITDA for the three and six months ended June 30, 2019, as compared to the three and six months ended June 30, 2018 was primarily attributable to lower production volumes, partially offset by the impact of price increases to customers.

Reconciliation of Non-GAAP and GAAP Information

In addition to results reported in accordance with accounting principles generally accepted in the United States of America (GAAP) in this MD&A, we have provided certain non-GAAP financial measures such as EBITDA and Total Segment Adjusted EBITDA. Such information is reconciled to its closest GAAP measure in accordance with Securities and Exchange Commission rules below.

We define EBITDA to be earnings before interest expense, income taxes, depreciation and amortization. Total Segment Adjusted EBITDA is defined as EBITDA for our reportable segments excluding the impact of restructuring and acquisition-related costs, debt refinancing and redemption costs, gain on the sale of a business, goodwill impairments and non-recurring items. We believe that EBITDA and Total Segment Adjusted EBITDA are meaningful measures of performance as they are commonly utilized by management and investors to analyze operating performance and entity valuation. Our management, the investment community and the banking institutions routinely use EBITDA and Total Segment Adjusted EBITDA, together with other measures, to measure our operating performance relative to other Tier 1 automotive suppliers and to assess the relative

mix of Adjusted EBITDA by segment. We also believe that Total Segment Adjusted EBITDA is a meaningful measure as it is used for operational planning and decision-making purposes. These non-GAAP financial measures are not and should not be considered a substitute for any GAAP measure. Additionally, non-GAAP financial measures as presented by AAM may not be comparable to similarly titled measures reported by other companies.

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Net income	\$ 52.7	\$ 151.3	\$ 94.4	\$ 240.8
Interest expense	56.2	54.4	109.6	107.6
Income tax expense	6.0	2.0	3.0	19.9
Depreciation and amortization	136.5	130.2	277.3	258.0
EBITDA	\$ 251.4	\$ 337.9	\$ 484.3	\$ 626.3
Restructuring and acquisition-related costs	12.2	36.8	24.3	55.1
Debt refinancing and redemption costs	2.4	4.3	2.4	14.6
Gain on sale of business	—	(15.5)	—	(15.5)
Non-recurring items:				
Gain on settlement of capital lease	—	(15.6)	—	(15.6)
Total Segment Adjusted EBITDA	\$ 266.0	\$ 347.9	\$ 511.0	\$ 664.9

LIQUIDITY AND CAPITAL RESOURCES

Our primary liquidity needs are to fund debt service obligations, capital expenditures and working capital requirements, in addition to advancing our strategic initiatives. We believe that operating cash flow, available cash and cash equivalent balances and available borrowing capacity under our credit facilities will be sufficient to meet these needs.

Operating Activities In the first six months of 2019, net cash provided by operating activities was \$136.9 million as compared to net cash provided by operating activities of \$289.4 million in the first six months of 2018. The following factors impacted cash from operating activities in the first six months of 2019 as compared to the first six months of 2018:

Net income Net income was \$94.4 million in the first six months of 2019 as compared to \$240.8 million in the first six months of 2018. The change in net income in the first six months of 2019, as compared to the first six months of 2018, was the result of the factors discussed in the Results of Operations - Six Months Ended June 30, 2019 as Compared to Six Months Ended June 30, 2018 section of this MD&A.

Accounts receivable For the six months ended June 30, 2019, we experienced an increase in cash flow from operating activities of approximately \$55 million related to the change in our accounts receivable balance from December 31, 2018 to June 30, 2019, as compared to the change in our accounts receivable balance from December 31, 2017 to June 30, 2018. This change in accounts receivable was primarily attributable to lower sales.

Accounts payable and accrued expenses For the six months ended June 30, 2019, we experienced a decrease in cash flow from operating activities of approximately \$59 million related to the change in our accounts payable and accrued expenses balances from December 31, 2018 to June 30, 2019, as compared to the change in our accounts payable and accrued expenses balances from December 31, 2017 to June 30, 2018. This change was attributable primarily to accounts payable and the timing of payments to suppliers.

Interest paid Interest paid in the first six months of 2019 was \$102.1 million, as compared to \$104.4 million in the first six months of 2018.

Restructuring and acquisition-related costs For the full year 2019, we expect restructuring and acquisition-related payments to be between \$50 million and \$60 million, and we expect the timing of cash payments to approximate the timing of charges incurred.

Pension and other postretirement benefits Due to the availability of our pre-funded pension balances (previous contributions in excess of prior required pension contributions) related to certain of our U.S. pension plans, we expect our regulatory pension funding requirements in 2019 to be approximately \$2.2 million. We expect our cash payments for other postretirement benefit obligations in 2019, net of GM cost sharing, to be approximately \$17.7 million.

Investing Activities In the first six months of 2019, net cash used in investing activities was \$238.0 million as compared to \$226.8 million for the six months ended June 30, 2018. Capital expenditures were \$237.5 million in the first six months of 2019 as compared to \$273.0 million in the first six months of 2018. We expect our capital spending in 2019 to be approximately 7% of sales, which includes support for our global program launches in 2019 and 2020 within our new and incremental business backlog, as well as program capacity increases and future launches of replacement programs.

In the second quarter of 2019, we made a payment of \$2.2 million as part of our investment in the Liuzhou Wuling joint venture that was formed in 2018. We expect to make additional payments of approximately \$8 million as part of this investment during the second half of 2019.

In the first six months of 2018, we completed the sale of the aftermarket business associated with our Powertrain segment. As a result of this sale, we received net proceeds of approximately \$47 million.

Financing Activities In the first six months of 2019, net cash used in financing activities was \$127.7 million, as compared to net cash used in financing activities of \$79.4 million in the first six months of 2018. The following factors impacted cash from financing activities in the first six months of 2019 as compared to the first six months of 2018:

Senior Secured Credit Facilities In 2017, Holdings and American Axle & Manufacturing, Inc. (AAM, Inc.) entered into a credit agreement (the Credit Agreement). In connection with the Credit Agreement, Holdings, AAM, Inc. and certain of their restricted subsidiaries entered into a Collateral Agreement and Guarantee Agreement with the financial institutions party thereto. The Credit Agreement includes a \$100.0 million term loan A facility (the Term Loan A Facility), a \$1.55 billion term

loan B facility (the Term Loan B Facility) and a \$932 million multi-currency revolving credit facility (the Revolving Credit Facility, and together with the Term Loan A Facility and the Term Loan B Facility, the Senior Secured Credit Facilities). The borrowings under the Revolving Credit Facility are used for general corporate purposes.

At June 30, 2019, we had \$894.3 million available under the Revolving Credit Facility. This availability reflects a reduction of \$37.7 million for standby letters of credit issued against the facility.

The Senior Secured Credit Facilities provide back-up liquidity for our foreign credit facilities. We intend to use the availability of long-term financing under the Senior Secured Credit Facilities to refinance any current maturities related to such debt agreements that are not otherwise refinanced on a long-term basis in their local markets, except where otherwise reclassified to Current portion of long-term debt on our Condensed Consolidated Balance Sheet.

Subsequent Event On July 29, 2019, Holdings, AAM, Inc., and certain subsidiaries of Holdings entered into the First Amendment (First Amendment) to the Credit Agreement (as amended by the First Amendment, the Amended Credit Agreement). The First Amendment, among other things, established \$340 million in incremental term loan A commitments under the Amended Credit Agreement with a maturity date of July 29, 2024 (Term Loan A Facility due 2024), extended the maturity date of the Revolving Credit Facility from April 6, 2022 to July 29, 2024 and modified the applicable margin with respect to interest rates under the Term Loan A Facility due 2024 and interest rates and commitment fees under the Revolving Credit Facility. The applicable margin and the maturity date for the Term Loan B Facility remain unchanged. The proceeds of \$340 million were used to repay all of the outstanding loans under the existing Term Loan A Facility and a portion of the outstanding Term Loan B Facility, resulting in no additional indebtedness.

In the third quarter of 2019, we expect to pay approximately \$4 million of debt issuance costs related to this First Amendment, and we expect to expense approximately \$5 million for the write-off of the unamortized debt issuance costs related to the existing Term Loan A Facility and a portion of the unamortized debt issuance costs related to our Term Loan B Facility that we had been amortizing over the expected life of the borrowings.

Redemption of 7.75% Notes due 2019 In May 2019, we voluntarily redeemed the remaining balance outstanding under our 7.75% Notes due 2019. This resulted in a principal payment of \$100 million and \$0.3 million in accrued interest. We also expensed approximately \$0.1 million for the write-off of the unamortized debt issuance costs that we had been amortizing over the expected life of the borrowing, and approximately \$2.2 million for an early redemption premium.

6.25% Notes due 2026 In March 2018, we issued \$400.0 million in aggregate principal amount of 6.25% senior notes due 2026 (the 6.25% Notes due 2026). Proceeds from the 6.25% Notes due 2026 were used primarily to fund the tender offer for the 6.25% senior notes due 2021 (the 6.25% Notes due 2021) described below. We paid debt issuance costs of \$6.6 million in the first three months of 2018 related to the 6.25% Notes due 2026.

Tender Offer of 6.25% Notes due 2021 Also in March 2018, we made a tender offer for our 6.25% Notes due 2021. Under this tender offer, we retired \$383.1 million of the 6.25% Notes due 2021 in the first quarter of 2018. We redeemed the remaining \$16.9 million of the 6.25% Notes due 2021 during the second quarter of 2018. During the six months ended June 30, 2018, we expensed \$2.5 million for the write-off of the remaining unamortized debt issuance costs that we had been amortizing over the expected life of the borrowing and \$8.0 million in tender premiums.

Redemption of 6.625% Notes due 2022 In May 2018, we voluntarily redeemed a portion of our 6.625% Notes due 2022. This resulted in a principal payment of \$100.0 million, and a payment of \$0.8 million in accrued interest. During the six months ended June 30, 2018, we expensed \$0.8 million for the write-off of a portion of the remaining unamortized debt issuance costs that we had been amortizing over the expected life of the borrowing and \$3.3 million for an early redemption premium.

Foreign credit facilities We utilize local currency credit facilities to finance the operations of certain foreign subsidiaries. At June 30, 2019, \$119.6 million was outstanding under our foreign credit facilities, as compared to \$127.1 million at December 31, 2018. At June 30, 2019, an additional \$87.7 million was available under our foreign credit facilities.

Treasury stock Treasury stock increased by \$7.5 million in the first six months of 2019 to \$209.3 million as compared to \$201.8 million at year-end 2018, due to the withholding and repurchase of shares of AAM stock to satisfy employee tax withholding obligations due upon the vesting of performance shares and restricted stock units.

CRITICAL ACCOUNTING ESTIMATES

Subsequent to the disaggregation of our Powertrain reporting unit into the Driveline and Metal Forming reporting units, the fair value of our Metal Forming reporting unit exceeded its carrying value by approximately 11%. Fair value of the reporting unit is estimated based on a combination of discounted cash flows and the use of pricing multiples derived from an analysis of comparable public companies multiplied against historical and/or anticipated financial metrics of the reporting unit. These calculations contain uncertainties as they require management to make assumptions including, but not limited to, market comparables, future cash flows of the reporting unit, and appropriate discount and long-term growth rates.

A decline in the actual cash flows of Metal Forming in future periods, as compared to the projected cash flows used in the valuation, could result in the carrying value of the reporting unit exceeding its fair value. Further, a change in the discount rate or long-term growth rate as a result of a change in economic conditions could result in the carrying value of the reporting unit exceeding its fair value.

AAM's critical accounting estimates are included in our Annual Report on Form 10-K for the year ended December 31, 2018 and did not materially change during the six months ended June 30, 2019.

CYCLICALITY AND SEASONALITY

Our operations are cyclical because they are directly related to worldwide automotive production, which is itself cyclical and dependent on general economic conditions and other factors. Our business is also moderately seasonal as our major OEM customers historically have an extended shutdown of operations (typically 1-2 weeks) in conjunction with their model year changeover and an approximate one-week shutdown in December. Our major OEM customers also occasionally have longer shutdowns of operations (up to six weeks) for program changeovers. Accordingly, our quarterly results may reflect these trends.

LITIGATION AND ENVIRONMENTAL MATTERS

We are involved in various legal proceedings incidental to our business. Although the outcome of these matters cannot be predicted with certainty, we do not believe that any of these matters, individually or in the aggregate, will have a material adverse effect on our financial condition, results of operations or cash flows.

We are subject to various federal, state, local and foreign environmental and occupational safety and health laws, regulations and ordinances, including those regulating air emissions, water discharge, waste management and environmental cleanup. We closely monitor our environmental conditions to ensure that we are in compliance with applicable laws, regulations and ordinances. We have made, and anticipate continuing to make, capital and other expenditures, including recurring administrative costs, to comply with environmental requirements. Such expenditures were not significant in the second quarter of 2019.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

MARKET RISK

Our business and financial results are affected by fluctuations in global financial markets, including currency exchange rates and interest rates. Our hedging policy has been developed to manage these risks to an acceptable level based on management's judgment of the appropriate trade-off between risk, opportunity and cost. We do not hold financial instruments for trading or speculative purposes.

Currency Exchange Risk From time to time, we use foreign currency forward contracts to reduce the effects of fluctuations in exchange rates relating to certain foreign currencies. At June 30, 2019, we had currency forward contracts with a notional amount of \$175.2 million outstanding. The potential decrease in fair value of foreign exchange contracts, assuming a 10% adverse change in the foreign currency exchange rates, would be approximately \$16.1 million at June 30, 2019 and was approximately \$17.1 million at December 31, 2018.

Future business operations and opportunities, including the expansion of our business outside North America, may further increase the risk that cash flows resulting from these global operations may be adversely affected by changes in currency exchange rates. If and when appropriate, we intend to manage these risks by creating natural hedges in the structure of our global operations, utilizing local currency funding of these expansions and various types of foreign exchange contracts.

Interest Rate Risk We are exposed to variable interest rates on certain credit facilities. From time to time, we have used interest rate hedging to reduce the effects of fluctuations in market interest rates. In 2018, we entered into a variable-to-fixed interest rate swap to reduce the variability of cash flows associated with interest payments on our variable rate debt. In the second quarter of 2019, we discontinued this variable-to-fixed interest rate swap, which was a liability of \$9.7 million on the date that it was discontinued.

Also in the second quarter of 2019, we entered into a new variable-to-fixed interest rate swap to reduce the variability of cash flows associated with interest payments on our variable rate debt. We have the following notional amounts hedged in relation to our variable-to-fixed interest rate swap: \$1.0 billion through May 2020, \$900.0 million through May 2021, \$750.0 million through May 2022, \$600.0 million through May 2023 and \$500.0 million through May 2024.

The pre-tax earnings and cash flow impact of a one-percentage-point increase in interest rates (approximately 17% of our weighted-average interest rate at June 30, 2019) on our long-term debt outstanding, would be approximately \$7.0 million at June 30, 2019 and was approximately \$8.2 million at December 31, 2018, on an annualized basis.

Item 4. Controls and Procedures

Disclosure Controls and Procedures

Under the direction of our Chief Executive Officer and Chief Financial Officer, we evaluated our disclosure controls and procedures and internal control over financial reporting and concluded that our disclosure controls and procedures (as defined in Rules 13a-15(e) or 15d-15(e) under the Securities Exchange Act of 1934 (the "Exchange Act")) were effective as of June 30, 2019.

Changes in Internal Control over Financial Reporting

On January 1, 2019, we began the implementation of our global enterprise resource planning (ERP) systems at certain of the locations that were acquired as part of the MPG acquisition. As part of these implementations, we have modified the design and documentation of our internal controls processes and procedures, where appropriate. We will continue to implement these ERP systems at certain locations throughout the remainder of 2019 and early 2020.

Also on January 1, 2019, we adopted new accounting guidance under Accounting Standards Codification Topic 842 (ASC 842) *Leases*. As part of the adoption of ASC 842, we implemented changes to our internal controls including the implementation of a new software system for lease accounting and reporting. Other changes to internal controls related to ASC 842 included updating our company policy associated with leases, determining the term of lease agreements, including whether options to extend or terminate a lease are reasonably certain to be exercised, and establishing the appropriate discount rates to calculate our lease liabilities.

Except as described above, there were no changes in our internal control over financial reporting during the quarter ended June 30, 2019 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1A. Risk Factors

There were no material changes from the risk factors previously disclosed in our December 31, 2018 Form 10-K.

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

In the second quarter of 2019, we withheld and repurchased shares of AAM stock to satisfy employee tax withholding obligations due upon the vesting of restricted stock units and performance shares. The following table provides information about our equity security purchases during the quarter ended June 30, 2019:

ISSUER PURCHASES OF EQUITY SECURITIES

Period	Total Number of Shares (or Units) Purchased	Average Price Paid per Share (or Unit)	Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs	Maximum Number (or Approximate Dollar Value) of Shares (or Units) that May Yet Be Purchased Under the Plans or Programs
				<i>(in millions)</i>
April 1 - April 30, 2019	6,495	\$ 15.18	—	\$ —
May 1 - May 31, 2019	2,141	10.58	—	—
June 1 - June 30, 2019	—	—	—	—
Total	<u>8,636</u>	<u>\$ 14.04</u>	<u>—</u>	<u>\$ —</u>

Item 6. Exhibits

Number	Description of Exhibit
<u>*31.1</u>	<u>Certification of David C. Dauch, Chairman of the Board & Chief Executive Officer Pursuant to Rule 13a-14(a) of the Securities Exchange Act</u>
<u>*31.2</u>	<u>Certification of Christopher J. May, Vice President & Chief Financial Officer Pursuant to Rule 13a-14(a) of the Securities Exchange Act</u>
<u>*32</u>	<u>Certifications of David C. Dauch, Chairman of the Board & Chief Executive Officer and Christopher J. May, Vice President & Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</u>
101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document
**101.SCH	XBRL Taxonomy Extension Schema Document
**101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
**101.LAB	XBRL Taxonomy Extension Label Linkbase Document
**101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
**101.DEF	XBRL Taxonomy Extension Definition Linkbase Document

* Filed herewith

** Submitted electronically with this Report.

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.

AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.
(Registrant)

/s/ James G. Zaliwski
James G. Zaliwski
Chief Accounting Officer
August 2, 2019

**EXHIBIT 31.1 - CERTIFICATION PURSUANT TO RULE 13a-14(a)
OF THE SECURITIES EXCHANGE ACT**

I, David C. Dauch, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of American Axle & Manufacturing Holdings, 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 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: August 2, 2019

/s/ David C. Dauch

David C. Dauch

Chairman of the Board & Chief Executive Officer

(Principal Executive Officer)

**EXHIBIT 31.2 - CERTIFICATION PURSUANT TO RULE 13a-14(a)
OF THE SECURITIES EXCHANGE ACT**

I, Christopher J. May, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of American Axle & Manufacturing Holdings, 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 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: August 2, 2019

/s/ Christopher J. May

Christopher J. May
Vice President & Chief Financial Officer
(Principal Financial Officer)

**EXHIBIT 32 - CERTIFICATIONS 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 American Axle & Manufacturing Holdings, Inc. (Issuer) on Form 10-Q for the period ending June 30, 2019 as filed with the Securities and Exchange Commission on the date hereof (Report), I, David C. Dauch, Chairman of the Board & Chief Executive Officer of the Issuer, and I, Christopher J. May, Vice President & Chief Financial Officer of the Issuer, 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 Issuer.

/s/ David C. Dauch

David C. Dauch
Chairman of the Board &
Chief Executive Officer
August 2, 2019

/s/ Christopher J. May

Christopher J. May
Vice President &
Chief Financial Officer
August 2, 2019