

AMERICAN AXLE & MANUFACTURING HOLDINGS INC  
Form 10-K  
February 08, 2013

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

FORM 10-K

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

For the fiscal year ended December 31, 2012

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)

313-758-2000

(Registrant's telephone number, including area code)

48211-1198

(Zip Code)

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

Title of Each Class

Name of Each Exchange on Which  
Registered

COMMON STOCK, PAR VALUE \$0.01 PER SHARE

NEW YORK STOCK EXCHANGE

PREFERRED SHARE PURCHASE RIGHTS, PAR VALUE \$0.01 PER  
SHARE

NEW YORK STOCK EXCHANGE

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes x No o

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

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 x No o

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

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

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

Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company   
(Do not check if small reporting company)

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

The closing price of the Common Stock on June 30, 2012 as reported on the New York Stock Exchange was \$10.49 per share and the aggregate market value of the registrant's Common Stock held by non-affiliates was approximately \$718.7 million.

As of February 6, 2013, the number of shares of the registrant's Common Stock, \$0.01 par value, outstanding was 74,839,567 shares.

#### Documents Incorporated by Reference

Portions of the registrant's Annual Report to Stockholders for the year ended December 31, 2012 and Proxy Statement for use in connection with its Annual Meeting of Stockholders to be held on May 2, 2013, to be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after December 31, 2012, are incorporated by reference in Part I (Items 1, 1A, 1B, 2, 3 and 4), Part II (Items 5, 6, 7, 7A, 8, 9, 9A and 9B), Part III (Items 10, 11, 12, 13 and 14) and Part IV (Item 15) of this Report.

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## Part I

### Item 1. Business

As used in this report, except as otherwise indicated in information incorporated by reference, references to “our Company,” “we,” “our,” “us” or “AAM” mean American Axle & Manufacturing Holdings, Inc. (Holdings) and its subsidiaries and predecessors, collectively.

#### (a) General Development of Business

Holdings, a Delaware corporation, is a successor to American Axle & Manufacturing of Michigan, Inc., a Michigan corporation, pursuant to a migratory merger between these entities in 1999.

#### (b) Financial Information About Segments

See Item 8, “Financial Statements and Supplementary Data - Note 13 - Segment and Geographic Information” included in this report.

#### (c) Narrative Description of Business

##### Company Overview

We are a Tier I supplier to the automotive industry. We manufacture, engineer, design and validate driveline and drivetrain systems and related components and chassis modules for light trucks, sport utility vehicles (SUVs), passenger cars, crossover vehicles and commercial vehicles. Driveline and drivetrain systems include components that transfer power from the transmission and deliver it to the drive wheels. Our driveline, drivetrain and related products include axles, chassis modules, driveshafts, power transfer units, transfer cases, chassis and steering components, driveheads, transmission parts and metal-formed products. In addition to locations in the United States (U.S.) (Michigan, Ohio, Indiana and Pennsylvania), we also have offices or facilities in Brazil, China, Germany, India, Japan, Luxembourg, Mexico, Poland, Scotland, South Korea, Sweden and Thailand.

We are the principal supplier of driveline components to General Motors Company (GM) for its rear-wheel drive (RWD) light trucks and SUVs manufactured in North America, supplying substantially all of GM's rear axle and four-wheel drive and all-wheel drive (4WD/AWD) axle requirements for these vehicle platforms. Sales to GM were approximately 73% of our total net sales in 2012 and 2011, and approximately 75% of our net sales in 2010.

We are the sole-source supplier to GM for certain axles and other driveline products for the life of each GM vehicle program covered by a Lifetime Program Contract (LPC). Substantially all of our sales to GM are made pursuant to the LPCs. The LPCs have terms equal to the lives of the relevant vehicle programs or their respective derivatives, which typically run 5 to 7 years, and require us to remain competitive with respect to technology, design and quality.

We are also the principal supplier of driveline system products for the Chrysler Group LLC's (Chrysler) heavy-duty Ram full-size pickup trucks and its derivatives. Sales to Chrysler were approximately 10% of our total net sales in 2012, 8% in 2011 and 9% in 2010. In addition to GM and Chrysler, we supply driveline systems and other related components to Volkswagen AG (Volkswagen), Mack Trucks Inc. (Mack Truck), PACCAR Inc., Harley-Davidson Inc., Tata Motors, Nissan Motor Co., Ltd. (Nissan), Ford Motor Company (Ford), Deere & Company, Scania AB, Audi AG (Audi) and other original equipment manufacturers (OEMs) and Tier I supplier companies such as Jatco Ltd. and Hino Motors Ltd. Our net sales to customers other than GM increased to \$792.6 million in 2012 as compared to \$710.0 million in 2011 and \$563.0 million in 2010.

We estimate our principal served market to be approximately \$33 billion, based on information available at the end of 2012. Our principal served market is the global driveline market, which consists of driveline, drivetrain and related components and chassis modules for light trucks, SUVs, passenger cars, crossover vehicles and commercial vehicles.

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The following chart sets forth the percentage of total revenues attributable to our products for the periods indicated:

	Year ended December 31,			
	2012	2011	2010	
Axles and driveshafts	82	% 81	% 81	%
Drivetrain components, forged products and other	18	% 19	% 19	%
Total	100	% 100	% 100	%

## Business Strategy

We are focused on profitable net sales growth and strengthening our balance sheet by capitalizing on our competitive strengths and continuing to diversify our customer, product, and geographic sales mix while providing exceptional value to our customers. Over the past several years, we have taken necessary restructuring actions that allowed us to make significant, permanent structural cost reductions which have enabled us to be market cost competitive on a global basis. We expect to benefit from these actions in the future as global economic conditions and the strength of the automotive industry continue to improve.

We have aligned our business strategy to build value for our key stakeholders. This strategy emphasizes a commitment to deliver industry leading quality, technology leadership and operational excellence. By focusing on this commitment, AAM can achieve our key critical business objectives of product and customer diversification, globalization and solid financial performance. This strategy includes the following actions:

Maintain our high quality standards which are the foundation of our product durability and reliability.

AAM has an outstanding daily track record for delivering quality products, having averaged less than 10 discrepant parts per million (“PPM”) since 2003, as measured by our largest customer.

Our quality performance has resulted in improved warranty performance for our customers. As a result, customer incidents per thousand vehicles have improved an average of 15% annually since 2006, as measured by our largest customer.

Achieve technology leadership by delivering innovative driveline products which improve the diversification of our product portfolio while increasing our total global served market.

AAM's significant investment in research and development has resulted in the development of advanced technology products designed to assist our customers in meeting the market demands for higher fuel-efficiency; lower emissions; more sophisticated electronic controls; improved safety, ride and handling performance; and enhanced reliability and durability for light trucks, SUVs, passenger cars, crossover vehicles and commercial vehicles.

AAM won an industry-first order for our EcoTrac™ disconnecting AWD technology. AAM's EcoTrac™ AWD system is a fuel-efficient and environmentally friendly driveline system that further enhances AAM's technology leadership position by providing OEMs the option of an all-wheel-drive system that disconnects when not needed to improve fuel efficiency and reduce CO<sub>2</sub> emissions compared to conventional AWD systems. AAM's EcoTrac™ AWD system will be featured on a major passenger car and crossover vehicle program beginning in 2013.

In the first quarter of 2012, we paid \$4.0 million to acquire the remaining shares of e-AAM Driveline Systems AB (e-AAM). e-AAM, previously a joint venture between AAM and Saab Automobile AB (Saab), was created to design and commercialize electric and hybrid driveline systems designed to improve fuel efficiency, reduce CO<sub>2</sub> emissions and provide AWD capability. AAM now has 100% ownership of e-AAM, and will continue engineering, developing

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and commercializing electric and hybrid driveline systems for passenger cars and crossover vehicles.

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AAM has established a high efficiency product portfolio that is designed to improve axle efficiency and fuel economy through innovative product design technologies. Our line-up of high efficiency axles for rear-wheel drive and AWD vehicles are now featured on GM's all-new Cadillac ATS, which was named the 2013 North American Car of the Year

Sustain our operational excellence and focus on cost management to deliver exceptional value to our customers.

Our focus on cost management has led to sustainable structural reductions in AAM's fixed cost structure. We continue to focus on cost management through the implementation of the AAM Manufacturing System to improve quality, eliminate waste, reduce lead time and total costs globally.

We successfully extended our stand alone United Automobile, Aerospace and Agricultural Implement Workers of America (UAW) agreement that covers hourly associates at our Three Rivers Manufacturing Facility to ensure market competitiveness at AAM's largest U.S. facility into 2017. We have also negotiated collective bargaining agreements that cover our hourly associates at our Colfor Manufacturing Inc. and MSP Industries Corporation subsidiaries into 2014 and 2017, respectively.

With the closure of our Detroit Manufacturing Complex (DMC) and Cheektowaga Manufacturing Facility (CKMF) in 2012, we have achieved market cost competitive labor structures at each of our global locations.

Diversify our business through the growth of new and existing customer relationships and expansion of our product portfolio.

In addition to maintaining and building upon our long standing relationships with GM and Chrysler, we have focused on generating profitable growth with new and existing global OEM customers, as well as commercial vehicle, off-road and emerging market OEMs. As a result, new business launches in 2012 included business with Volkswagen, Audi, Nissan, Ford, Mercedes-Benz, Daimler Truck, Tata Motors, Jaguar Land Rover, The Volvo Group and Mahindra Navistar. New and expanded business launches in 2013 through 2015 include business with Chrysler-Fiat, Daimler Truck, Ford, Honda, Jaguar Land Rover, Nissan, Tata Motors, The Volvo Group, Mercedes-Benz and others.

We have accelerated the development and launch of products for passenger cars and crossover vehicles and the global light truck and commercial vehicle markets. We have approximately \$1.25 billion of new and incremental business backlog launching from 2013 to 2015, of which approximately 65% relates to AWD and RWD applications for passenger cars, crossover vehicles and driveline applications for the commercial vehicle market.

Approximately 50% of our new and incremental business backlog launching from 2013 to 2015 is for customers other than GM. In addition, we are quoting on approximately \$500 million in new business opportunities to continue the diversification and expansion of our customer base, product portfolio and global footprint. Over 95% of these opportunities are for customers other than GM.

Achieve globalization by increasing our presence in growth markets to support our customers' global platforms.

Over the past few years, we have significantly increased our installed capacity in cost competitive global growth markets to support current programs and future opportunities. Specific actions included expanding facilities in Brazil, Mexico and Poland and constructing new facilities in India, Mexico and Thailand.

In 2011, we also expanded our existing joint venture with Hefei Automobile Axle Co., Ltd. (HAAC), a subsidiary of the JAC Group (Anhui Jianghuai Automotive Group Co., Ltd.) to include 100% of HAAC's light commercial axle business. By adding the light and medium duty commercial axle business, this expanded joint venture will supply

front and rear beam axles to several leading Chinese light truck manufacturers, including JAC and BAIC Foton, making AAM the second largest axle supplier in China's light commercial truck segment.

Approximately 40% of our \$1.25 billion of new and incremental business backlog launching from 2013 to 2015 is for end use markets outside the U.S. and approximately 65% has been sourced to our manufacturing facilities outside the U.S.

Achieve solid financial performance to build value for our key stakeholders.

Over the past three years, AAM's compound annual growth rate (CAGR) for sales has exceeded the growth rate of the industry. AAM's new and incremental business backlog will continue to drive our sales growth to exceed a targeted 10% CAGR through 2015. This is approximately double the rate of growth expected for the industry, which is expected to grow by 4%-5% based on current industry estimates.

We have established a cost competitive, operationally flexible global manufacturing, engineering and sourcing footprint by re-aligning our global installed capacity to increase our presence in global growth markets, support global product development initiatives and establish regional cost competitiveness. This includes having manufacturing facilities in Brazil, China, India, Mexico, Poland, Scotland, Thailand and the U.S.

#### Competition and Strengths

We compete with a variety of independent suppliers and distributors, as well as with the in-house operations of certain OEMs. Our principal competitors include Dana Holding Corporation, GKN plc, Magna International Inc., ZF Friedrichshafen AG, Linamar Corporation, Meritor Inc. and the in-house operations of various global OEMs. The sector is also attracting new competitors from Asia, some of whom are entering both of our product lines through the acquisition of OEM non-core operations.

With a focus on engineering and manufacturing, we support our business strategy and differentiate ourselves through outstanding long-term daily track records on quality, reliability, delivery and launch performance. We reduced our discrepant PPM performance, as measured by our largest customer, from 13,441 PPM in 1994 to an average of less than 10 PPM for the last 10 years.

We have converted our former fixed legacy labor cost structure to a highly flexible, competitive and variable cost structure.

We continuously evaluate the need to rationalize excess capacity through consolidation, divestiture, idling or closing facilities to maximize productivity and capacity utilization and further minimize operating and overhead costs. This is evidenced by the following actions:

In the first quarter of 2012, we closed DMC and CKMF upon the expiration of our collective bargaining agreement for these locations with the International UAW. The programs previously sourced to these locations were moved to our market cost competitive North American facilities. DMC's business was resourced to Three Rivers Manufacturing Facility, our largest U.S. manufacturing facility, and CKMF's business was resourced to the facilities in Indiana, Ohio and Mexico.

In 2011, we closed our Spurrier Manufacturing Facility in England. In 2010, we idled and subsequently closed our Salem Manufacturing Facility (part of our Colfor Manufacturing operations) and consolidated its operations within our two remaining facilities in Ohio. We also idled and consolidated certain administrative and engineering facilities in Michigan.

All of our global facilities utilize the AAM Manufacturing System, a business philosophy focused on lean manufacturing designed to facilitate cost reductions, improve quality, reduce inventory and improve our operating flexibility. This philosophy is demonstrated through the following:

Ability to drive home the benefits of market cost competitiveness and productivity initiatives - Our Three Rivers Manufacturing Facility was named one of the 10 best plants in North America by IndustryWeek Magazine, which recognizes North American manufacturing facilities that foster productive and competitive work environments and optimize customer satisfaction. The AAM Manufacturing System and associate involvement were noted as key enablers for the plant to be awarded new business.

Recognition for demonstrating outstanding achievements in manufacturing processes, quality enhancements, productivity improvement and customer satisfaction - Our Guanajuato Manufacturing Complex is a "Shingo Prize" award recipient for Manufacturing Excellence, which focuses on lean manufacturing techniques and promotes world-class business performance through continuous improvements in core manufacturing and business processes.

#### Industry Trends

See Item 7, "Management's Discussion and Analysis - Industry Trends."

#### Productive Materials

We believe that we have adequate sources of supply of productive materials and components for our manufacturing needs. Most raw materials (such as steel) and semi-processed or finished items (such as castings) are available within the geographical regions of our operating facilities from qualified sources in quantities sufficient for our needs. We currently have contracts with our steel suppliers that ensure continuity of supply to our principal operating facilities in North America. We also have validation and testing capabilities that enable us to strategically qualify steel sources on a global basis. As we continue to expand our global manufacturing footprint, we will rely on suppliers in local markets that have not yet proven their ability to meet our requirements.

#### Research and Development (R&D)

We continue to invest in the development of new products, processes and systems to improve efficiency and flexibility in our operations and continue to deliver innovative new products, chassis modules and integrated driveline systems to our customers.

In 2012, R&D spending was \$123.4 million as compared to \$113.6 million in 2011 and \$82.5 million in 2010. The focus of this investment continues to be developing innovative driveline and drivetrain systems and related components for light trucks, passenger cars, SUVs, crossover vehicles and commercial vehicles in the global marketplace. Product development in this area includes power transfer units, transfer cases, driveline and transmission differentials, multi-piece driveshafts, constant velocity joints, torque transfer devices, chassis modules and front and rear drive axles. We continue to focus on electronic integration in our existing and future products to advance their performance. We also continue to support the development of hybrid and electric vehicle systems. Special emphasis is also placed on the development of products and systems that provide our customers with advancements in fuel efficiency and emissions reduction and improved performance metrics such as noise vibration harshness (NVH) and power density. Our efforts in these areas have resulted in the development of prototypes and various configurations of these driveline systems for several OEMs throughout the world.

We have also developed and commercialized a disconnecting AWD system, which strengthens AAM's position as a leader in global driveline systems technology. AAM's EcoTrac™ disconnecting AWD system is an industry-first technology that seamlessly engages AWD functionality while improving fuel efficiency and reducing CO<sub>2</sub> emissions. The system will be featured on a passenger car and crossover vehicle platform launching in 2013.

AAM also develops and manufactures high-efficiency axle systems which improve axle efficiency and fuel economy by using proprietary technologies to optimize product design and lubrication efficiency, while also significantly reducing friction. In 2012, AAM launched a high efficiency axle on the Cadillac ATS compact luxury sport sedan.

Our e-AAM subsidiary engineers and develops electric and hybrid driveline systems to be commercialized for passenger cars and crossover vehicles. These systems are designed to improve fuel efficiency by up to 30%, reduce CO<sub>2</sub> emissions and provide AWD capability with the additional benefit of improved vehicle stability when compared to traditional mechanical AWD systems.

Through the development of our EcoTrac™ disconnecting AWD system, our high efficiency axles and e-AAM, we have significantly advanced our efforts to improve fuel efficiency and ride and handling performance while reducing emissions.

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## Backlog

We typically enter into agreements with our customers to provide axles or other driveline or drivetrain products for the life of our customers' vehicle programs. Our new and incremental business backlog includes awarded programs and incremental content and volume including customer requested engineering changes. Our backlog may be impacted by various assumptions, many of which are provided by our customers based on their long range production plans. These assumptions include future production volume estimates, changes in program launch timing and fluctuation in foreign currency exchange rates.

Our new and incremental business backlog is approximately \$1.25 billion for programs launching from 2013 to 2015. Approximately 65% of our new and incremental business backlog relates to RWD and AWD applications for passenger cars, crossover vehicles and driveline applications for the commercial vehicle markets. Approximately 40% of our new and incremental business backlog will be for end use markets outside the U.S. and approximately 65% has been sourced to our non-U.S. manufacturing facilities. Approximately 50% of our new and incremental business backlog is for customers other than GM.

## Patents and Trademarks

We maintain and have pending various U.S. and foreign patents, trademarks and other rights to intellectual property relating to our business, which we believe are appropriate to protect our interest in existing products, new inventions, manufacturing processes and product developments. We do not believe that any single patent or trademark is material to our business nor would expiration or invalidity of any patent or trademark have a material adverse effect on our business or our ability to compete.

## Cyclical 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 to 2 weeks) in conjunction with their model year changeover and an approximate one-week shutdown in December. Accordingly, our quarterly results may reflect these trends.

## Environmental Matters

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 will continue to make, capital and other expenditures to comply with environmental requirements, including recurring administrative costs. Such expenditures were not significant in 2012, 2011 and 2010.

## Associates

We employ approximately 11,300 associates on a global basis, including our joint venture affiliates, of which approximately 2,925 are employed in the U.S. Approximately 1,500 associates are represented by the UAW. Approximately 800 of our hourly associates at our Three Rivers Manufacturing Facility in Michigan are subject to a stand alone UAW agreement that expires September 13, 2017. An additional 700 associates at our Colfor Manufacturing, Inc. and MSP Industries Corporation subsidiaries are represented by the UAW under collective bargaining agreements that expire June 6, 2014 and April 18, 2017, respectively. In addition, approximately 125

associates at our Albion Automotive subsidiary in Scotland, approximately 3,100 associates at our Guanajuato Manufacturing Complex in Mexico and approximately 750 associates at our Araucaria Manufacturing Facility in Brazil are represented by labor unions that are subject to collective bargaining agreements. The current collective bargaining agreement at Albion will expire on March 31, 2014. The collective bargaining agreements in Mexico and Brazil expire annually.



## Executive Officers of the Registrant

Name	Age	Position
Richard E. Dauch .....	70	Co-Founder & Executive Chairman of the Board
David C. Dauch .....	48	President & Chief Executive Officer
John J. Bellanti .....	58	Executive Vice President - Worldwide Operations
Michael K. Simonte .....	49	Executive Vice President & Chief Financial Officer
Mark S. Barrett .....	52	Group Vice President - Engineering & Procurement
Alberto L. Satine .....	56	Group Vice President - Global Sales & Business Development
David A. Culton .....	47	President - AAM Americas, Vice President - AAM Corporate
Phillip R. Guys .....	50	Vice President - Product Engineering & Development
Terri M. Kemp .....	47	Vice President - Human Resources
Michael J. Lynch .....	48	Vice President - Finance & Controller
Allan R. Monich.....	59	Vice President - Quality, Warranty & Customer Satisfaction
Steven J. Proctor .....	56	President - AAM Europe, Vice President - AAM Corporate
Kevin M. Smith.....	51	Vice President - Global Manufacturing Services
John S. Sofia .....	52	Vice President - Global Program Management & AAM Manufacturing Systems
Thomas J. Szymanski.....	51	Vice President - Operations - AAM Americas
Norman Willemse .....	56	Vice President - Metal Formed Products Business Unit

Richard E. Dauch, age 70, is Co-Founder & Executive Chairman of the Board of AAM, and is also Chairman of the Executive Committee of the Board of Directors. He served as the Chief Executive Officer of AAM from 1994 to 2012 and has been a member of AAM's Board of Directors since the Company began operations in March 1994. In October 1997, he was named Chairman of the Board of Directors. He was also President of AAM from March 1994 through December 2000. Prior to March 1994, he spent 12 years at the Chrysler Corporation, where he established the just-in-time materials management system and the three-shift manufacturing vehicle assembly process. He is a retired officer from the Chrysler Corporation. Mr. Dauch's last position at Chrysler, in 1991, was Executive Vice President of Worldwide Manufacturing. Mr. Dauch also served as Group Vice President of Volkswagen of America, where he established the manufacturing facilities and organization for the successful launch of the first major automotive transplant in the United States. Mr. Dauch has more than 48 years of experience in the automotive industry. Mr. Dauch also served as Chairman of the National Association of Manufacturers (N.A.M.), and currently serves on the Board of Directors of that organization. In 2012, Mr. Dauch was inducted into IndustryWeek's Manufacturing Hall of Fame. In addition to lecturing extensively on the subject of manufacturing, he has authored two books, "Passion for Manufacturing," which was released in 1993, and "American Drive," which was released in September 2012. Richard

E. Dauch is the father of David C. Dauch.

David C. Dauch, age 48, has been President and Chief Executive Officer since September 2012 and has served on AAM's Board of Directors since April 2009. Prior to that, he served as President & Chief Operating Officer (since June 2008), Executive Vice President & COO (since December 2007); Executive Vice President - Commercial & Strategic Development (since January 2005); Senior Vice President, Commercial (since May 2004); Senior Vice President, Sales, Marketing & Driveline Division (since September 2003); Vice President, Manufacturing - Driveline Division (since January 2001); Vice President, Sales and Marketing (since 1998) and Director of Sales, GM Full-Size Truck Programs (since May 1996). Mr. Dauch joined our Company in July 1995 as Manager, Sales Administration. Prior to joining our Company, Mr. Dauch held various positions and served on the Board of Directors at Collins & Aikman Products Company. Presently, he serves on the Boards of Directors of Business Leaders for Michigan, the Detroit Regional Chamber, the Great Lakes Council Boy Scouts of America and the Boys & Girls Clubs of Southeastern Michigan. Mr. Dauch also serves on the Miami University Business Advisory Council. David C. Dauch is the son of Richard E. Dauch.

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John J. Bellanti, age 58, has been Executive Vice President - Worldwide Operations since September 2008. Prior to that, he served as Group Vice President - Manufacturing Services, Capital Planning & Cost Estimating (since December 2007); Vice President - Manufacturing Services, Capital Planning & Cost Estimating (since July 2006); Vice President - Engineering & Chief Technology Officer (since May 2004); Vice President, Engineering & Product Development (since September 2003); Executive Director, Manufacturing Services (since March 2000); Director, Manufacturing Engineering (since June 1998); Director Advanced Programs (since May 1996) and Plant Manager, Detroit Forge Plant (since joining our Company in March 1994). Prior to joining our Company, Mr. Bellanti worked at General Motors for 22 years in various manufacturing and engineering positions, most recently serving as Production Manager. Mr. Bellanti was on the Board of Directors for the North American Forging Industry Association from 1999 through 2003, serving as President of that Association in 2002.

Michael K. Simonte, age 49, has been Executive Vice President & Chief Financial Officer since December 2011. Simonte previously served as Executive Vice President - Finance & Chief Financial Officer (since February 2009), Group Vice President - Finance & Chief Financial Officer (since December 2007); Vice President - Finance & Chief Financial Officer (since January 2006); Vice President & Treasurer (since May 2004); and Treasurer (since September 2002). Simonte joined AAM in December 1998 as Director, Corporate Finance. Prior to joining our Company, Simonte served as Senior Manager at the Detroit office of Ernst & Young LLP. Mr. Simonte is a certified public accountant.

Mark S. Barrett, age 52, has been Group Vice President - Engineering & Procurement since November 2012. Prior to that, he served as Group Vice President - Engineering, Product Development & Procurement (since December 2011), Vice President - Engineering & Product Development (since October 2008), Executive Director, Engineering & Product Development (since January 2008); Executive Director, Axle & Drivetrain (since November 2006); Executive Director, Powertrain, Driveshaft and Halfshaft Engineering (since January 2006); Executive Director, Released and Domestic Programs (since January 2004); Director, Mid Size Axle Programs (since December 1998) and Staff Project Engineer (since joining our Company in March 1994). Prior to joining our Company, Mr. Barrett served at General Motors for nine years in a variety of manufacturing and engineering positions.

Alberto L. Satine, age 56, has been Group Vice President - Global Sales & Business Development since December 2011. Prior to that, he served as Vice President - Strategic & Business Development (since November 2005), Vice President - Procurement (since January 2005); Executive Director, Global Procurement Direct Materials (since January 2004); General Manager, Latin American Driveline Sales and Operations (since August 2003) and General Manager of International Operations (since joining our Company in May 2001). Prior to joining our Company, Mr. Satine held several management positions at Dana Corporation, including the position of President of Dana's Andean Operations in South America from 1997 to 2000 and General Manager of the Spicer Transmission Division in Toledo, Ohio from 1994 to 1997.

David A. Culton, age 47, has been President - AAM Americas, Vice President - AAM Corporate since June 2012. Prior to that, he served as President - AAM Europe, Vice President - AAM Corporate (since November 2010), Vice President - Commercial (since September 2009); Vice President - Unibody Vehicle Business Unit (since October 2008); Controller (since April 2007); Executive Director, Sales (since July 2006); Director, Commercial Analysis (since August 2004); Director, Finance - Operations (Since June 2003); Finance Manager (since August 1999); and Assistant Finance Manager (since joining our Company in September 1998). Prior to joining our Company, Mr. Culton served at Chrysler Corporation for 10 years in a variety of management, finance, engineering and manufacturing positions.

Phillip R. Guys, age 50, has been Vice President - Product Engineering & Development since November 2012. Prior to that, he served as Vice President - Product Engineering since joining AAM in December 2011. Prior to joining our Company, Mr. Guys served for four years at Linamar Corporation in various senior management positions, including

Vice President - Engineering, and over 20 years in various engineering positions of increasing responsibility at Ford Motor Company and General Motors.

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Terri M. Kemp, age 47, has been Vice President - Human Resources since September 2012. Prior to that, she served as Executive Director - Human Resources & Labor Relations (since November 2010); Executive Director - Human Resources (since September 2009); Director - Human Resources Operations (since October 2008); Director - Program Management (since March 2008); Director - Program Management, Mexico (since August 2006); Launch Manager (since May 2006); Manager - Manufacturing (since August 2005); Manager - Manufacturing, Front Axles and Gears (since June 2005); Area Manager - Plant 1 (since October 2004); Director - Personnel, Detroit Gear & Axle (since January 2003); Area Manager - Plant 6 (since March 2002); Manager - Program Management (since February 2001); Area Manager - Manufacturing Plant 8 (since June 1999); Supervisor - I.E. Plants 1, 6 and 8 (since August 1998); Production Coordinator (since September 1997); and Manager - Productivity since joining the company in July 1996. Prior to joining our Company, Mrs. Kemp served for 9 years at Corning Incorporated, where she progressed through a series of manufacturing positions with increasing responsibility, including Industrial Engineer, Department Head and Operations Manager.

Michael J. Lynch, age 48, has been Vice President - Finance & Controller since September 2012. Prior to that, he served as Executive Director & Controller (since October 2008); Director - Commercial Analysis (since July 2006); Director - Finance, Driveline Americas (since March 2006); Director - Investment & Commercial Analysis (since November 2005); Director - Finance, Driveline (since October 2005); Director - Finance Operations, U.S. (since April 2005); Manager - Finance (since June 2003); Manager - Finance, Forge Division (since September 2001); Finance Manager - Albion Automotive (since October 1998); Supervisor - Cost Estimating (since February 1998) and Financial Analyst at the Detroit Manufacturing Facility since joining AAM in September 1996. Prior to joining our Company, Mr. Lynch served at Stellar Engineering for 9 years in various capacities.

Allan R. Monich, age 59, has been Vice President - Quality, Warranty & Customer Satisfaction since November 2010. Prior to that, he served as Executive Director - Warranty (since January 2010); Vice President - Quality Assurance & Customer Satisfaction (since July 2006); Vice President - Program Management & Capital Planning (since October 2005); Vice President - Program Management & Launch (since May 2004); Vice President, Manufacturing Forging Division (since October 2001); Vice President, Human Resources (since 1998); Vice President, Personnel (since November 1997) and Plant Manager for the Buffalo Gear & Axle Plant in Buffalo, NY since the formation of our Company in March 1994. Prior to joining our Company in March 1994, Mr. Monich worked for General Motors for 22 years in the areas of manufacturing, quality assurance, sales and engineering, including four years as a Plant Manager.

Steven J. Proctor, age 56, has been President - AAM Europe, Vice President - AAM Corporate since June 2012. Prior to that, he served as President - AAM Asia, Vice President - AAM Corporate (since October 2008); Vice President - Sales & Marketing (since June 2004); Executive Director, Driveline Sales & Marketing (since September 2003); President and Chief Operating Officer of AAM do Brasil (since September 1999); Director, GMT-360, I-10/GMT-355 (since December 1998); Director, Worldwide Programs (since February 1998); Director, Strategic Planning (since July 1996) and Director, General Motors Programs (since joining our Company in March 1994). Prior to joining our Company, Mr. Proctor worked for General Motors for 20 years in the areas of product and industrial engineering, production, material management and sales.

Kevin M. Smith, age 51, has been Vice President - Global Manufacturing Services since November 2012. Prior to that, he served as Vice President - Driveshaft Business Unit (since December 2011); Vice President - Program Management & Launch (since November 2010), Executive Director - Advanced Programs, Cost Reductions & Productivity (since January 2010); Vice President - Mexico Operations (since December 2007); Plant Manager, Guanajuato Gear & Axle (since February 2007); Executive Director, Manufacturing Engineering (since July 2006); Executive Director, Axle Engineering (since January 2006); Director, GMT 900 Program (since October 2001); Director, Manufacturing Engineering (since June 2001); Plant Manager, Buffalo Gear, Axle & Linkage (since March 2000); Plant Manager, Three Rivers (since February 1998); Manufacturing Manager, Detroit Gear & Axle Plant (since

February 1996) and Manufacturing Engineering Manager, Buffalo Gear, Axle & Linkage (since joining our Company in March 1994). Prior to joining our Company, Mr. Smith served at Chrysler Corporation for 10 years in a variety of manufacturing and engineering positions.

John S. Sofia, age 52, has been Vice President - Global Program Management & AAM Manufacturing Systems since November 2012. Prior to that, he served as Vice President - Commercial Vehicle Business (since March 2008); Vice President - Product Engineering, Commercial Vehicle Operations & Chief Technology Officer (since December 2007); Vice President - Engineering & Product Development (since July 2006); Vice President - Quality Assurance & Customer Satisfaction (since October 2004); Director, Advanced Quality Planning (since August 2002); Plant Manager, Detroit Forge (since April 2001); Director, Product Engineering (since June 2000); Manager of the Current Production & Process Engineering Group (since September 1997) and Engineering Manager (since joining our Company in May 1994). Prior to joining our Company, Mr. Sofia served at Chrysler Corporation for 10 years in a variety of manufacturing and engineering positions.

Thomas J. Szymanski, age 51, has been Vice President - Operations - AAM Americas since November 2012. Prior to that, he served as Vice President - Global Manufacturing Services (since November 2010); Executive Director - Manufacturing Planning (since October 2008); Executive Director - Corporate Manufacturing Services Unibody Vehicles (since January 2008); Director - Cost Estimating & Advanced Manufacturing Engineering (since August 2006); President & Chief Operating Officer - Colfor Manufacturing, Inc. (since August 2004); Director - Corporate Manufacturing Engineering (since January 2003); Plant Manager - Three Rivers Gear & Axle (since March 2000); Plant Manager - Tonawanda Forge (since December 1998); Manufacturing Manager - Tonawanda Forge (since March 1994); and Area Manager, Axle Assembly - Buffalo Gear & Axle (since the formation of our Company in March 1994). Prior to joining our Company in March 1994, Mr. Szymanski worked for General Motors for 11 years in a variety of manufacturing and plant management positions.

Norman Willemse, age 56, has been Vice President - Metal Formed Product Business Unit since December 2011. Prior to that, he served as Vice President - Global Metal Formed Product Business Unit (since October 2008), Vice President - Global Metal Formed Product Operations (since December 2007); General Manager - Metal Formed Products Division (since July 2006) and Managing Director - Albion Automotive (since joining our Company in August 2001). Prior to joining our Company, Mr. Willemse served at ATSAS for seven years as Executive Director Engineering & Commercial and John Deere for over 17 years in various engineering positions of increasing responsibility. Mr. Willemse is a professional certified mechanical engineer.

## Internet Website Access to Reports

The website for American Axle & Manufacturing Holdings, Inc. is [www.aam.com](http://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(a) or 15(d) of the Securities Exchange Act of 1934 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](http://www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. The information contained in the Company's website is not included, or incorporated by reference, in this annual report on Form 10-K.

## (d) Financial Information About Geographic Areas

International operations are subject to certain additional risks inherent in conducting business outside the U.S., such as changes in currency exchange rates, price and currency exchange controls, import restrictions, nationalization, expropriation and other governmental action. Financial information relating to our operations by geographic area is presented in the following table. Net sales are attributed to countries based upon location of customer. Long-lived assets exclude deferred income taxes.

	December 31, 2012 (in millions)	2011	2010
Net sales			
United States	\$1,576.6	\$1,587.3	\$1,396.7
Canada	75.0	60.8	50.1
Mexico	755.1	678.5	638.0
South America	216.4	134.8	99.5
Asia	214.5	33.2	19.0
Europe and other	93.3	90.4	79.7
Total net sales	\$2,930.9	\$2,585.0	\$2,283.0
Long-lived assets			
United States	\$865.3	\$845.7	\$816.2
Mexico	417.7	384.9	381.8
South America	113.3	131.9	124.4
Asia	159.0	131.7	101.2
Europe	72.5	51.3	50.4
Total long-lived assets	\$1,627.8	\$1,545.5	\$1,474.0



## Item 1A. Risk Factors

The following risk factors and other information included in this Annual Report on Form 10-K should be considered. If any of the following risks occur, our business, financial condition, operating results and cash flows could be materially adversely affected.

General global economic conditions may have an adverse impact on our operating performance and results of operations.

The automotive industry has continued to improve over the past three years after suffering the effects of the global financial crisis experienced in 2008 and 2009. While the U.S. SAAR increased to 14.4 million units in 2012 from 12.7 million in 2011, the automotive industry is still recovering from the effects of the unprecedented decline in consumer demand and production volumes. General economic conditions such as the depressed U.S. housing market, continued high unemployment rates and general economic instability may still hinder a full recovery of the domestic automotive industry over the next few years. Additionally, continued turmoil in the European credit markets and the debt crisis in the Euro-zone pose potential threats to global growth and market stability, which could have an adverse impact on the recovery of the automotive industry. Continued weakness or deteriorating conditions in the U.S. or global economy that results in another reduction or depressed levels of automotive production and sales by our largest customers may adversely affect our business, financial condition and results of operations. Additionally, in a flat or declining economic environment, we may experience the negative effects of increased competitive pricing pressure and customer turnover.

Our business is significantly dependent on sales to GM and Chrysler.

We are the principal supplier of driveline components to GM for its RWD light trucks and SUVs manufactured in North America, supplying substantially all of GM's RWD and 4WD/AWD axle requirements for these vehicle platforms. Sales to GM were approximately 73% of our total net sales in 2012 and 2011, and approximately 75% of our total net sales in 2010. A reduction in our sales to GM or a reduction by GM of its production of RWD light trucks or SUVs, as a result of market share losses of GM or otherwise, could have a material adverse effect on our results of operations and financial condition.

We are also the principal supplier of driveline system products for Chrysler's Ram program and its derivatives. Sales to Chrysler accounted for approximately 10% of our total net sales in 2012, 8% in 2011 and 9% in 2010. A reduction in our sales to Chrysler or a reduction by Chrysler of its production of the Ram program, as a result of market share losses of Chrysler or otherwise, could have a material adverse effect on our results of operations and financial condition.

Our business is dependent on the rear-wheel drive light truck and SUV market segments in North America.

A substantial portion of our revenue is derived from products supporting RWD light truck and SUV platforms in North America. Sales and production levels of light trucks and SUVs are being affected by many factors, including changes in consumer demand; product mix shifts favoring other types of light vehicles, such as front-wheel drive based crossover vehicles and passenger cars; fuel prices; and government regulation, such as the corporate average fuel economy (CAFE) regulations and related emissions standards promulgated by federal and state regulators. In 2012, the Obama Administration announced new CAFE standards for cars and light-duty trucks, raising the standard to the equivalent of 54.5 miles per gallon by 2025. Our customers are currently planning for these regulations and the potential impact on consumer preferences and demand for vehicles. A reduction in the market segment we currently supply could have a material adverse impact on our results of operations and financial condition.



Our company or our customers may not be able to successfully and efficiently manage the timing and costs of new product program launches.

Certain of our customers are preparing to launch new product programs for which we will supply newly developed driveline system products and related components. There can be no assurance that we will successfully complete the transition of our manufacturing facilities and resources to support these new product programs or any other future product programs on a timely basis. Accordingly, the launch of new product programs may adversely affect production rates or other operational efficiency and profitability measures at our facilities. We may also experience difficulties with the performance of our supply chain on program launches, which could result in our inability to meet our contractual obligations to key customers. Production shortfalls or production delays, if any, could result in our failure to effectively manage our material and freight costs relating to these program launches. In addition, our customers may delay the launch or fail to successfully execute the launch of these new product programs, or any additional future product program for which we will supply products. Our revenues, operating results and financial condition could be adversely impacted if our customers fail to timely launch such programs or if we are unable to manage the timing requirements and costs of new product program launches.

Our company may not realize all of the revenue expected from our new and incremental business backlog.

The realization of incremental revenues from awarded business is inherently subject to a number of risks and uncertainties, including the accuracy of customer estimates relating to the number of vehicles to be produced in new and existing product programs and the timing of such production. It is also possible that our customers may delay or cancel a product program that has been awarded to us. Our revenues, operating results and financial condition could be adversely affected relative to our current financial plans if we do not realize substantially all the revenue from our new and incremental business backlog.

We are under continuing pressure from our customers to reduce our prices.

Annual price reductions are a common practice in the automotive industry. The majority of our products are sold under long-term contracts with prices scheduled at the time the contracts are established. Many of our contracts require us to reduce our prices in subsequent years and most of our contracts allow us to adjust prices for engineering changes. If we must accommodate a customer's demand for higher annual price reductions and are unable to offset the impact of any such price reductions through continued technology improvements, cost reductions or other productivity initiatives, our results of operations and financial condition could be adversely affected.

Our business could be adversely affected by disruptions in our supply chain and our customers' supply chain.

We depend on a limited number of suppliers for certain key components and materials needed for our products. We rely upon, and expect to continue to rely upon, certain suppliers for critical components and materials that are not readily available in sufficient volume from other sources. As we continue to expand our global manufacturing footprint, we need to rely on suppliers in local markets that have not yet proven their ability to meet our requirements. These supply chain characteristics make us susceptible to supply shortages and price increases. In addition, over the past several years, many of our direct material suppliers have filed for bankruptcy protection and restructured their operations to significantly reduce their installed capacity. If production volumes increase rapidly, there can be no assurance that the suppliers of critical components and materials will be able or willing to meet our future needs on a timely basis. A significant disruption in the supply of these materials could have a material adverse effect on our results of operations and financial condition.

Natural disasters, such as the earthquake in Japan and the floods in Thailand, affected the automotive industry's supply chain in 2011. Although our direct supply chain did not suffer any material effects from these natural disasters, future

natural disasters could cause a disruption in the supply of critical components to us and our customers and have a material adverse effect on our results of operations and financial condition.

Our business faces substantial competition.

The automotive industry is highly competitive. Our competitors include the driveline component manufacturing facilities controlled by certain existing OEMs, as well as many other domestic and foreign companies possessing the capability to produce some or all of the products we supply. Some of our competitors are affiliated with OEMs and others have economic advantages as compared to our business, such as patents, existing underutilized capacity and lower wage and benefit costs. Technology, design, quality, delivery and cost are the primary elements of competition in our industry segment. As a result of these competitive pressures and other industry trends, OEMs and suppliers are developing strategies to reduce costs. These strategies include supply base consolidation and global sourcing. Our business may be adversely affected by increased competition from suppliers benefiting from OEM affiliate relationships, bankruptcy reorganization or financial and other resources that we do not possess. Our business may also be adversely affected if we do not sustain our ability to meet customer requirements relative to technology, design, quality, delivery and cost.

We may incur material losses and costs as a result of product recall or field action, product liability and warranty claims, litigation and other disputes and claims.

We are exposed to warranty, product recall or field action and product liability claims in the event that our products fail to perform as expected, and we may be required to participate in a recall of such products. Prior to 2011, we experienced negligible warranty charges from our customers due to our contractual arrangements and the quality, warranty, reliability and durability performance of our products. As part of our 2009 Settlement and Commercial Agreement with GM, we agreed to expanded warranty cost sharing, which began on January 1, 2011. In addition, as we continue to diversify our customer base, we will have an increased obligation to share in the cost of providing warranties as part of our agreements with new customers. Costs and expenses associated with warranties, field actions, product recalls and product liability claims could have a material adverse impact on our results of operations and financial condition and may differ materially from the estimated liabilities that we have recorded in our consolidated financial statements.

We are also involved in various legal proceedings incidental to our business. Although we believe that none of these matters is likely to have a material adverse effect on our results of operations or financial condition, there can be no assurance as to the ultimate outcome of any such legal proceeding or any future legal proceedings.

Our business could be adversely affected by volatility in the price of raw materials.

Worldwide commodity market conditions have resulted in volatility in the cost of steel and other metallic materials in recent years. As general economic conditions have improved and customer demand has increased, the cost of steel and metallic materials needed for our products has increased. If we are unable to pass cost increases on to our customers, this could have a material adverse effect on our results of operations and financial condition.

Our business could be adversely affected if we fail to maintain satisfactory labor relations.

The majority of our hourly associates worldwide are members of industrial trade unions employed under the terms of collective bargaining agreements. Substantially all of our hourly associates in the U.S. are represented by the UAW. Approximately 3,850 of our hourly associates at our facilities in Mexico and Brazil are also covered by collective bargaining agreements which expire annually. There can be no assurance that future negotiations with our labor unions will be resolved favorably or that we will not experience a work stoppage or disruption that could have a material adverse impact on our results of operations and financial condition. In addition, there can be no assurance that such future negotiations will not result in labor cost increases or other terms and conditions that could adversely affect our results of operations and financial condition or our ability to compete for future business.



Our company's global operations are subject to risks and uncertainties.

We have business and technical offices and manufacturing facilities in many foreign countries, including Brazil, China, India, Mexico, Poland, Scotland, Sweden and Thailand. Approximately 8,375 of our 11,300 associates are located outside of the U.S. International operations are subject to certain risks inherent in conducting business outside the U.S., such as changes in currency exchange rates, tax laws, price and currency exchange controls, import restrictions, nationalization, expropriation and other governmental action. Our global operations may also be adversely affected by political events and domestic or international terrorist events and hostilities. These uncertainties could have a material adverse effect on the continuity of our business and our results of operations and financial condition. As we continue to expand our business globally, our success will depend, in part, on our ability to anticipate and effectively manage these and other risks.

Our financial condition and operations may be adversely affected by a violation of financial and other covenants.

Our Amended Revolving Credit Facility contains financial covenants related to secured indebtedness leverage and interest coverage. The Amended Revolving Credit Facility, our 9.25% Senior Secured Notes due 2017 (9.25% Notes) and the indentures governing our senior unsecured notes limit our ability to make certain investments, loans and guarantees, declare dividends or distributions on capital stock, redeem or repurchase capital stock and certain debt obligations, incur liens, incur indebtedness, enter into certain restrictive agreements, merge, make acquisitions or sell all or substantially all of our assets. The Amended Revolving Credit Facility and the 9.25% Notes also significantly restrict our ability to incur additional secured debt. The Amended Revolving Credit Facility, the 9.25% Notes and the indentures governing our senior unsecured notes also include customary events of default. Obligations under the Amended Revolving Credit Facility, the 9.25% Notes, the 7.75% senior unsecured notes due 2019 and our 6.625% Senior Unsecured Notes due 2022 (6.625% Notes) are required to be guaranteed by most of our U.S. subsidiaries that hold domestic assets. In addition, the Amended Revolving Credit Facility and the 9.25% Notes are secured on a first priority basis by all or substantially all of our assets, the assets of Holdings and each guarantor's assets, including a pledge of capital stock of our U.S. subsidiaries that hold domestic assets and a portion of the capital stock of the first tier foreign subsidiaries of AAM and each guarantor. A violation of any of these covenants or agreements could result in a default under these contracts, which could permit the lenders or note holders to accelerate repayment of any borrowings or notes outstanding at that time and levy on the collateral granted in connection with these contracts. A default or acceleration under the Amended Revolving Credit Facility, the 9.25% Notes or the indentures governing our senior unsecured notes may result in increased capital costs and defaults under our other debt agreements and may adversely affect our ability to operate our business, our subsidiaries' and guarantors' ability to operate their respective businesses and our results of operations and financial condition.

Our business could be adversely affected by the cyclical nature of the automotive industry.

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, such as credit availability, interest rates, fuel prices and consumer confidence. Our business may be further adversely affected by another economic decline that results in a further reduction of automotive production and sales by our largest customers. Our business may also be adversely affected by reduced demand for the product programs we currently support, or if we do not obtain sales orders for new or redesigned products that replace our current product programs.

Our company faces substantial pension and other postretirement benefit obligations.

We have significant pension and other postretirement benefit obligations to certain of our associates and retirees. Our ability to satisfy the funding requirements associated with these obligations will depend on our cash flow from operations and our ability to access credit and the capital markets. The funding requirements of these benefit plans,

and the related expense reflected in our financial statements, are affected by several factors that are subject to an inherent degree of uncertainty and volatility, including governmental regulation. Key assumptions used to value these benefit obligations and the cost of providing such benefits, funding requirements and expense recognition include the discount rate, the expected long-term rate of return on pension assets and the health care cost trend rate. If the actual trends in these factors are less favorable than our assumptions, this could have an adverse effect on our results of operations and financial condition.

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Our company's ability to operate effectively could be impaired if we lose key personnel.

Our success depends, in part, on the efforts of our executive officers and other key associates. In addition, our future success will depend on, among other factors, our ability to continue to attract and retain qualified personnel. The loss of the services of our executive officers or other key associates, or the failure to attract or retain associates, could have a material adverse effect on our results of operations and financial condition.

Our business is subject to costs associated with environmental, health and safety regulations.

Our operations are subject to various federal, state, local and foreign laws and regulations governing, among other things, emissions to air, discharge to waters and the generation, handling, storage, transportation, treatment and disposal of waste and other materials. We believe that our operations and facilities have been and are being operated in compliance, in all material respects, with such laws and regulations, many of which provide for substantial fines and criminal sanctions for violations. The operation of our manufacturing facilities entails risks in these areas, however, and there can be no assurance that we will not incur material costs or liabilities. In addition, potentially significant expenditures could be required in order to comply with evolving environmental, health and safety laws, regulations or other pertinent requirements that may be adopted or imposed in the future by governmental authorities.

We may be unable to consummate and successfully integrate acquisitions and joint ventures.

As we continue to expand globally, we have engaged, and may continue to engage, in acquisitions and joint ventures that involve potential risks, including failure to successfully integrate and realize the expected benefits of such acquisitions and joint ventures. Integrating acquired operations is a significant challenge and there is no assurance that we will be able to manage the integrations successfully. Failure to successfully integrate acquired operations or to realize the expected benefits of such acquisitions may have an adverse impact on our results of operations and financial condition.

Item 1B. Unresolved Staff Comments

None.

## Item 2. Properties

We operate in 13 countries and have 33 manufacturing, engineering and business office facilities worldwide of which the principal facilities are:

Name	Type of Interest	Function
Three Rivers Manufacturing Facility Three Rivers, MI	Owned	Front and rear axles and driveheads
Lancaster Manufacturing Facility Lancaster, Pennsylvania	Leased	Assembly of axles and driveheads for commercial vehicles
Colfor Manufacturing, Inc. Malvern, OH	Owned	Forged products
Minerva, OH	Owned	Forged and machined products and rear axles
MSP Industries Oxford, MI	Leased	Forged and machined products
Oxford Forge Oxford, MI	Owned	Forged products
AccuGear, Inc. Fort Wayne, IN	Owned	Forged and machined products
DieTronik Auburn Hills, MI	Owned	Tool & die manufacturer
Guanajuato Manufacturing Complex Guanajuato, Mexico	Owned	Rear axles and driveshafts, front axles, front auxiliary driveshafts, forging products, rear differential modules, power transfer units and transfer cases
AccuGear - Silao Silao, Mexico	Owned	Forged and machined products
Araucária Manufacturing Facility Araucária, Brazil	Owned	Front and rear axles, machining of forged and cast products, and constant velocity joints
Rayong Manufacturing Facility Rayong, Thailand	Owned	Front and rear axles and driveshafts
Albion Automotive Glasgow, Scotland	Leased	Front and rear axles for medium and heavy-duty trucks and buses and transfer cases
Changshu Manufacturing Facility Changshu, China	Owned	Front axles, independent rear drive axles, rear drive modules, gear sets and machined cases
Pantnagar Manufacturing Facility Pantnagar, India	Owned	Rear axles
Pune Manufacturing Facility Pune, India	Owned	Driveheads
Chennai Manufacturing Facility Chennai, India	Owned	Assembly of front and rear axles
Swidnica Manufacturing Facility Swidnica, Poland	Owned	Transmission differentials and machined products
World Headquarters Detroit, MI	Owned	Executive and administrative offices
Quality Engineering Technical Center Auburn Hills, MI	Owned	Prototypes, R&D, and design engineering
Technical Center Rochester Hills, MI	Owned	R&D, design engineering, metallurgy, testing and validation

We believe that our property and equipment is properly maintained and in good operating condition. We will continue to evaluate capacity requirements in light of current and projected market conditions. We also intend to continue redeploying assets in order to increase our capacity utilization and reduce future capital expenditures to support program launches.

## Item 3. Legal Proceedings

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 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 will continue to make, capital and other expenditures to comply with environmental requirements, including recurring administrative costs. Such expenditures were not significant in 2012, 2011 and 2010.

In February 2012, the International UAW filed suit in the United States District Court for the Eastern District of Michigan, alleging that AAM violated certain provisions of the collective bargaining agreement covering represented hourly associates at the Detroit Manufacturing Complex and Cheektowaga Manufacturing Facility related to pension and postretirement benefits. In 2012, we recorded \$28.7 million in cost of goods sold related to pension and postretirement benefits to be provided to certain eligible UAW associates as a result of our election to apply the provisions of Moving Ahead for Progress in the 21st Century Act (MAP-21) and the subsequent recertification of our U.S. hourly pension plan. In December 2012, we settled this matter with the International UAW. This settlement had no further impact on our operating results in 2012.

## Item 4. Mine Safety Disclosures

Not applicable.

## Part II

## Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

## Market Information

Our common stock, par value \$0.01 per share, is listed for trading on the New York Stock Exchange (NYSE) under the symbol "AXL."

## Stockholders and High and Low Sales Prices

	1 <sup>st</sup> Quarter	2 <sup>nd</sup> Quarter	3 <sup>rd</sup> Quarter	4 <sup>th</sup> Quarter	Full Year
2012					
High	\$12.95	\$12.06	\$12.80	\$12.48	\$12.95
Low	\$10.49	\$8.36	\$9.55	\$9.43	\$8.36
2011					
High	\$16.15	\$12.80	\$11.96	\$10.04	\$16.15
Low	\$12.38	\$9.79	\$6.98	\$7.01	\$6.98

Prices are the quarterly high and low closing sales prices for our common stock as reported by the NYSE. We had approximately 361 stockholders of record as of February 6, 2013.

## Dividends

We did not declare or pay any cash dividends on our common stock in 2012. Our senior debt agreements limit our ability to declare or pay dividends or distributions on capital stock.

Securities Authorized for Issuance under Equity Compensation Plans

The information regarding our securities authorized for issuance under equity compensation plans is incorporated by reference from our Proxy Statement.

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## Item 6. Selected Financial Data

## FIVE YEAR CONSOLIDATED FINANCIAL SUMMARY

Year Ended December 31,

	2012	2011	2010	2009	2008
	(in millions, except per share data)				
Statement of income data					
Net sales	\$2,930.9	\$2,585.0	\$2,283.0	\$1,521.6	\$2,109.2
Gross profit (loss)	399.7	455.1	401.7	(31.1 )	(865.2 )
Selling, general and administrative expenses	243.3	231.7	197.6	172.7	185.4
Operating income (loss)	156.4	223.4	204.1	(203.8 )	(1,050.6 )
Net interest expense	(101.0 )	(82.7 )	(85.2 )	(82.5 )	(67.9 )
Net income (loss)	366.7	(a)(b)(c) 137.1	(a)(b) 114.5	(253.3 )	(a)(b) (1,224.6 )
Net income (loss) attributable to AAM	367.7	(a)(b)(c) 142.8	(a)(b) 115.4	(253.1 )	(a)(b) (1,224.3 )
Diluted earnings (loss) per share	\$4.87	\$1.89	\$1.55	\$(4.81 )	\$(23.73 )
Diluted shares outstanding	75.4	75.4	74.5	52.6	51.6
Balance sheet data					
Cash and cash equivalents	\$62.4	\$169.2	\$244.6	\$178.1	\$198.8
Total assets	2,866.0	2,328.7	2,114.7	1,986.8	2,247.7
Total long-term debt	1,454.1	1,180.2	1,010.0	1,071.4	1,139.9
Total AAM stockholders' deficit	(120.8 )	(425.5 )	(479.5 )	(560.2 )	(435.7 )
Dividends declared per share	—	—	—	—	0.34
Statement of cash flows data					
Cash provided by (used in) operating activities	\$(175.5 )	\$(56.3 )	\$240.3	\$15.9	\$(163.1 )
Cash used in investing activities	(185.4 )	(184.1 )	(107.0 )	(74.6 )	(231.7 )
Cash provided by (used in) financing activities	253.5	167.2	(66.4 )	32.1	254.5
Dividends paid	—	—	—	—	(18.3 )
Other data					
Depreciation and amortization	\$152.2	\$139.4	\$131.6	\$134.7	\$199.5
Capital expenditures	207.6	163.1	108.3	137.7	147.3
Purchase buyouts of leased equipment	—	13.4	7.8	—	—
Proceeds from sale-leaseback of equipment	12.1	—	—	—	—

(a) Includes net special charges, curtailment gains, asset impairments and asset redeployment and other restructuring costs associated with plant closures of \$40.6 million in 2012 (including \$28.7 million of expense related to contractual termination benefits provided to certain eligible UAW associates as a result of the DMC and CKMF plant closures); asset impairments, other non-recurring costs and tax refunds of \$16.6 million in 2011 (including \$0.5 million related to the non-controlling interest portion of a \$1.6 million asset impairment recorded by e-AAM); \$120.5 million in 2009 and \$985.4 million in 2008 primarily related to restructuring actions.

(b)

Includes charges of \$19.8 million in 2012, \$3.1 million in 2011 and \$7.7 million in 2009 related to debt refinancing and redemption costs.

(c) Includes the impact of the reversal of our valuation allowance on U.S. federal deferred tax assets of \$337.5 million in the fourth quarter of 2012.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

COMPANY OVERVIEW

American Axle & Manufacturing Holdings, Inc. (Holdings) and its subsidiaries (collectively, we, our, us or AAM) is a Tier I supplier to the automotive industry. We manufacture, engineer, design and validate driveline and drivetrain systems and related components and chassis modules for light trucks, sport utility vehicles (SUVs), passenger cars, crossover vehicles and commercial vehicles. Driveline and drivetrain systems include components that transfer power from the transmission and deliver it to the drive wheels. Our driveline, drivetrain and related products include axles, chassis modules, driveshafts, power transfer units, transfer cases, chassis and steering components, driveheads, transmission parts and metal-formed products. In addition to locations in the United States (U.S.) (Michigan, Ohio, Indiana and Pennsylvania), we also have offices or facilities in Brazil, China, Germany, India, Japan, Luxembourg, Mexico, Poland, Scotland, South Korea, Sweden and Thailand.

We are the principal supplier of driveline components to General Motors Company (GM) for its rear-wheel drive (RWD) light trucks and SUVs manufactured in North America, supplying substantially all of GM's rear axle and four-wheel drive and all-wheel drive (4WD/AWD) axle requirements for these vehicle platforms. Sales to GM were approximately 73% of our total net sales in 2012 and 2011, and 75% of our total net sales in 2010.

We are the sole-source supplier to GM for certain axles and other driveline products for the life of each GM vehicle program covered by a Lifetime Program Contract (LPC). Substantially all of our sales to GM are made pursuant to the LPCs. The LPCs have terms equal to the lives of the relevant vehicle programs or their respective derivatives, which typically run 5 to 7 years, and require us to remain competitive with respect to technology, design and quality.

We are also the principal supplier of driveline system products for the Chrysler Group LLC's (Chrysler) heavy-duty Ram full-size pickup trucks (Ram program) and its derivatives. Sales to Chrysler were approximately 10% of our total net sales in 2012, 8% in 2011 and 9% in 2010. In addition to GM and Chrysler, we supply driveline systems and other related components to Volkswagen AG (Volkswagen), Mack Trucks Inc. (Mack Truck), PACCAR Inc., Harley-Davidson Inc., Tata Motors, Nissan Motor Co., Ltd. (Nissan), Ford Motor Company (Ford), Deere & Company, Scania AB, Audi AG (Audi) and other original equipment manufacturers (OEMs) and Tier I supplier companies such as Jatco Ltd. and Hino Motors Ltd. Our net sales to customers other than GM increased to \$792.6 million in 2012 as compared to \$710.0 million in 2011 and \$563.0 million in 2010.

In 2012, we took further actions in order to improve the market cost competitiveness of our labor cost structure and rationalize our operating capacity. We closed both the Detroit Manufacturing Complex (DMC) and the Cheektowaga Manufacturing Facility (CKMF) in February 2012, at the expiration of our collective bargaining agreement with the International UAW. As a result of these recent actions, along with others made over the past several years, we have aligned our global capacity with projected market demand and improved our regional cost competitiveness on a global basis. As a result of these plant closures, we recorded net special charges including curtailment gains, asset impairments, asset redeployment and other restructuring costs of \$40.6 million. As we look beyond 2012, we continue to focus on profitably growing sales, significantly diversifying our customer, product and geographic sales mix and strengthening our balance sheet.

INDUSTRY TRENDS

There are a number of significant trends affecting the highly competitive automotive industry. As general economic and industry specific conditions continue to stabilize and improve, the global automotive industry continues to experience intense competition, volatile fuel, steel, metallic and other commodity prices and significant pricing pressures. At the same time, the industry is focused on investing in future products that will incorporate the latest technology, meet changing customer demands and comply with more stringent government regulations.





In 2012, the U.S. Seasonally Adjusted Annual Rate of sales (SAAR) increased to 14.4 million units from 12.7 million in 2011. While the increase in production levels represents a significant year-over-year improvement, these production levels remain depressed in comparison to the 16.1 million U.S. SAAR experienced in 2007. Factors such as the depressed U.S. housing market and continued high unemployment rates may still hinder a full recovery of the domestic automotive industry over the next few years. Additionally, continued turmoil in the European credit markets and the debt crisis in the Euro-zone pose potential constraints to market stability and global growth in the automotive industry. However, as a result of the significant restructuring actions that were implemented over the previous years, and the increasing age of vehicles currently on the road, we expect that the U.S. domestic OEMs and their suppliers will continue to capitalize on these increased volumes and provide improved financial performance as the industry recovers.

**GLOBAL AUTOMOTIVE PRODUCTION** The trend toward the globalization of automotive production continues to intensify in regions such as Asia (particularly China, India, South Korea and Thailand), Eastern Europe and South America. Automotive production in these regions is expected to continue to grow while production in the traditional automotive production centers such as North America, Western Europe and Japan are continuing to improve from recent declines. We have significantly increased our global installed capacity to support current programs and future opportunities while reducing our installed capacity in the U.S. We have expanded our facilities in Brazil, Mexico and Poland, constructed new facilities in India, Mexico and Thailand and increased our investment in our China joint venture. We also have offices in Brazil, China, Germany, India, South Korea and Sweden to support these developing markets. We expect our business activity in these markets to increase significantly over the next several years. Approximately 40% of our new and incremental business backlog is for end use markets outside the U.S. and approximately 65% has been sourced to our manufacturing facilities outside the U.S.

**STEEL AND OTHER METALLIC COMMODITIES** Worldwide commodity market conditions have resulted in volatile steel and other metallic material prices. As general economic conditions have improved and production levels increased in 2012, demand for these commodities has grown and prices have risen. We have taken actions to mitigate the impact of this trend through commercial agreements with our customers, strategic sourcing arrangements with suppliers and technology advancements that result in using less metallic content or less expensive metallic content in the manufacturing of our products. The majority of our sales contracts with our largest customers provide price adjustment provisions for metal market price fluctuations. We do not have metal market price provisions with all of our customers for all of the parts that we sell. We also have agreed to share in the risk of metal market price fluctuations in certain customer contracts. As a result, we may experience higher net costs for raw materials. These cost increases would come in the form of metal market adjustments and base price increases. We currently have contracts with our steel suppliers that ensure continuity of supply to our principal operating facilities in North America. We also have validation and testing capabilities that enable us to strategically qualify steel sources on a global basis.

**PRICE PRESSURE** Year-over-year price reductions are a common competitive practice in the automotive industry. As OEMs continue to demand cost cutting initiatives, we anticipate increased pressure to reduce the cost of our own operations. The majority of our products are sold under long-term contracts with prices scheduled at the time the contracts are established. Many of our contracts require us to reduce our prices in subsequent years and most of our contracts allow us to adjust prices for engineering changes. We do not believe that the price reductions we have committed to our customers will have a material adverse impact on our future operating results because we intend to lessen the impact of such price reductions through continued cost reductions, efficiency improvements or other productivity initiatives.

**INCREASE IN DEMAND FOR ALTERNATIVE ENERGY SOURCES AND ELECTRONIC INTEGRATION** With a shift towards aggressive, environmentally focused legislation in the U.S., we have observed an increased demand for technologies designed to help reduce emissions, increase fuel economy and minimize the environmental impact of

vehicles. In August 2012, the Obama Administration announced the new CAFE standard for cars and light-duty trucks, raising the standard to the equivalent of 54.5 miles per gallon, by 2025. As a result, OEMs and suppliers are competing intensely to develop and market new and alternative technologies, such as electric vehicles, hybrid vehicles, fuel cells, diesel engines and efficiency improvements of driveline systems to improve fuel economy and emissions.

The electronic content of vehicles continues to expand, largely driven by consumer demand for greater vehicle performance, functionality, and affordable convenience options. This demand is a result of increased communication abilities in vehicles as well as increasingly stringent regulatory standards for energy efficiency, emissions reduction and increased safety. As these electronics continue to become more reliable and affordable, we expect this trend to continue. The increased use of electronics provides greater flexibility in vehicles and enables the OEMs to better control vehicle stability, fuel efficiency, and safety while improving the overall driving experience. Suppliers with enhanced capability in electronic integration have greater sourcing opportunities with OEMs and may be able to obtain more favorable pricing for these products.

We are responding to the continuing change in vehicle mix in the North American market as well as expected increases in CAFE regulations, with ongoing research and development (R&D) efforts that focus on fuel economy, emission reduction and environmental improvements. These efforts position us to compete as this product mix shift continues and have led to new business awards for products that support AWD and RWD passenger cars and crossover vehicles. We are continuing to invest in the development of advanced products focused on fuel economy, mass reductions, vehicle safety and performance leveraging electronics and technology. We have increased our focus on alternative energy and electronics by investing in product development that is consistent with the continued shift in market demand. Approximately 60% of AAM's new and incremental business backlog launching from 2013 to 2015, which is an estimated \$1.25 billion, relates to AAM's newest AWD systems for passenger cars and crossover vehicles. In 2010, we entered into a joint venture with Saab in which the new company, e-AAM (now our wholly-owned subsidiary), was created to engineer and develop electric and hybrid driveline systems to be commercialized for passenger cars and crossover vehicles. These systems are designed to improve fuel efficiency by up to 30%, reduce CO<sub>2</sub> emissions and provide AWD capability with the additional benefit of improved vehicle stability when compared to traditional mechanical AWD systems. We have also developed and commercialized a disconnecting AWD system, which strengthens AAM's position as a leader in global driveline systems technology. AAM's EcoTrac™ disconnecting AWD system is an industry-first technology that seamlessly engages AWD functionality while improving fuel efficiency and reducing CO<sub>2</sub> emissions. The system will be featured on a passenger car and crossover vehicle platform launching in 2013.

AAM also develops and manufactures high-efficiency axle systems which improve axle efficiency and fuel economy by using proprietary technologies to optimize product design and lubrication efficiency, while also significantly reducing friction. In 2012, AAM launched a high efficiency axle on the Cadillac ATS compact luxury sport sedan. Through the development of our EcoTrac™ disconnecting AWD system, our high efficiency axles and our e-AAM subsidiary, we have significantly advanced our efforts to improve fuel efficiency and ride and handling performance while reducing emissions.

## RESULTS OF OPERATIONS

**NET SALES** Net sales increased by 13% to \$2,930.9 million in 2012 as compared to \$2,585.0 million in 2011 and \$2,283.0 million in 2010.

Our sales in 2012, as compared to 2011, reflect an increase of approximately 3.8% in production volumes for the major North American light truck and SUV programs we currently support. These increases reflect the improvement in both general economic conditions and market conditions in the automotive industry. The increase in sales also reflects the favorable impact of new product launches, many of which support passenger car platforms.

Our sales in 2011, as compared to 2010, reflect an increase of approximately 7.5% in production volumes for the North American light truck and SUV programs we currently support for GM and Chrysler.

Our content-per-vehicle (as measured by the dollar value of our products supporting our customers' North American light truck and SUV programs) was \$1,473 in 2012 as compared to \$1,487 in 2011 and \$1,441 in 2010. The change in content-per-vehicle in 2012 as compared to 2011 is primarily due to a reduction in deferred revenue recognition related to the 2008 AAM - GM Agreement. The increase in 2011 as compared to 2010 is primarily due to mix shifts favoring the next generation of heavy-duty trucks for GM and higher metal market pass throughs.

Our 4WD/AWD penetration rate was 64.4% in 2012 as compared to 63.0% in 2011 and 64.2% in 2010. We define 4WD/AWD penetration as the total number of front axles we produce divided by the total number of rear axles we produce for the vehicle programs we support.

**GROSS PROFIT** Gross profit was \$399.7 million in 2012 as compared to \$455.1 million in 2011 and \$401.7 million in 2010. Gross margin was 13.6% in 2012 as compared to 17.6% in both 2011 and 2010. The change in gross profit in 2012 as compared to 2011 primarily reflects the impact of special charges related to the closure of DMC and CKMF, as well as costs associated with increased levels of global launch activity, which includes premium freight costs, lower capacity utilization and labor inefficiencies. We estimate premium freight costs to be approximately \$24 million in 2012. In addition, gross profit was adversely impacted by material cost inflation of approximately \$32 million and higher warranty accruals.

Gross profit in 2012 includes special charges of \$28.7 million of expense related to contractual termination benefits provided to certain eligible UAW associates as a result of the DMC and CKMF plant closures and \$32.5 million of expense primarily related to asset impairments, asset redeployment and other restructuring costs associated with the closure of DMC and CKMF. The impact on gross profit as a result of these special charges was partially offset by a \$21.8 million other postretirement benefits (OPEB) curtailment gain recorded as a result of the DMC and CKMF hourly associates who have terminated employment from AAM as a result of our plant closures and a \$5.2 million settlement gain related to the termination of the UAW Legal Services Plan. Also included in gross profit in 2012, is a gain of \$2.2 million related to the sale of CKMF.

The increase in gross profit in 2011 as compared to 2010 primarily reflects the positive impact of an increase in sales and productivity gains, partially offset by special charges and the impact of the implementation of certain provisions of the 2009 Settlement and Commercial Agreement with GM. These provisions were effective January 1, 2011 and, among other things, include expanded warranty cost sharing and product price-downs.

Gross profit in 2011 includes special charges and other non-recurring operating costs of \$15.0 million, which includes \$8.7 million of asset impairment charges and indirect inventory obsolescence as a result of the announced closure of CKMF and \$6.3 million of other plant closure related costs. Gross profit in 2011 also includes a \$6.1 million gain related to the sale of equipment that we had previously written down to its estimated fair value as a result of asset impairments.

Gross profit in 2010 includes the adverse impact of an arbitration ruling related to the transfer of certain production from DMC to another AAM facility for which we recorded a charge of \$5.3 million for wages and benefits owed to certain UAW represented associates at the DMC. Gross profit in 2010 also includes net special charges of \$1.1 million related to \$8.7 million of asset impairment and related charges at our Salem Manufacturing Facility, net of \$7.6 million of adjustments to previously recorded estimates for Supplemental Unemployment Benefits, idled leased assets and one-time termination benefit accruals.

**SELLING, GENERAL AND ADMINISTRATIVE EXPENSES (SG&A)** SG&A (including R&D) was \$243.3 million in 2012 as compared to \$231.7 million in 2011 and \$197.6 million in 2010. SG&A as a percentage of net sales was 8.3% in 2012, 9.0% in 2011 and 8.7% in 2010. The increase in SG&A in 2012 as compared to 2011 is primarily the result of higher R&D spending and increases in our salaried workforce to support worldwide growth, which is partially offset by lower incentive compensation accruals and stock-based compensation expense. The increase in SG&A in 2011 as compared to 2010 primarily reflects increased R&D spending, including costs related to e-AAM, a joint venture that we formed with Saab Automobile AB (Saab) in the fourth quarter of 2010 that is now a wholly-owned subsidiary.

In 2011, Saab filed for bankruptcy and entered into liquidation status. As a result, in 2011, we recorded a \$1.6 million impairment charge to SG&A to write off the intangible asset associated with the long-term supply agreement with

Saab acquired as part of our joint venture formation in 2010.

SG&A in 2010 included a \$3.3 million write down of administrative and engineering facilities located in Detroit, Michigan.

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**R&D** In 2012, R&D spending in product, process and systems was \$123.4 million as compared to \$113.6 million in 2011 and \$82.5 million in 2010. The focus of this investment continues to be developing innovative driveline and drivetrain systems and components for light trucks, SUVs, passenger cars, crossover vehicles and commercial vehicles in the global marketplace. Product development in this area includes power transfer units, transfer cases, driveline and transmission differentials, multi-piece driveshafts, halfshafts, torque transfer devices, and front and rear drive axles. We continue to focus on electronic integration in our existing and future products to advance their performance. We also continue to support the development of hybrid vehicle systems. Special emphasis is also placed on the development of products and systems that provide our customers with advancements in fuel efficiency and emissions reduction and improved performance metrics such as noise vibration harshness (NVH) and power density.

**OPERATING INCOME** Operating income was \$156.4 million in 2012 as compared to \$223.4 million in 2011 and \$204.1 million in 2010. Operating margin was 5.3% in 2012 as compared to 8.6% in 2011 and 8.9% in 2010. The changes in operating income and operating margin in 2012, 2011 and 2010 were due to the factors discussed in Gross Profit and SG&A.

**INTEREST EXPENSE** Interest expense was \$101.6 million in 2012, \$83.9 million in 2011 and \$89.0 million in 2010. The increase in interest expense in 2012 reflects higher average outstanding borrowings as compared to 2011. The decrease in interest expense in 2011 as compared to 2010 relates primarily to higher capitalized interest as a result of increased capital expenditures to support our significant global program launches.

The weighted-average interest rate of our total debt outstanding was 7.8%, 8.0% and 8.1% during 2012, 2011 and 2010, respectively.

**INVESTMENT INCOME** Investment income was \$0.6 million in 2012, \$1.2 million in 2011 and \$3.8 million in 2010. Investment income includes interest and dividends earned on cash and cash equivalents and short-term investments during the period. Investment income includes a gain of \$0.1 million and \$2.3 million in 2011 and 2010, respectively, related to distributions of our short-term investments from which distributions were previously suspended.

**OTHER INCOME (EXPENSE)** Following are the components of Other Income (Expense) for 2012, 2011 and 2010:

**Debt refinancing and redemption costs** In 2012, we expensed \$19.8 million of unamortized debt issuance costs, discount and prepayment premiums related to our Amended and Restated Revolving Credit Agreement, the purchase of \$137.8 million of our 5.25% Notes pursuant to a tender offer, the subsequent redemption of the remaining \$112.2 million of our 5.25% Notes and the voluntary redemption of \$42.5 million of our 9.25% Notes. In 2011, we expensed \$3.1 million of unamortized debt issuance costs, discount and prepayment premiums related to the voluntary redemption of \$42.5 million of our 9.25% Notes and the termination of our Second Lien Term Loan with GM.

**Other, net** Other, net, which includes the net effect of foreign exchange gains and losses and our proportionate share of earnings from equity in unconsolidated subsidiaries, was expense of \$4.1 million in 2012, income of \$0.5 million in 2011 and expense of \$0.1 million in 2010. The change in 2012, as compared to 2011, is primarily due to foreign exchange losses in our Brazil and Mexican operations.



**INCOME TAX EXPENSE (BENEFIT)** Income tax expense (benefit) was a benefit of \$335.2 million in 2012 as compared to expense of \$1.0 million in 2011 and expense of \$4.3 million in 2010. Our effective income tax rate was negative 1,064.2% in 2012 as compared to 0.7% in 2011 and 3.6% in 2010.

The following is a reconciliation of our provision for income taxes to the expected amounts using statutory rates:

	2012		2011		2010	
Federal statutory	35.0		% 35.0		% 35.0	%
Foreign income taxes	(85.0	)	(34.6	)	(42.9	)
State and local	3.5		(1.2	)	1.6	
Valuation allowance	(985.0	)	(30.7	)	(39.3	)
U.S. tax on unremitted foreign earnings	(29.5	)	26.3		49.6	
Other	(3.2	)	5.9		(0.4	)
Effective income tax rate	(1,064.2	)%	0.7		% 3.6	%

During 2012, our business returned to a position of cumulative profitability on a pre-tax basis, considering our operating results for the current year (2012) and the previous two years (2011 and 2010). We concluded that this record of cumulative profitability in recent years, in addition to the restructuring of our U.S. operations and our long range forecast showing continued profitability, has provided sufficient positive evidence that our net U.S. federal tax benefits more likely than not will be realized. Accordingly, in the fourth quarter of 2012, we released the valuation allowance against our net federal deferred tax assets for entities in the U.S., resulting in a \$337.5 million benefit in our 2012 provision for income taxes. Our income tax benefit and effective tax rate in 2012 reflect the impact of this valuation allowance reversal.

Our income tax expense and effective tax rate for 2012 also reflect a net tax expense of \$1.3 million related to the amendment of state income tax returns as a result of the settlement of federal income tax audits for the tax years 2004 through 2007.

As of December 31, 2012, we have retained a valuation allowance of approximately \$166.1 million related to net deferred tax assets in several foreign jurisdictions and U.S. state and local jurisdictions. See "Critical Accounting Estimates – Valuation of Deferred Tax Assets and Other Tax Liabilities" below for more detail on the impact of this reversal.

For each reporting period until the valuation allowance was released, we experienced low effective tax rates as we continued to record net tax expense only for those locations in which we did not have a valuation allowance in place. As a result of reversing our valuation allowance against our net federal deferred tax assets in the U.S. in 2012, we expect to experience higher effective tax rates going forward.

Our income tax expense and effective tax rate in 2011 reflect the effect of recognizing a net operating loss (NOL) benefit against our taxable income in the U.S. Our income tax expense for 2011 also reflects net tax benefits of \$4.5 million relating to the favorable resolution of income tax audits in the U.S. and the impacts of tax law changes in Brazil and the state of Michigan. Our low effective tax rate was primarily the result of our valuation allowance against deferred tax assets as of December 31, 2011.

Our income tax expense and effective tax rate for 2010 reflect the effect of recognizing an NOL benefit against our taxable income in the U.S. In conjunction with the filing of our 2009 federal tax return, under provisions contained in the American Recovery and Reinvestment Act of 2009, we recorded a tax benefit of \$1.4 million in 2010 attributable to the monetization of alternative minimum tax and research and development credits. We received this tax refund during the fourth quarter of 2010.



**NET LOSS ATTRIBUTABLE TO NONCONTROLLING INTERESTS** Net loss attributable to noncontrolling interests was \$1.0 million in 2012, \$5.7 million in 2011 and \$0.9 million in 2010. The decrease in 2012 as compared to 2011 is attributable to the acquisition of the noncontrolling interest in e-AAM in the first quarter of 2012. There is no longer an allocation of net loss attributable to noncontrolling interests related to this entity. The increase in 2011 as compared to 2010 primarily reflects the portion of the net expenses of e-AAM that relates to noncontrolling interests, which included an impairment charge of \$0.5 million in 2011 related to the write off of the Saab intangible asset.

**NET INCOME ATTRIBUTABLE TO AAM AND EARNINGS PER SHARE (EPS)** Net income attributable to AAM was \$367.7 million in 2012 as compared to \$142.8 million in 2011 and \$115.4 million in 2010. Diluted earnings per share was \$4.87 in 2012 as compared to \$1.89 per share in 2011 and \$1.55 per share in 2010. Net Income and EPS were primarily impacted by the factors discussed in Gross Profit, SG&A, Interest Expense, Debt Refinancing and Redemption Costs and Income Tax Expense (Benefit).

### LIQUIDITY AND CAPITAL RESOURCES

Our primary liquidity needs are to fund capital expenditures, debt service obligations and our working capital requirements. We believe that operating cash flow, available cash and cash equivalent balances and available committed borrowing capacity under our Amended Revolving Credit Facility will be sufficient to meet these needs.

**OPERATING ACTIVITIES** Net cash used in operating activities was \$175.5 million in 2012 as compared to net cash used in operating activities of \$56.3 million in 2011 and net cash provided by operating activities of \$240.3 million in 2010.

**Pension and OPEB** We contributed \$225.4 million to our pension trusts in 2012, which included our regulatory funding requirements of \$35.0 million. This compares to \$52.0 million in 2011, which included \$26.0 million of contributions that were in excess of our minimum statutory funding requirements for the 2011 calendar year, and \$44.0 million in 2010. This funding compares to our annual pension expense, including special and contractual termination benefits, curtailments and settlements of \$24.6 million in 2012, \$14.5 million in 2011 and \$12.6 million in 2010. Due to our significant pension contributions made in 2012, we do not expect to make any cash payments in 2013 to satisfy our regulatory funding requirements.

On September 27, 2012, AAM and the Pension Benefit Guaranty Corporation entered into an agreement regarding any liability that may have arisen under the Employee Retirement Income Security Act of 1974 in connection with the closures of DMC and CKMF. As part of this agreement, in the third quarter of 2012, we contributed \$114.7 million in excess of our statutory minimum to our U.S. hourly pension plan, which is included in the contributions described above.

Our cash outlay for OPEB, net of GM cost sharing, was \$11.5 million in both 2012 and 2011 and \$10.4 million in 2010. This compares to our annual postretirement cost, including special and contractual termination benefits, curtailments and settlements, of expense of \$3.3 million in 2012, \$15.2 million in 2011 and \$12.6 million in 2010. We expect our cash outlay for other postretirement benefit obligations in 2013, net of GM cost sharing, to be approximately \$15 million.

**GM Payment Terms** As a result of a change in the administration of GM supplier payment terms from pay on shipment to pay on receipt, our operating cash flow was negatively impacted by approximately \$33.1 million in 2012.

In conjunction with the 2009 Settlement and Commercial Agreement with GM, we agreed to expedited payment terms of "net 10 days" from GM (as compared to previously existing terms of approximately 45 days) in exchange for a 1% early payment discount. We estimated that the accelerated payment terms favorably impacted cash flow from

operations by approximately \$23 million in 2010. In 2011, we elected to terminate the expedited payment terms and transition to GM standard weekly payment terms of approximately 50 days. As a result of the termination of these expedited payment terms in 2011, our operating cash flow was negatively impacted by approximately \$190 million in 2011.

Cash paid for special charges In 2012, we made cash payments of \$37.9 million for special charges primarily related to asset redeployment, capital expenditures and other costs associated with the closure of DMC and CKMF in the first quarter of 2012. We paid \$34.6 million in 2011 related to asset redeployment and other costs associated with our announced closures of DMC and CKMF and leased assets that were permanently idled prior to 2011. In 2010, we paid \$46.9 million related to our ongoing restructuring actions. These cash payments primarily related to hourly and salaried workforce reductions initiated prior to 2010. We expect to make payments of \$0.5 million in 2013 related to our remaining restructuring accrual as of December 31, 2012.

In 2011, we paid \$18.6 million for purchase buyouts of leased equipment, of which \$13.4 million is included in the investing section of our Consolidated Statement of Cash Flows.

Incentive compensation payments We paid approximately \$37.0 million in 2012, approximately \$31.0 million in 2011 and approximately \$5.0 million in 2010 related to incentive compensation as a result of our increased profitability and statutory requirements in certain jurisdictions.

Sales and production volumes Cash provided by operating activities was favorably impacted by higher profits related to an increase in sales and production activity in 2011 and 2010.

Accounts receivable Accounts receivable at year-end 2012 were \$463.4 million as compared to \$333.3 million at year-end 2011 and \$146.6 million at year-end 2010. The increase in our year-end 2012 accounts receivable balance was primarily due to increased sales in November and December 2012 as compared to November and December of 2011, as well as the change in administration of GM payment terms. The increase in our year-end 2011 accounts receivable balance primarily reflects the termination of expedited payment terms with GM and the transition to standard weekly payment terms of approximately 50 days, effective June 30, 2011.

Inventories At year-end 2012, inventories were \$224.3 million as compared to \$177.2 million at year-end 2011 and \$130.3 million at year-end 2010. The increase in inventory in 2012, as compared to 2011, was primarily related to the impact of global sourcing and plant loading initiatives, new program launches and increased production in existing programs during 2012. The increase in inventory in 2011, as compared to 2010, primarily reflects increased inventory levels related to new program launches, higher production in existing programs, bank builds related to our pending DMC and CKMF plant closures and the ramp-up of production at our Rayong Manufacturing facility in Thailand.

Accounts payable At year-end 2012, accounts payable were \$396.1 million as compared to \$337.1 million at year-end 2011 and \$283.6 million at year-end 2010. The increase in accounts payable at year-end 2012, as compared to year-end 2011, primarily reflects an increase in sales and production levels and higher capital expenditures. The increase in accounts payable at year-end 2011 compared to year-end 2010 primarily reflects higher production levels, higher capital expenditures and the ramp up of activity at some of our foreign locations.

Interest paid Interest paid in 2012 was \$88.9 million as compared to \$73.1 million in 2011 and \$61.6 million in 2010. The increase in interest paid in 2012, as compared to 2011, and 2011, as compared to 2010, relates primarily to higher average outstanding borrowings during the year. The amount of accrued interest included in other accrued expenses on our Consolidated Balance Sheet was \$35.1 million and \$32.0 million as of December 31, 2012 and 2011, respectively.

Refundable income taxes In 2010, we collected a \$48.8 million refund as a result of a special carryback election which enabled us to carryback our 2008 NOL to 2003.

INVESTING ACTIVITIES Capital expenditures were \$207.6 million in 2012, \$163.1 million in 2011 and \$108.3 million in 2010. In 2012 and 2011, our capital spending primarily supported our significant global program launches

within our new and incremental business backlog.

We expect our capital spending, net of proceeds from the sale-leaseback of equipment and the sale of property, plant and equipment in 2013 to be approximately 7% of sales, which includes support for our significant global program launches in 2013 and 2014 within our new and incremental business backlog.

In the fourth quarter of 2012, we entered into a sale-leaseback transaction for equipment recently purchased. We received proceeds of \$12.1 million in 2012 related to this transaction.

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In 2009, we formed a JV with Hefei Automobile Axle Co, Ltd., (HAAC), a subsidiary of the JAC Group (Anhui Jianghuai Automobile Group Co, Ltd). In 2011, we expanded our existing JV with HAAC to include HAAC's light commercial axle business. We made an initial investment of \$10.2 million in 2009 related to the formation of this JV and an additional investment of \$16.5 million in 2011 related to the expansion of this JV. Each party continues to own 50 percent of the JV, which we account for under the equity method of accounting.

In 2008, certain money-market and other similar funds that we invested in temporarily suspended redemptions. We received \$6.4 million of redemptions in 2010 from these funds.

**FINANCING ACTIVITIES** Net cash provided by financing activities was \$253.5 million in 2012 as compared to net cash provided by financing activities of \$167.2 million in 2011 and net cash used in financing activities of \$66.4 million in 2010. Total debt outstanding was \$1,454.1 million at year-end 2012, \$1,180.2 million at year-end 2011 and \$1,010.0 million at year-end 2010. Total debt outstanding increased by \$273.9 million at year-end 2012 as compared to year-end 2011, primarily as a result of the issuance of \$550.0 million of 6.625% senior unsecured notes in the third quarter of 2012, which was partially offset by using the proceeds to purchase and redeem \$250.0 million of our 5.25% Notes and redeem \$42.5 million of our 9.25% Notes. The increase in total debt outstanding at year-end 2011 as compared to year-end 2010 was primarily due to the issuance of \$200.0 million of 7.75% senior unsecured notes in 2011, which was partially offset by using cash flow from operations to redeem \$42.5 million of our 9.25% Notes.

**Amended Revolving Credit Facility** On August 31, 2012, we amended and restated the Credit Agreement dated as of January 9, 2004 (as amended and restated, the "Amended and Restated Revolving Credit Agreement" and the facility thereunder, the "Amended Revolving Credit Facility"). As of December 31, 2012, the Amended Revolving Credit Facility provided up to \$72.8 million of revolving bank financing commitments through June 2013 and \$365.0 million of revolving bank financing commitments through June 30, 2016. At December 31, 2012, \$414.6 million was available under the Amended Revolving Credit Facility, which reflected a reduction of \$23.2 million for standby letters of credit issued against the facility.

The Amended and Restated Revolving Credit Agreement, among other things, increased the aggregate commitments by approximately \$116.0 million and increased the commitments maturing on June 30, 2016 (the class D facility) to \$365.0 million. The class D facility includes loans held by lenders that agreed to extend and/or increase their respective commitments and new lenders to the facility. The Amended and Restated Revolving Credit Agreement also includes a class C loan facility of approximately \$72.8 million, which matures on June 30, 2013. We expensed \$0.3 million for the write-off of a proportionate amount of unamortized debt issuance costs related to the class C facility. We had been amortizing the debt issuance costs over the expected life of the borrowing. We paid debt issuance costs of \$1.7 million, \$5.9 million and \$1.6 million associated with the amendments and restatements of our Revolving Credit Facility in 2012, 2011 and 2010, respectively.

Borrowings under the Amended Revolving Credit Facility bear interest at rates based on adjusted LIBOR or an alternate base rate, plus an applicable margin. The applicable margin for the class C and class D facilities remains unchanged.

Under the Amended Revolving Credit Facility, certain negative covenants were revised to provide increased flexibility. In the event AAM achieves investment grade corporate credit ratings from S&P and Moody's, AAM may elect to release all of the collateral from the liens granted pursuant to the Collateral Agreement, subject to notice requirements and other conditions.

The Amended Revolving Credit Facility is secured on a first priority basis by all or substantially all of the assets of AAM and each guarantor under the Collateral Agreement dated as of November 7, 2008, as amended and restated as of December 18, 2009 and as further amended on June 30, 2011, among AAM and its domestic subsidiaries and

JPMorgan Chase Bank, N.A., as collateral agent for the lenders under the Amended and Restated Revolving Credit Agreement and the secured noteholders under the Indenture dated as of December 18, 2009, among AAM, as issuer, the guarantors and U.S. Bank National Association, as trustee.

The Amended Revolving Credit Facility provides back-up liquidity for our foreign credit facilities. We intend to use the availability of long-term financing under the Amended Revolving Credit Facility to refinance any current maturities related to such debt agreements that are not otherwise refinanced on a long-term basis in their local markets.



9.25% Notes In 2009, we issued \$425.0 million of 9.25% senior secured notes due 2017 (9.25% Notes). The notes were issued at a discount of \$5.5 million. Net proceeds from these notes were used for the repayment of certain indebtedness. In 2010, we paid debt issuance costs of \$0.3 million related to the 9.25% Notes.

In 2012 and 2011, we elected to exercise an option to redeem 10% of the original amount of our 9.25% Notes outstanding at a redemption price of 103% of the principal amount. This resulted in principal payments of \$42.5 million and \$1.3 million for the redemption premiums, as well as payments of accrued interest in both 2012 and 2011. We expensed \$1.0 million in 2012 and \$1.4 million in 2011 for the write-off of a proportional amount of unamortized debt discount and issuance costs related to this debt. We had been amortizing the debt discount and debt issuance costs over the expected life of the borrowing. Pursuant to the terms of our 9.25% Notes, we have the right to voluntarily redeem an additional 10% in October 2013. In addition, we have the right to redeem any remaining 9.25% Notes outstanding in January 2014. We may elect to exercise our right to redeem the remaining 9.25% Notes, subject to our liquidity position and the appropriate market conditions.

The 9.25% Notes share the collateral package equally and ratably with the Amended Revolving Credit Facility described above. The indenture governing the 9.25% Notes limits our ability to make certain investments, declare or pay dividends or distributions on capital stock, redeem or repurchase capital stock and certain debt obligations, incur liens, incur indebtedness, transact with affiliates or merge, make acquisitions and sell assets.

7.875% Notes In 2007, we issued \$300.0 million of 7.875% senior unsecured notes due 2017. Net proceeds from these notes were used for general corporate purposes, including payment of amounts outstanding under our Revolving Credit Facility. Pursuant to the terms of our 7.875% Notes, we may voluntarily redeem any or all of the outstanding 7.875% Notes at any time. If favorable market conditions exist in the future and we have other available financing options, we would consider entering into a refinancing transaction to redeem or purchase the outstanding 7.875% Notes.

7.75% Notes In 2011, we issued \$200.0 million of 7.75% senior unsecured notes due 2019 (7.75% Notes). Net proceeds from these notes were used for general corporate purposes, including the repayment of certain amounts outstanding under our Amended Revolving Credit Facility. In 2011, we paid debt issuance costs of \$5.0 million related to the 7.75% Notes.

6.625% Notes In the third quarter of 2012, we issued \$550.0 million of 6.625% senior unsecured notes due 2022 (6.625% Notes). Concurrently with the offering of the 6.625% Notes, we made a tender offer to purchase our 5.25% Notes, of which the aggregate principal amount outstanding at the time of the tender offer was \$250.0 million. Net proceeds from the 6.625% Notes were used to fund the purchase of \$137.8 million of the outstanding 5.25% Notes pursuant to the tender offer, certain pension obligations and for other general corporate purposes. We also used the net proceeds to fund the redemption of the remaining 5.25% Notes, including the payment of interest, and to redeem \$42.5 million aggregate principal amount of our 9.25% notes. We paid debt issuance costs of \$8.9 million related to the 6.625% Notes in 2012.

5.25% Notes On September 18, 2012, in connection with the cash tender offer, we purchased \$137.8 million aggregate principal amount of the 5.25% Notes, and paid accrued interest. Upon purchase, we expensed \$9.2 million related to a tender premium, \$0.5 million of professional fees and unamortized debt issuance costs of \$0.1 million related to this debt. We had been amortizing the debt issuance costs over the expected life of the borrowing.

On October 3, 2012, we voluntarily redeemed the remaining 5.25% Notes outstanding. This resulted in a principal payment of \$112.2 million, a payment of \$7.3 million related to a make-whole premium, as well as payment of accrued interest. Upon redemption, we expensed \$0.1 million of unamortized debt discount and issuance costs related to this debt. We had been amortizing the debt issuance costs over the expected life of the borrowing.

2.00% Convertible Notes In 2006, the 2.00% Senior Convertible Notes due 2024 became convertible into cash under terms of the indenture. The remaining outstanding 2.00% Convertible Notes of \$0.4 million were fully redeemed and converted into cash in 2011.

Foreign credit facilities We utilize local currency credit facilities to finance the operations of certain foreign subsidiaries. At December 31, 2012, \$61.0 million was outstanding under these facilities and an additional \$15.1 million was available.

**Credit ratings** To access public debt capital markets, the Company relies on credit rating agencies to assign short-term and long-term credit ratings to our securities as an indicator of credit quality for fixed income investors. A credit rating agency may change or withdraw its ratings based on its assessment of our current and future ability to meet interest and principal repayment obligations. Credit ratings affect our cost of borrowing under our Amended Revolving Credit Facility and may affect our access to debt capital markets and other costs to fund our business. The credit ratings and outlook currently assigned to our securities by the rating agencies are as follows:

	Corporate Family Rating	Senior Secured Notes Rating	Senior Unsecured Notes Rating	Outlook
Standard & Poor's	BB-	BB	B	Stable
Moody's Investors Services	B1	Ba1	B2	Stable
Fitch Ratings	B+	BB+	B-	Positive

**Dividend program** In 2009, the Company's Board of Directors decided to discontinue the quarterly cash dividend. We have not declared or paid any cash dividends on our common stock in 2012, 2011 or 2010.

**Purchase of noncontrolling interest** In 2012, we paid \$4.0 million to acquire the remaining shares of e-AAM. e-AAM, previously a joint venture between AAM and Saab Automobile AB, was created to design and commercialize electric and hybrid driveline systems designed to improve fuel efficiency, reduce CO<sub>2</sub> emissions and provide AWD capability with the additional benefit of improved vehicle stability when compared to traditional mechanical AWD systems.

**Stock repurchase** In 2012, we repurchased 0.5 million shares of AAM common stock for \$5.9 million, in 2011, we repurchased shares of AAM common stock for \$0.1 million and in 2010, we repurchased 0.1 million shares of AAM common stock for \$1.3 million to satisfy employee tax withholding obligations due upon the vesting of our restricted stock grants.

**Exercise of employee stock options** We received \$0.1 million in 2012, \$4.6 million in 2011 and \$1.1 million in 2010 related to the exercise of employee stock options.

**Off-balance sheet arrangements** Our off-balance sheet financing relates principally to operating leases for machinery and equipment, commercial office and production facilities, vehicles and other assets. We lease certain machinery and equipment under operating leases with various expiration dates. In the fourth quarter of 2012, we entered into a sale-leaseback transaction for \$13.2 million of machinery and equipment to be used in production starting in 2013. Pursuant to these operating leases, we may have the option to purchase the underlying equipment on specified dates. Remaining lease repurchase options are \$4.6 million through 2016.

Contractual obligations The following table summarizes payments due on our contractual obligations as of December 31, 2012:

	Payments due by period				
	Total (in millions)	<1yr	1-3 yrs	3-5 yrs	>5 yrs
Long-term debt	\$1,448.5	\$55.2	\$5.8	\$637.5	\$750.0
Interest obligations	768.4	118.5	233.6	202.2	214.1
Capital lease obligations	5.6	0.3	0.8	0.9	3.6
Operating leases <sup>(1)</sup>	35.6	9.6	15.4	9.9	0.7
Purchase obligations <sup>(2)</sup>	231.9	208.7	23.2	—	—
Other long-term liabilities <sup>(3)</sup>	608.8	53.9	129.0	119.8	306.1
Total	\$3,098.8	\$446.2	\$407.8	\$970.3	\$1,274.5

Operating leases include all lease payments through the end of the contractual lease terms, which includes elections (1) for repurchase options and excludes any non-exercised purchase options. These commitments include machinery and equipment, commercial office and production facilities, vehicles and other assets.

(2) Purchase obligations represent our obligated purchase commitments for capital expenditures and related project expense.

(3) Other long-term liabilities represent our estimated pension and other postretirement benefit obligations, net of GM cost sharing, that were actuarially determined through 2022, as well as our unrecognized income tax benefits.

## 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. Accordingly, our quarterly results may reflect these trends.

## LEGAL PROCEEDINGS

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 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 will continue to make, capital and other expenditures (including recurring administrative costs) to comply with environmental requirements, including recurring administrative costs. Such expenditures were not significant in 2012, 2011 and 2010.

In February 2012, the International UAW filed suit in the United States District Court for the Eastern District of Michigan, alleging that AAM violated certain provisions of the collective bargaining agreement covering represented hourly associates at the Detroit Manufacturing Complex and Cheektowaga Manufacturing Facility related to pension and postretirement benefits. In 2012, we recorded \$28.7 million in cost of goods sold related to pension and postretirement benefits to be provided to certain eligible UAW associates as a result of our election to apply the

provisions of Moving Ahead for Progress in the 21st Century Act (MAP-21) and the subsequent recertification of our U.S. hourly pension plan. In December 2012, we settled this matter with the International UAW. This settlement had no further impact on our operating results in 2012.

## EFFECT OF NEW ACCOUNTING STANDARDS

On January 1, 2012, we adopted new accounting guidance on the presentation of comprehensive income. The new guidance allows an entity to present components of net income and other comprehensive income in one continuous statement, referred to as the statement of comprehensive income, or in two separate, but consecutive statements. We have elected to present the components of other comprehensive income in a separate statement immediately following the statement of income. The guidance eliminates the previous option to report other comprehensive income and its components in the statement of changes in equity. While the new guidance changes the presentation of comprehensive income, there are no changes to the components that are recognized in net income or other comprehensive income under current accounting guidance. Other than the change in presentation, the adoption of this new guidance has had no impact on our consolidated financial statements.

On January 1, 2012, we also adopted new accounting guidance on testing goodwill for impairment. This new guidance allows us the option to first assess qualitative factors to determine whether it is necessary to perform the two-step quantitative goodwill impairment test. Under this guidance, we are not required to calculate the fair value of a reporting unit unless we determine, based on a qualitative assessment, that it is more likely than not that its fair value is less than its carrying amount. The guidance includes a number of events and circumstances to consider in conducting the qualitative assessment. The adoption of this new accounting guidance did not have an effect on our 2012 goodwill impairment assessment.

On July 27, 2012, the FASB issued new accounting guidance, which amends the previous accounting guidance on testing indefinite-lived intangible assets, other than goodwill, for impairment. This new guidance allows us the option to first assess qualitative factors to determine whether it is necessary to calculate the fair value of the asset being tested. This new guidance will be effective for us as of January 1, 2013, with early adoption permitted. We do not believe that the adoption of this new accounting guidance will have a significant effect on our indefinite-lived intangible asset impairment assessments in the future.

## CRITICAL ACCOUNTING ESTIMATES

In order to prepare consolidated financial statements in conformity with accounting principles generally accepted in the United States of America (GAAP), we are required to make estimates and assumptions that affect the reported amounts and disclosures in our consolidated financial statements. These estimates are subject to an inherent degree of uncertainty and actual results could differ from our estimates.

Other items in our consolidated financial statements require estimation. In our judgment, they are not as critical as those disclosed below. We have discussed and reviewed our critical accounting estimates disclosure with the Audit Committee of our Board of Directors.

**PENSION AND OTHER POSTRETIREMENT BENEFITS** In calculating our assets, liabilities and expenses related to pension and OPEB, key assumptions include the discount rate, expected long-term rates of return on plan assets and rates of increase in health care costs.

The discount rates used in the valuation of our U.S. pension and OPEB obligations were based on an actuarial review of a hypothetical portfolio of long-term, high quality corporate bonds matched against the expected payment stream for each of our plans. In 2012, the weighted average discount rates determined on that basis were 4.01% for the valuation of our pension benefit obligations and 4.05% for the valuation of our OPEB obligations. The discount rate used in the valuation of our U.K. pension obligation was based on a review of long-term bonds, including published indices in the applicable market. In 2012, the discount rate determined on that basis was 4.30%. The expected long-term rates of return on our plan assets were 7.50% for our U.S. plans and 4.35% for our U.K. plan in 2012. We

developed these rates of return assumptions based on future capital market expectations for the asset classes represented within our portfolio and a review of long-term historical returns. The asset allocation for our plans was developed in consideration of the demographics of the plan participants and expected payment stream of the liability. Our investment policy allocates 35-65% of the U.S. plans' assets to equity securities, depending on the plan, with the remainder invested in fixed income securities, hedge fund investments and cash. The rates of increase in health care costs are based on current market conditions, inflationary expectations and historical information.

All of our assumptions were developed in consultation with our actuarial service providers. While we believe that we have selected reasonable assumptions for the valuation of our pension and OPEB obligations at year-end 2012, actual trends could result in materially different valuations.

The effect on our pension plans of a 0.5% decrease in both the discount rate and expected return on assets is shown below as of December 31, 2012, our valuation date.

	Discount Rate (in millions)	Expected Return on Assets
Decline in funded status	\$64.7	N/A
Increase in 2012 expense	\$1.9	\$2.4

No changes in benefit levels and no changes in the amortization of gains or losses have been assumed.

For 2013, we assumed a weighted average annual increase in the per-capita cost of covered health care benefits of 8.0% for OPEB. The rate is assumed to decrease gradually to 5.0% by 2019 and remain at that level thereafter. A 0.5% decrease in the discount rate for our OPEB would have decreased total expense in 2012 and increased the postretirement obligation, net of GM cost sharing, at December 31, 2012 by \$0.5 million and \$22.6 million, respectively. A 1.0% increase in the assumed health care trend rate would have increased total service and interest cost in 2012 and the postretirement obligation, net of GM cost sharing, at December 31, 2012 by \$1.6 million and \$35.9 million, respectively.

As part of our 2009 Settlement and Commercial Agreement, GM confirmed its obligation to share in the cost of OPEB for eligible retirees proportionally based on the length of service an employee had with AAM and GM. We estimate the future cost sharing payments and present it as an asset on our Consolidated Balance Sheet. As of December 31, 2012, we estimated \$273.0 million in future GM cost sharing. If, in the future, GM was unable to fulfill this financial obligation, our OPEB expenses may be different than our current estimates.

**VALUATION OF DEFERRED TAX ASSETS AND OTHER TAX LIABILITIES** Because we operate in many different geographic locations, including several foreign, state and local tax jurisdictions, the evaluation of our ability to use all recognized deferred tax assets is complex.

We are required to estimate whether recoverability of our deferred tax assets is more likely than not, based on forecasts of taxable income in the related tax jurisdictions. In these estimates, we use historical results, projected future operating results based upon approved business plans, eligible carryforward periods, tax planning opportunities and other relevant considerations. This includes the consideration of tax law changes, prior profitability performance and the uncertainty of future projected profitability.

Under applicable GAAP, a sustained period of profitability in our operations is required before we would change our judgment regarding the need for a valuation allowance against our net deferred tax assets. During 2012, our business returned to a position of cumulative profitability on a pre-tax basis, considering our operating results for the current year (2012) and the previous two years (2011 and 2010). We concluded that this record of cumulative profitability in recent years, in addition to the restructuring of our U.S. operations and our long range forecast showing continued profitability, has provided sufficient positive evidence that our net U.S. federal tax benefits more likely than not will be realized. Accordingly, in the fourth quarter of 2012, we released the valuation allowance against our net federal deferred assets for entities in the U.S., resulting in a \$337.5 million benefit in our 2012 provision for income taxes. As of December 31, 2012, we have retained a valuation allowance of \$166.1 million related to deferred tax assets in several foreign jurisdictions and U.S. state and local jurisdictions. As of December 31, 2011 and 2010, we had



valuation allowances of \$426.9 million and \$560.9 million, respectively. In 2011 and 2010, these valuation allowances mainly related to the full valuation allowances on our U.S. net deferred tax assets.

If, in the future, we generate taxable income on a sustained basis in foreign and U.S. state jurisdictions for which we have recorded valuation allowances, our current estimate of the recoverability of our deferred tax assets could change and result in the future reversal of some or all of the valuation allowance. While we believe we have made appropriate valuations of our deferred tax assets, unforeseen changes in tax legislation, regulatory activities, audit results, operating results, financing strategies, organization structure and other related matters may result in material changes in our deferred tax asset valuation allowances or our tax liabilities.

To the extent our uncertain tax positions do not meet the “more likely than not” threshold, we have derecognized such positions. To the extent our uncertain tax positions meet the “more likely than not” threshold, we have measured and recorded the highest probable benefit, and have established appropriate reserves for benefits that exceed the amount likely to be defended upon examination.

As of December 31, 2012, 2011 and 2010, we have recorded a liability for unrecognized income tax benefits and related interest and penalties of \$30.9 million, \$33.2 million and \$69.0 million, respectively. Our U.S. federal and certain state income tax returns and certain non-U.S. income tax returns are currently under various stages of audit by the relevant tax authorities. We will continue to monitor the progress and conclusions of all ongoing audits and will adjust our estimated liability as necessary.

**PRODUCT WARRANTY** We record a liability against cost of goods sold for estimated warranty obligations at the dates our products are sold or when specific warranty issues are identified. Liabilities for product recalls are recorded at the time the company's obligation is probable and can be reasonably estimated. Product warranties not expected to be paid within one year are recorded as a non-current liability on our Consolidated Balance Sheet. Our estimated warranty obligations for products sold are based on significant management estimates, with input from our warranty, sales, engineering, quality and legal departments. For products and customers with actual warranty payment experience, we will estimate warranty costs principally based on past claims history. For certain products and customers, actual warranty payment experience does not exist or is not mature. In these cases, we estimate our costs based on our analysis of the contractual arrangements with individual customers, existing customer warranty programs, sales history and internal and external warranty data, including a determination of our involvement in the matter giving rise to the potential warranty issue or claim and estimates of repair costs. These estimates are re-evaluated on a quarterly basis.

As part of the 2009 Settlement and Commercial Agreement, we agreed to expanded warranty cost sharing with GM, which began on January 1, 2011.

We actively study trends of our warranty claims and take action to improve product quality and minimize warranty claims. Warranty accruals are evaluated and adjusted as appropriate based on occurrences giving rise to potential warranty exposure and associated experience. Our warranty accrual was \$29.1 million as of December 31, 2012 and \$13.4 million as of December 31, 2011. Actual experience could differ from the amounts estimated requiring adjustments to these liabilities in future periods. While we have not experienced any significant differences between these estimates and our actual costs, it is possible that changes in our assumptions or future warranty issues could materially affect our financial position and results of operations.

**ENVIRONMENTAL OBLIGATIONS** Due to the nature of our operations, we have legal obligations to perform asset retirement activities related to federal, state, local and foreign environmental requirements. The process of estimating environmental liabilities is complex and significant uncertainty exists related to the timing and method of the settlement of these obligations. Therefore, these liabilities are not reasonably estimable until a triggering event occurs that allows us to estimate a range and possibilities of potential settlement dates, and the potential methods of settlement.

As a result of the plant closures, idling and consolidation of facilities in 2011 and 2010, the methods and timing of certain asset retirement obligations related to these facilities became reasonably estimable. Based on management's best estimate of the costs, methods and timing of the settlement of these obligations, we recorded a charge of \$0.1 million in 2011 and 2010. As of December 31, 2012, the accrual for this liability was \$0.5 million. In the future, we will update our estimated costs and potential settlement dates and methods and their associated probabilities based on current information. Any update may change our best estimate and could result in a material adjustment to this liability.

**GOODWILL** We review our goodwill for impairment annually during the fourth quarter. In addition, we review goodwill for impairment whenever adverse events or changes in circumstances indicate a possible impairment. This review utilizes a two-step impairment test covering goodwill and other indefinite-lived intangibles. The first step involves a comparison of the fair value of a reporting unit with its carrying value. If the carrying value of the reporting unit exceeds its fair value, the second step of the process involves a measurement and comparison of the fair value of goodwill with its carrying value. If the carrying value of the reporting unit's goodwill exceeds the fair value of that goodwill, an impairment loss is recognized in an amount equal to the excess.

The determination of our reporting units, impairment indicators and the fair value of those reporting units and corresponding goodwill require us to make significant judgments and estimates, including the extent and timing of future cash flows. As part of the determination of future cash flows, we need to make assumptions on future general economic conditions, business projections, growth rates and discount rates. These assumptions require significant judgment and are subject to a considerable degree of uncertainty. We believe that the assumptions and estimates in our review of goodwill for impairment are reasonable. However, different assumptions could materially effect our conclusions on this matter. We performed our annual analysis in the fourth quarter and determined there was no impairment to goodwill in 2012.

**IMPAIRMENT OF LONG-LIVED ASSETS** Long-lived assets, excluding goodwill and other indefinite-lived intangible assets, to be held and used are reviewed for impairment whenever adverse events or changes in circumstances indicate a possible impairment. Recoverability of each "held for use" asset group affected by impairment indicators is determined by comparing the forecasted undiscounted cash flows of the operations to which the assets relate to their carrying amount. If the carrying amount of an asset group exceeds the undiscounted cash flows and is therefore nonrecoverable, the assets in this group are written down to their estimated fair value. We estimate fair value based on market prices, when available, or on a discounted cash flow analysis. Long-lived assets held for sale are recorded at the lower of their carrying amount or fair value less cost to sell. Significant judgments and estimates used by management when evaluating long-lived assets for impairment include:

- An assessment as to whether an adverse event or circumstance has triggered the need for an impairment review;
- Determination of asset groups, the primary asset within each group, and the primary asset's average estimated useful life;
- Undiscounted future cash flows generated by the assets; and
- Determination of fair value when an impairment is deemed to exist, which may require assumptions related to future general economic conditions, future expected production volumes, product pricing and cost estimates, working capital and capital investment requirements, discount rates and estimated liquidation values.

In 2012, we recorded asset impairment charges of \$5.8 million related to previously purchased lease buyouts of equipment that we no longer expect to use in our operations. In 2011, we recorded asset impairment charges of \$8.1 million as a result of the announced closure of CKMF. In 2010, we recorded asset impairment charges of \$8.4 million as a result of the announced closure of our Salem Manufacturing Facility. We also classified certain administrative and engineering facilities located in Detroit, Michigan as held-for-sale and recorded a loss of \$5.1 million to write these assets down to their estimated fair value using available market data in 2010.

**ESTIMATED USEFUL LIVES FOR DEPRECIATION** At December 31, 2012, approximately 77% of our capitalized investment in property, plant and equipment was related to productive machinery and equipment used in support of our manufacturing operations. The selection of appropriate useful life estimates for such machinery and equipment is a critical element of our ability to properly match the cost of such assets with the operating profits and cash flow generated by their use. We currently depreciate productive machinery and equipment on the straight-line method using composite useful life estimates up to 12 years.

While we believe that the useful life estimates currently being used for depreciation purposes reasonably approximate the period of time we will use such assets in our operations, unforeseen changes in product design and technology standards or cost, quality and delivery requirements may result in actual useful lives that differ materially from the current estimates.

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## Forward-Looking Statements

In this MD&A and elsewhere in this Annual 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” 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:

- global economic conditions, including the impact of the debt crisis in the Euro-zone;
- reduced purchases of our products by GM, Chrysler or other customers;
- reduced demand for our customers' products (particularly light trucks and SUVs produced by GM and Chrysler);
- our ability or our customers' and suppliers' ability to successfully launch new product programs on a timely basis;
- our ability to realize the expected revenues from our new and incremental business backlog;
- our ability to respond to changes in technology, increased competition or pricing pressures;
- supply shortages or price increases in raw materials, utilities or other operating supplies for us or our customers as a result of natural disasters or otherwise;
- liabilities arising from warranty claims, product recall or field actions, product liability and legal proceedings to which we are or may become a party;
- our ability to achieve the level of cost reductions required to sustain global cost competitiveness;
- our ability to attract new customers and programs for new products;
- price volatility in, or reduced availability of, fuel;
- our ability to develop and produce new products that reflect market demand;
- lower-than-anticipated market acceptance of new or existing products;
- our ability to maintain satisfactory labor relations and avoid work stoppages;
- our suppliers', our customers' and their suppliers' ability to maintain satisfactory labor relations and avoid work stoppages;
- risks inherent in our international operations (including adverse changes in political stability, taxes and other law changes, potential disruptions of production and supply, and currency rate fluctuations);
- availability of financing for working capital, capital expenditures, R&D or other general corporate purposes, including 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;
- adverse changes in laws, government regulations or market conditions affecting our products or our customers' products (such as the Corporate Average Fuel Economy (“CAFE”) regulations);
- changes in liabilities arising from pension and other postretirement benefit obligations;
- our ability to attract and retain key associates;
- risks of noncompliance with environmental laws and regulations or risks of environmental issues that could result in unforeseen costs at our facilities;
- our ability or our customers' and suppliers' ability to comply with the Dodd-Frank Act and other regulatory requirements and the potential costs of such compliance;
- our ability to consummate and integrate acquisitions and joint ventures;
- 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.

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Item 7A. Quantitative and Qualitative Disclosures about Market Risk

MARKET RISK

Our business and financial results are affected by fluctuations in world 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 EXCHANGE RISK** From time to time, we use foreign currency forward contracts to reduce the effects of fluctuations in exchange rates, primarily relating to the Mexican Peso, Euro and Pound Sterling. At December 31, 2012, we had forward contracts with a notional amount of \$31.9 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 \$2.9 million at December 31, 2012.

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 activities may be adversely affected by changes in currency exchange rates. If and when appropriate, we intend to manage these risks by 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. As of December 31, 2012, there are no interest rate swaps in place. The pre-tax earnings and cash flow impact of a one-percentage-point increase in interest rates (approximately 13% of our weighted-average interest rate at December 31, 2012) on our long-term debt outstanding at December 31, 2012 would be approximately \$0.6 million on an annualized basis.



## AMERICAN AXLE &amp; MANUFACTURING HOLDINGS, INC.

## Item 8. Financial Statements and Supplementary Data

Consolidated Statements of Income  
Year Ended December 31,

	2012	2011	2010
	(in millions, except per share data)		
Net sales	\$2,930.9	\$2,585.0	\$2,283.0
Cost of goods sold	2,531.2	2,129.9	1,881.3
Gross profit	399.7	455.1	401.7
Selling, general and administrative expenses	243.3	231.7	197.6
Operating income	156.4	223.4	204.1
Interest expense	(101.6	) (83.9	) (89.0
Investment income	0.6	1.2	3.8
Other income (expense)			
Debt refinancing and redemption costs	(19.8	) (3.1	) —
Other, net	(4.1	) 0.5	(0.1
Income before income taxes	31.5	138.1	118.8
Income tax expense (benefit)	(335.2	) 1.0	4.3
Net income	\$366.7	\$137.1	\$114.5
Net loss attributable to noncontrolling interests	1.0	5.7	0.9
Net income attributable to AAM	\$367.7	\$142.8	\$115.4
Basic earnings per share	\$4.88	\$1.91	\$1.61
Diluted earnings per share	\$4.87	\$1.89	\$1.55

See accompanying notes to consolidated financial statements

## AMERICAN AXLE &amp; MANUFACTURING HOLDINGS, INC.

Consolidated Statements of Comprehensive Income  
Year Ended December 31,

	2012 (in millions)	2011	2010
Net income	\$366.7	\$137.1	\$114.5
Other comprehensive income (loss), net of tax			
Defined benefit plans, net of \$32.3 million of tax in 2012	(58.9	) (63.5	) (50.3
Foreign currency translation adjustments	(9.4	) (27.3	) 7.3
Change in derivatives	7.8	(6.8	) 1.3
Other comprehensive loss	(60.5	) (97.6	) (41.7
Comprehensive income	306.2	39.5	72.8
Net loss attributable to noncontrolling interests	1.0	5.7	0.9
Foreign currency translation adjustments attributable to noncontrolling interests	0.3	0.2	(0.1
Comprehensive income attributable to AAM	\$306.9	\$45.0	\$73.8

See accompanying notes to consolidated financial statements

## AMERICAN AXLE &amp; MANUFACTURING HOLDINGS, INC.

## Consolidated Balance Sheets

December 31,

	2012	2011
Assets	(in millions, except per share data)	
Current assets		
Cash and cash equivalents	\$62.4	\$169.2
Accounts receivable, net	463.4	333.3
Inventories, net	224.3	177.2
Deferred income taxes	34.9	11.3
Prepaid expenses and other	87.1	72.1
Total current assets	872.1	763.1
Property, plant and equipment, net	1,009.7	971.2
Deferred income taxes	366.1	20.1
Goodwill	156.4	155.9
GM postretirement cost sharing asset	259.7	260.2
Other assets and deferred charges	202.0	158.2
Total assets	\$2,866.0	\$2,328.7
Liabilities and Stockholders' Deficit		
Current liabilities		
Accounts payable	\$396.1	\$337.1
Accrued compensation and benefits	84.9	110.6
Deferred revenue	17.2	32.9
Deferred income taxes	1.4	9.9
Other accrued expenses	101.2	85.6
Total current liabilities	600.8	576.1
Long-term debt	1,454.1	1,180.2
Deferred income taxes	9.5	7.7
Deferred revenue	82.2	88.2
Postretirement benefits and other long-term liabilities	840.2	896.1
Total liabilities	2,986.8	2,748.3
Stockholders' deficit		
Series A junior participating preferred stock, par value \$0.01 per share; 0.1 million shares authorized; no shares outstanding in 2012 or 2011	—	—
Preferred stock, par value \$0.01 per share; 10.0 million shares authorized; no shares outstanding in 2012 or 2011	—	—
Common stock, par value \$0.01 per share; 150.0 million shares authorized; 80.9 million and 79.3 million shares issued and outstanding in 2012 and 2011, respectively	0.8	0.8
Series common stock, par value \$0.01 per share; 40.0 million shares authorized; no shares outstanding in 2012 or 2011	—	—
Paid-in capital	600.9	597.2
Accumulated deficit	(275.8)	(643.5)
Treasury stock at cost, 6.0 million shares in 2012 and 5.5 million shares in 2011	(182.1)	(176.2)
Accumulated other comprehensive income (loss), net of tax		
Defined benefit plans	(274.5)	(215.6)

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Foreign currency translation adjustments	7.6	17.3	
Unrecognized gain (loss) on derivatives	2.3	(5.5	)
Total AAM stockholders' deficit	(120.8	) (425.5	)
Noncontrolling interests in subsidiaries	—	5.9	
Total stockholders' deficit	(120.8	) (419.6	)
Total liabilities and stockholders' deficit	\$2,866.0	\$2,328.7	

See accompanying notes to consolidated financial statements

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## AMERICAN AXLE &amp; MANUFACTURING HOLDINGS, INC.

Consolidated Statements of Cash Flows  
Year Ended December 31,

	2012 (in millions)	2011	2010
<b>Operating Activities</b>			
Net income	\$366.7	\$137.1	\$114.5
Adjustments to reconcile net income to net cash provided by (used in) operating activities			
Asset impairments and related indirect inventory obsolescence	5.8	8.7	8.7
Depreciation and amortization	152.2	139.4	131.6
Deferred income taxes	(343.8)	) 17.2	(8.0)
Stock-based compensation	2.4	4.5	9.4
Pensions and other postretirement benefits, net of contributions	(208.4)	) (33.3)	) (28.8)
(Gain) loss on retirement of equipment and held-for-sale assets, net	(1.9)	) (6.9)	) 2.9
Debt refinancing and redemption costs	1.5	1.8	—
Changes in operating assets and liabilities			
Accounts receivable	(130.6)	) (189.9)	) (14.8)
Inventories	(49.9)	) (50.2)	) (38.9)
Accounts payable and accrued expenses	60.9	37.1	112.0
Deferred revenue	(21.6)	) (74.7)	) (70.1)
Other assets and liabilities	(8.8)	) (47.1)	) 21.8
Net cash provided by (used in) operating activities	(175.5)	) (56.3)	) 240.3
<b>Investing activities</b>			
Purchases of property, plant and equipment	(207.6)	) (163.1)	) (108.3)
Proceeds from sale of property, plant and equipment	10.1	8.9	4.9
Proceeds from sale-leaseback of equipment	12.1	—	—
Purchase buyouts of leased equipment	—	(13.4)	) (7.8)
Acquisition, net	—	(16.5)	) (2.2)
Redemption of short-term investments	—	—	6.4
Net cash used in investing activities	(185.4)	) (184.1)	) (107.0)
<b>Financing activities</b>			
Net short-term borrowings (repayments) under credit facilities	10.4	2.6	(60.0)
Proceeds from issuance of long-term debt	562.6	227.0	6.2
Payments of other long-term debt and capital lease obligations	(299.1)	) (56.0)	) (8.1)
Debt issuance costs	(10.6)	) (10.9)	) (2.2)
Purchase of noncontrolling interest	(4.0)	) —	(2.1)
Employee stock option exercises, including tax benefit	0.1	4.6	1.1
Purchase of treasury stock	(5.9)	) (0.1)	) (1.3)
Net cash provided by (used in) financing activities	253.5	167.2	(66.4)
Effect of exchange rate changes on cash	0.6	(2.2)	) (0.4)
Net increase (decrease) in cash and cash equivalents	(106.8)	) (75.4)	) 66.5
Cash and cash equivalents at beginning of year	169.2	244.6	178.1
Cash and cash equivalents at end of year	\$62.4	\$169.2	\$244.6

Supplemental cash flow information				
Interest paid	\$88.9	\$73.1	\$61.6	
Income taxes paid (refunds received)	\$14.7	\$10.9	\$(43.1	)

See accompanying notes to consolidated financial statements

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## AMERICAN AXLE &amp; MANUFACTURING HOLDINGS, INC.

## Consolidated Statement of Stockholders' Deficit

	Common Stock Shares Outstanding (in millions)	Par Value	Paid-in Capital	Accumulated Deficit	Treasury Stock	Accumulated Other Comprehensive Income (Loss) Attributable to AAM	Noncontrolling Interests in Subsidiaries
Balance at January 1, 2010	68.4	\$0.8	\$579.9	\$(901.7)	\$(174.8)	\$(64.4)	\$0.3
Net income				115.4			(0.9)
Change in derivatives, net						1.3	
Foreign currency translation, net						7.4	(0.1)
Defined benefit plans, net						(50.3)	
Acquisition of noncontrolling interest			(2.1)				0.1
Issuance of noncontrolling interest in e-AAM							12.0
Exercise of stock options and vesting of restricted stock	0.5		1.1				
Stock-based compensation			9.2				
Purchase of treasury stock	(0.1)	)			(1.3)		
Balance at December 31, 2010	68.8	\$0.8	\$588.1	\$(786.3)	\$(176.1)	\$(106.0)	\$11.4
Net income				142.8			(5.7)
Change in derivatives, net						(6.8)	
Foreign currency translation, net						(27.5)	0.2
Defined benefit plans, net						(63.5)	
Exercise of stock options and vesting of restricted stock	1.7		4.6				
Stock-based compensation			4.5				
Exercise of GM warrants	3.3						
Purchase of treasury stock	—				(0.1)		
Balance at December 31, 2011	73.8	\$0.8	\$597.2	\$(643.5)	\$(176.2)	\$(203.8)	\$5.9
Net income				367.7			(1.0)
Change in derivatives, net						7.8	
Foreign currency translation, net						(9.7)	0.3
Defined benefit plans, net						(58.9)	
Exercise of stock options and vesting of restricted stock	1.5		0.1				
Stock-based compensation			2.4				
Acquisition of noncontrolling interest			1.2				(5.2)
Purchase of treasury stock	(0.5)	)			(5.9)		

Balance at December 31, 2012 74.8      \$0.8      \$600.9      \$(275.8    )\$(182.1    )\$(264.6      )\$—

See accompanying notes to consolidated financial statements

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AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

**ORGANIZATION** American Axle & Manufacturing Holdings, Inc. (Holdings) and its subsidiaries (collectively, we, our, us or AAM) is a Tier I supplier to the automotive industry. We manufacture, engineer, design and validate driveline and drivetrain systems and related components and chassis modules for light trucks, sport utility vehicles (SUVs), passenger cars, crossover vehicles and commercial vehicles. Driveline and drivetrain systems include components that transfer power from the transmission and deliver it to the drive wheels. Our driveline, drivetrain and related products include axles, chassis modules, driveshafts, power transfer units, transfer cases, chassis and steering components, driveheads, transmission parts and metal-formed products. In addition to locations in the United States (U.S.) (Michigan, Ohio, Indiana and Pennsylvania), we also have offices or facilities in Brazil, China, Germany, India, Japan, Luxembourg, Mexico, Poland, Scotland, South Korea, Sweden and Thailand.

**PRINCIPLES OF CONSOLIDATION** We include the accounts of Holdings and its subsidiaries in our consolidated financial statements. We eliminate the effects of all intercompany transactions, balances and profits in our consolidation.

**REVENUE RECOGNITION** We recognize revenue when products are shipped to our customers and title transfers under standard commercial terms or when realizable in accordance with our commercial agreements. If we are uncertain as to whether we will be successful collecting a balance in accordance with our understanding of a commercial agreement, we do not recognize the revenue or cost recovery until such time as the uncertainty is removed.

In the third quarter of 2009, we entered into a settlement and commercial agreement (2009 Settlement and Commercial Agreement) with General Motors Company (GM). As part of this agreement, we received \$110.0 million from GM, of which we recorded \$79.7 million as deferred revenue. As of December 31, 2012, our deferred revenue related to the 2009 Settlement and Commercial Agreement is \$53.4 million, \$8.0 million of which is classified as a current liability and \$45.4 million of which is recorded as a noncurrent liability on our Consolidated Balance Sheet. We recognize this deferred revenue into revenue on a straight-line basis over 120 months, which ends September 2019 and is the period that we expect GM to benefit under the 2009 Settlement and Commercial Agreement. We recognized revenue of \$8.0 million, in 2012, 2011 and 2010 related to this agreement.

In the second quarter of 2008, we entered into an agreement with GM to provide financial assistance to support the transition of our United Automobile, Aerospace and Agricultural Implement Workers of America (UAW) represented legacy labor at our original U.S. locations upon the resolution of the strike called by the International UAW (2008 AAM - GM Agreement). Pursuant to this agreement, GM provided us \$115.0 million in 2008 and \$60.0 million in 2009. In total, we recorded deferred revenue of \$213.7 million as a result of the 2008 AAM - GM Agreement, which included \$38.7 million related to the fair value of the liability GM assumed for postretirement healthcare and life insurance coverage provided to UAW represented transitioned associates with earned credited service from AAM that have or will retire under plans operated by GM. We recognized this deferred revenue into revenue on a straight-line basis over a 45 month period, which ended February 2012 and was consistent with the period that we expected GM to benefit from the payments provided to us under the 2008 AAM - GM Agreement. We recognized \$9.5 million of revenue in 2012 and \$57.0 million of revenue in both 2011 and 2010 related to the 2008 AAM - GM Agreement. As of December 31, 2012, we have fully recognized the deferred revenue related to the 2008 AAM - GM Agreement.

As of December 31, 2012, the majority of the remaining deferred revenue primarily relates to customer payments to implement capacity programs, which is generally recognized into revenue over the life of these programs. We recognized \$13.1 million, \$15.6 million and \$12.5 million of revenue for these programs in 2012, 2011 and 2010,

respectively.

**BUYDOWN PROGRAM** In 2008, an involuntary Buydown Program (BDP) was initiated for associates that did not elect to participate in the Special Separation Program (SSP) and continued employment with AAM. Under the BDP, we agreed to make three annual lump-sum payments to associates in connection with, among other things, a base wage decrease. We made the third and final lump-sum BDP payment of \$19.7 million in 2010.

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

We recorded \$2.3 million, \$15.0 million and \$15.6 million of expense in 2012, 2011 and 2010, respectively, for the amortization of this prepaid asset, which we had been amortizing over the period that we estimated that AAM would benefit from these payments, which ended in February 2012. As of December 31, 2012, we have fully amortized the asset related to these BDP payments.

**RESEARCH AND DEVELOPMENT (R&D) COSTS** We expense R&D, as incurred, in selling, general and administrative expenses on our Consolidated Statement of Income. R&D spending was \$123.4 million, \$113.6 million and \$82.5 million in 2012, 2011 and 2010, respectively.

**CASH AND CASH EQUIVALENTS** Cash and cash equivalents include all cash balances and highly liquid investments in money market funds with maturities of 90 days or less at the time of purchase.

**ACCOUNTS RECEIVABLE** The majority of our accounts receivable are due from original equipment manufacturers (OEMs) in the automotive industry and are past due when payment is not received within the stated terms. In 2012, we continued the transition of our payment terms with our largest customer, GM, to GM standard weekly payment terms of approximately 50 days.

Amounts due from customers are stated net of allowances for doubtful accounts. We determine our allowances by considering factors such as the length of time accounts are past due, our previous loss history, the customer's ability to pay its obligation to us, and the condition of the general economy and the industry as a whole. The allowance for doubtful accounts was \$6.5 million and \$5.5 million as of December 31, 2012 and 2011, respectively. We write-off accounts receivable when they become uncollectible.

**CUSTOMER TOOLING AND PRE-PRODUCTION COSTS RELATED TO LONG-TERM SUPPLY AGREEMENTS** Engineering, R&D, and other pre-production design and development costs for products sold on long-term supply arrangements are expensed as incurred unless we have a contractual guarantee for reimbursement from the customer. Costs for tooling used to make products sold on long-term supply arrangements for which we have either title to the assets or the non-cancelable right to use the assets during the term of the supply arrangement are capitalized in property, plant and equipment. Capitalized items and customer receipts in excess of tooling costs specifically related to a supply arrangement are amortized over the shorter of the term of the arrangement or over the estimated useful lives of the related assets.

**INVENTORIES** We state our inventories at the lower of cost or market. The cost of our inventories is determined using the FIFO 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:

	December 31,	
	2012	2011
	(in millions)	
Raw materials and work-in-progress	\$220.3	\$177.0
Finished goods	25.0	26.9
Gross inventories	245.3	203.9
Inventory valuation reserves	(21.0	) (26.7
Inventories, net	\$224.3	\$177.2



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

**PROPERTY, PLANT AND EQUIPMENT** We state property, plant and equipment, including amortizable tooling, at historical cost, as adjusted for impairments. Construction in progress includes costs incurred for the construction of buildings and building improvements, and machinery and equipment in process. Repair and maintenance costs that do not extend the useful life or otherwise improve the utility of the asset beyond its existing useful state are expensed in the period incurred.

We record depreciation and tooling amortization on the straight-line method over the estimated useful lives of the depreciable assets. Depreciation and tooling amortization amounted to \$130.9 million, \$123.7 million and \$122.2 million in 2012, 2011 and 2010, respectively.

Property, plant and equipment consists of the following:

	Estimated Useful Lives (years)	December 31, 2012 (in millions)	2011
Land		\$27.8	\$30.6
Land improvements	10-15	17.8	17.4
Buildings and building improvements	15-40	293.3	273.5
Machinery and equipment	3-12	1,512.6	1,405.5
Construction in progress		123.1	138.2
		1,974.6	1,865.2
Accumulated depreciation and amortization		(964.9	) (894.0
Property, plant and equipment, net		\$1,009.7	\$971.2

**IMPAIRMENT OF LONG-LIVED ASSETS** When impairment indicators exist, we evaluate the carrying value of long-lived assets for potential impairment. We consider projected future undiscounted cash flows, trends and other circumstances in making such estimates and evaluations. If impairment is deemed to exist, the carrying amount of the asset is adjusted based on its fair value. Recoverability of assets "held for use" is determined by comparing the forecasted undiscounted cash flows of the operations to which the assets relate to their carrying amount. When the carrying value of an asset group exceeds its fair value and is therefore nonrecoverable, those assets are written down to fair value. Fair value is determined based on market prices, when available, or a discounted cash flow analysis performed using management estimates. See Note 2 - Restructuring Actions for detail on our 2012 and 2011 asset impairments.

**GOODWILL** We record goodwill when the purchase price of acquired businesses exceeds the value of their identifiable net tangible and intangible assets acquired. We periodically evaluate goodwill for impairment in accordance with the accounting guidance for goodwill and other indefinite-lived intangibles. We completed impairment tests in 2012 and 2011 and concluded that there was no impairment of our goodwill. The following table provides a reconciliation of changes in goodwill:

	December 31, 2012 (in millions)	2011
Beginning balance	\$155.9	\$155.8
Foreign currency translation and other	0.5	0.1
Ending balance	\$156.4	\$155.9



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

**INTANGIBLE ASSETS** As part of the formation of e-AAM, we recorded intangible assets of \$8.7 million in 2010, which represented the fair value of a GM license agreement for technology developed by Saab Automobile AB (Saab) when it was a subsidiary of GM, in-process research and development technology and a long-term supply agreement with Saab acquired as part of the joint venture formation in 2010. In 2011, Saab, our former partner in the e-AAM joint venture, filed for bankruptcy and entered into liquidation status. As a result, in 2011, we recorded a \$1.6 million impairment charge to selling, general and administrative expenses to write off the intangible asset associated with the long-term supply agreement with Saab. These intangible assets are classified as other assets and deferred charges on our Consolidated Balance Sheet and we expect to begin amortizing the assets on a straight-line basis over their estimated useful lives once development of the related technology is complete and we begin utilizing these assets.

We recorded an intangible asset of \$9.6 million as of December 31, 2008 which represents the fair value of the customer relationships acquired as part of an asset purchase agreement with FormTech Industries LLC. We recorded \$1.9 million of expense for the amortization of this intangible asset in each of the years 2012, 2011 and 2010, and the balance is \$1.9 million as of December 31, 2012. This intangible asset is classified as other assets and deferred charges on our Consolidated Balance Sheet and is being amortized on a straight-line basis over its estimated useful life of five years.

**DEBT ISSUANCE COSTS** The costs related to the issuance or modification of long-term debt are deferred and amortized into interest expense over the life of each debt issue. As of December 31, 2012 and December 31, 2011, our unamortized debt issuance costs were \$33.0 million and \$31.5 million, respectively. Deferred amounts associated with the extinguishment of debt are expensed and classified as debt refinancing and redemption costs on our Consolidated Statement of Income.

**DERIVATIVES** We recognize all derivatives on the balance sheet at fair value. If a derivative qualifies under the accounting guidance as a hedge, depending on the nature of the hedge, changes in the fair value of the derivative are either offset against the change in fair value of the hedged asset, liability or firm commitment through earnings or recognized in other comprehensive income until the hedged item is recognized in earnings. The ineffective portion of a derivative's change in fair value, and changes in the fair value of derivatives that do not qualify as hedges, are immediately recognized in earnings. See Note 4 - Derivatives and Risk Management, for more detail on our derivatives.

**CURRENCY TRANSLATION** We translate the assets and liabilities of our foreign subsidiaries to U.S. dollars at end-of-period exchange rates. We translate the income statement elements of our foreign subsidiaries to U.S. dollars at average-period exchange rates. We report the effect of translation for our foreign subsidiaries that use the local currency as their functional currency as a separate component of stockholders' deficit. Gains and losses resulting from the remeasurement of assets and liabilities in a currency other than the functional currency of a subsidiary are reported in current period income. We also report any gains and losses arising from transactions denominated in a currency other than the functional currency of a subsidiary in current period income.

**USE OF ESTIMATES** In order to prepare consolidated financial statements in conformity with accounting principles generally accepted in the United States of America (GAAP), we are required to make estimates and assumptions that affect the reported amounts and disclosures in our consolidated financial statements. Actual results could differ from those estimates.

**EFFECT OF NEW ACCOUNTING STANDARDS** On January 1, 2012, we adopted new accounting guidance on the presentation of comprehensive income. The new guidance allows an entity to present components of net income and other comprehensive income in one continuous statement, referred to as the statement of comprehensive income, or in

two separate, but consecutive statements. We have elected to present the components of other comprehensive income in a separate statement immediately following the statement of income. The guidance eliminates the previous option to report other comprehensive income and its components in the statement of changes in equity. While the new guidance changes the presentation of comprehensive income, there are no changes to the components that are recognized in net income or other comprehensive income under current accounting guidance. Other than the change in presentation, the adoption of this new guidance has had no impact on our consolidated financial statements.



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

On January 1, 2012, we also adopted new accounting guidance on testing goodwill for impairment. This new guidance allows us the option to first assess qualitative factors to determine whether it is necessary to perform the two-step quantitative goodwill impairment test. Under this guidance, we are not required to calculate the fair value of a reporting unit unless we determine, based on a qualitative assessment, that it is more likely than not that its fair value is less than its carrying amount. The guidance includes a number of events and circumstances to consider in conducting the qualitative assessment. The adoption of this new accounting guidance did not have an effect on our 2012 goodwill impairment assessment.

On July 27, 2012, the FASB issued new accounting guidance, which amends the previous accounting guidance on testing indefinite-lived intangible assets, other than goodwill, for impairment. This new guidance allows us the option to first assess qualitative factors to determine whether it is necessary to calculate the fair value of the asset being tested. This new guidance will be effective for us as of January 1, 2013, with early adoption permitted. We do not believe that the adoption of this new accounting guidance will have a significant effect on our indefinite-lived intangible asset impairment assessments in the future.

## 2. RESTRUCTURING ACTIONS

In 2012, we incurred restructuring charges related to termination benefits and other ongoing restructuring actions. In addition, we continue to make payments and accrual adjustments related to charges incurred for restructuring actions taken in prior years. A summary of this activity for 2012 and 2011 is shown below:

	One-time Termination Benefits (in millions)	Asset Impairment Charges	Indirect Inventory Obsolescence	Asset Retirement Obligations	Contract Related Costs	Other Restructuring Actions	Total
Accrual as of January 1, 2011	\$1.2	\$—	\$—	\$1.4	\$12.2	\$—	\$14.8
Charges	0.1	8.1	0.6	0.1	—	6.9	15.8
Cash utilization	(0.9)	)—	—	(1.0)	) (7.2)	) (6.9)	) (16.0)
Non-cash utilization	—	(8.1)	) (0.6)	)—	—	—	(8.7)
Accrual adjustments	(0.1)	)—	—	0.1	(5.0)	)—	(5.0)
Accrual as of December 31, 2011	\$0.3	\$—	\$—	\$0.6	\$—	\$—	\$0.9
Charges	1.7	5.8	—	—	—	23.2	30.7
Cash utilization	(1.6)	)—	—	(0.1)	)—	(23.2)	) (24.9)
Non-cash utilization	—	(5.8)	)—	—	—	—	(5.8)
Accrual adjustments	(0.4)	)—	—	—	—	—	(0.4)
Accrual as of December 31, 2012	\$—	\$—	\$—	\$0.5	\$—	\$—	\$0.5

**ONE-TIME TERMINATION BENEFITS** We expensed \$1.7 million in 2012 primarily related to the continuation of healthcare for certain associates as a result of the Detroit Manufacturing Complex (DMC) and Cheektowaga Manufacturing Facility (CKMF) plant closures, of which we paid \$1.6 million. We paid \$0.9 million in 2011 related to one-time termination benefits which were initiated and expensed prior to 2011.

We also recorded accrual adjustments related to changes in previous estimates and currency translation adjustments.

**ASSET IMPAIRMENTS** We recorded asset impairment charges of \$5.8 million in 2012 associated with previously leased assets at DMC that we had elected to buyout in 2011, as we no longer have a use for these assets. In 2011, we recorded asset impairment charges of \$8.1 million associated with the announced closure of CKMF.

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

**INDIRECT INVENTORY OBSOLESCENCE** As a result of the reduction in the projected usage of machinery and equipment due to the impairment indicators discussed above, certain machine repair parts and other indirect inventory were determined to be obsolete. We recorded a charge of \$0.6 million in 2011 related to the write down of the net book value of these assets to their estimated net realizable value.

**ASSET RETIREMENT OBLIGATIONS** As a result of announced plant closures, idling and consolidation of facilities, the methods and timing of certain asset retirement obligations, including environmental liabilities, related to these facilities became reasonably estimable. Based on management's best estimate of the costs, methods and timing of the settlement of these obligations, we recorded a charge of \$0.1 million in 2011. We paid \$0.1 million and \$1.0 million related to these asset retirement obligations in 2012 and 2011, respectively.

**CONTRACT RELATED COSTS** In 2011, as a result of the announced closure of DMC, we elected to buy out leased assets that were previously determined to be permanently idled. In 2011, we paid \$18.6 million to purchase these leased assets, along with others that are being utilized. As a result, we recorded a reduction of cost of goods sold of \$5.0 million to write-off the remaining accrual that was originally recorded when these assets were idled. See Note 5 - Fair Value for more detail on this lease buyout.

**OTHER RESTRUCTURING ACTIONS** We incurred charges related to the redeployment of assets to support capacity utilization initiatives and other related activities as a result of our DMC and CKMF plant closures. We expensed and paid \$23.2 million in 2012 and \$6.9 million in 2011 related to these actions.

We expect to make payments of \$0.5 million in 2013 related to the remaining restructuring accrual.

### 3. LONG-TERM DEBT AND LEASE OBLIGATIONS

Long-term debt consists of the following:

	December 31, 2012	2011
	(in millions)	
Amended Revolving Credit Facility	\$—	\$—
9.25% Notes, net of discount	337.5	379.0
7.875% Notes	300.0	300.0
7.75% Notes	200.0	200.0
6.625% Notes	550.0	—
5.25% Notes, net of discount	—	249.9
Foreign credit facilities	61.0	45.2
Capital lease obligations	5.6	6.1
Long-term debt	\$1,454.1	\$1,180.2

**AMENDED REVOLVING CREDIT FACILITY** On August 31, 2012, we amended and restated the Credit Agreement dated as of January 9, 2004 (as amended and restated, the "Amended and Restated Revolving Credit Agreement" and the facility thereunder, the "Amended Revolving Credit Facility"). As of December 31, 2012, the Amended Revolving Credit Facility provided up to \$72.8 million of revolving bank financing commitments through June 2013 and \$365.0 million of revolving bank financing commitments through June 30, 2016. At December 31, 2012, \$414.6 million was available under the Amended Revolving Credit Facility, which reflected a reduction of \$23.2 million for standby letters of credit issued against the facility.



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

The Amended and Restated Revolving Credit Agreement, among other things, increased the aggregate commitments by approximately \$116.0 million and increased the commitments maturing on June 30, 2016 (the class D facility) to \$365.0 million. The class D facility includes loans held by lenders that agreed to extend and/or increase their respective commitments and new lenders to the facility. The Amended and Restated Revolving Credit Agreement also includes a class C loan facility of approximately \$72.8 million, which matures on June 30, 2013. We expensed \$0.3 million for the write-off of a proportionate amount of unamortized debt issuance costs related to the class C facility. We had been amortizing the debt issuance costs over the expected life of the borrowing. We paid debt issuance costs of \$1.7 million, \$5.9 million and \$1.6 million associated with the amendments and restatements of our Revolving Credit Facility in 2012, 2011 and 2010, respectively.

Borrowings under the Amended Revolving Credit Facility bear interest at rates based on adjusted LIBOR or an alternate base rate, plus an applicable margin. The applicable margin for the class C and class D facilities remains unchanged.

Under the Amended Revolving Credit Facility, certain negative covenants were revised to provide increased flexibility. In the event AAM achieves investment grade corporate credit ratings from S&P and Moody's, AAM may elect to release all of the collateral from the liens granted pursuant to the Collateral Agreement, subject to notice requirements and other conditions.

The Amended Revolving Credit Facility is secured on a first priority basis by all or substantially all of the assets of AAM and each guarantor under the Collateral Agreement dated as of November 7, 2008, as amended and restated as of December 18, 2009 and as further amended on June 30, 2011, among AAM and its domestic subsidiaries and JPMorgan Chase Bank, N.A., as collateral agent for the lenders under the Amended and Restated Revolving Credit Agreement and the secured noteholders under the Indenture dated as of December 18, 2009, among AAM, as issuer, the guarantors and U.S. Bank National Association, as trustee.

The Amended Revolving Credit Facility provides back-up liquidity for our foreign credit facilities. We intend to use the availability of long-term financing under the Amended Revolving Credit Facility to refinance any current maturities related to such debt agreements that are not otherwise refinanced on a long-term basis in their local markets.

**9.25% NOTES** In 2009, we issued \$425.0 million of 9.25% senior secured notes due 2017 (9.25% Notes). The notes were issued at a discount of \$5.5 million. Net proceeds from these notes were used for the repayment of certain indebtedness. In 2010, we paid debt issuance costs of \$0.3 million related to the 9.25% Notes.

In 2012 and 2011, we elected to exercise an option to redeem 10% of the original amount of our 9.25% Notes outstanding at a redemption price of 103% of the principal amount. This resulted in principal payments of \$42.5 million and \$1.3 million for the redemption premiums, as well as payments of accrued interest in both 2012 and 2011. We expensed \$1.0 million in 2012 and \$1.4 million in 2011 for the write-off of a proportional amount of unamortized debt discount and issuance costs related to this debt. We had been amortizing the debt discount and debt issuance costs over the expected life of the borrowing. Pursuant to the terms of our 9.25% Notes, we have the right to voluntarily redeem an additional 10% in October 2013. In addition, we have the right to redeem any remaining 9.25% Notes outstanding in January 2014.

The 9.25% Notes share the collateral package equally and ratably with the Amended Revolving Credit Facility as described above. The indenture governing the 9.25% Notes limits our ability to make certain investments, declare or pay dividends or distributions on capital stock, redeem or repurchase capital stock and certain debt obligations, incur

liens, incur indebtedness, transact with affiliates or merge, make acquisitions and sell assets.

**7.875% NOTES** In 2007, we issued \$300.0 million of 7.875% senior unsecured notes due 2017 (7.875% Notes). Net proceeds from these notes were used for general corporate purposes, including payment of amounts outstanding under our Revolving Credit Facility. Pursuant to the terms of our 7.875% Notes, we may voluntarily redeem any or all of the outstanding 7.875% Notes at any time.

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

**7.75% NOTES** In 2011, we issued \$200.0 million of 7.75% senior unsecured notes due 2019 (7.75% Notes). Net proceeds from these notes were used for general corporate purposes, including the repayment of certain amounts outstanding under our Revolving Credit Facility. In 2011, we paid debt issuance costs of \$5.0 million related to the 7.75% Notes.

**6.625% NOTES** In the third quarter of 2012, we issued \$550.0 million of 6.625% senior unsecured notes due 2022 (6.625% Notes). Concurrently with the offering of the 6.625% Notes, we made a tender offer to purchase our 5.25% Notes, of which the aggregate principal amount outstanding at the time of the tender offer was \$250.0 million. Net proceeds from the 6.625% Notes were used to fund the purchase of \$137.8 million of the outstanding 5.25% Notes pursuant to the tender offer, certain pension obligations and for other general corporate purposes. We also used the net proceeds to fund the redemption of the remaining 5.25% Notes, including the payment of interest, and to redeem \$42.5 million aggregate principal amount of our 9.25% Notes. We paid debt issuance costs of \$8.9 million related to the 6.625% Notes in 2012.

**5.25% NOTES** On September 18, 2012, in connection with the cash tender offer, we purchased \$137.8 million aggregate principal amount of the 5.25% Notes, and paid accrued interest. Upon purchase, we expensed \$9.2 million related to a tender premium, \$0.5 million of professional fees and unamortized debt issuance costs of \$0.1 million related to this debt. We had been amortizing the debt issuance costs over the expected life of the borrowing.

On October 3, 2012, we voluntarily redeemed the remaining 5.25% Notes outstanding. This resulted in a principal payment of \$112.2 million, a payment of \$7.3 million related to a make-whole premium, as well as payment of accrued interest. Upon redemption, we expensed \$0.1 million of unamortized debt discount and issuance costs related to this debt. We had been amortizing the debt issuance costs over the expected life of the borrowing.

**LEASES** We lease certain facilities under capital leases expiring at various dates. The gross asset cost of our capital leases was \$6.7 million at December 31, 2012 and \$16.1 million at December 31, 2011. The net book value included in property, plant and equipment, net on the balance sheet was \$5.6 million and \$6.0 million at December 31, 2012 and 2011, respectively. The weighted-average interest rate on these capital lease obligations at December 31, 2012 was 8.9%.

We also lease certain manufacturing machinery and equipment, commercial office and production facilities, vehicles and other assets under operating leases expiring at various dates. In the fourth quarter of 2012, we entered into a sale-leaseback transaction for \$13.2 million of equipment to be used in production starting in 2013. We received proceeds of \$12.1 million in 2012 as a result of this transaction. Future minimum payments under noncancelable operating leases are as follows: \$9.6 million in 2013, \$8.3 million in 2014, \$7.1 million in 2015, \$5.8 million in 2016 and \$4.1 million in 2017. Our total expense relating to operating leases was \$9.0 million, \$6.8 million and \$5.3 million in 2012, 2011 and 2010, respectively. This includes a reduction to cost of goods sold of \$0.5 million and \$2.3 million related to the purchase of previously idled leased assets in 2011 and 2010, respectively. See Note 2 - Restructuring Actions for more detail on these charges.

**FOREIGN CREDIT FACILITIES** We utilize local currency credit facilities to finance the operations of certain foreign subsidiaries. These credit facilities, some of which are guaranteed by Holdings and/or AAM, Inc., expire at various dates through January 2015. At December 31, 2012, \$61.0 million was outstanding under these facilities and an additional \$15.1 million was available.

**DEBT MATURITIES** Aggregate maturities of long-term debt are as follows (in millions):

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2013	\$55.5
2014	2.4
2015	4.2
2016	0.4
2017	638.0
Thereafter	753.6
Total	\$1,454.1

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

**INTEREST EXPENSE AND INVESTMENT INCOME** Interest expense was \$101.6 million in 2012, \$83.9 million in 2011 and \$89.0 million in 2010. The increase in interest expense in 2012 reflects higher average outstanding borrowings as compared to 2011. The decrease in interest expense in 2011 as compared to 2010 relates primarily to higher capitalized interest as a result of increased capital expenditures to support our significant global program launches. We capitalized interest of \$8.2 million in 2012, \$8.3 million in 2011 and \$4.0 million in 2010. The weighted-average interest rate of our long-term debt outstanding at December 31, 2012 was 7.9% as compared to 8.0% and 8.2% at December 31, 2011 and 2010, respectively. The amount of accrued interest included in other accrued expenses on our Consolidated Balance Sheet was \$35.1 million and \$32.0 million as of December 31, 2012 and 2011, respectively.

Investment income was \$0.6 million in 2012, \$1.2 million in 2011 and \$3.8 million in 2010. Investment income includes interest and dividends earned on cash and cash equivalents and realized and unrealized gains and losses on our short-term investments during the period. In 2008, redemptions were temporarily suspended for certain money-market and other similar funds in which we invest. We recorded a gain of \$0.1 million and \$2.3 million in 2011 and 2010, respectively, related to distributions of our short-term investments, from which distributions were previously suspended.

#### 4. DERIVATIVES AND RISK MANAGEMENT

**DERIVATIVE FINANCIAL INSTRUMENTS** In the normal course of business, we are exposed to market risk associated with changes in foreign currency exchange rates and interest rates. To manage a portion of these inherent risks, we may purchase certain types of derivative financial instruments based on management's judgment of the trade-off between risk, opportunity and cost. We do not hold or issue derivative financial instruments for trading or speculative purposes. The ineffective portion of any hedge is included in current earnings. The impact of hedge ineffectiveness was not significant in any of the periods presented.

**CURRENCY FORWARD CONTRACTS** From time to time, we use foreign currency forward contracts to reduce the effects of fluctuations in exchange rates, primarily relating to the Mexican Peso, Euro and Pound Sterling. We had forward contracts with a notional amount of \$31.9 million and \$68.6 million outstanding at December 31, 2012 and 2011, respectively.

The following table summarizes the reclassification of pre-tax derivative gains (losses) into net income from accumulated other comprehensive income (loss):

	Location of Gain (Loss) Reclassified into Net Income	Gain (loss) Reclassified During the Twelve Months Ended December 31,		Gain Expected to be Reclassified During the Next 12 Months
		2012	2011	
		(in millions)		
Currency forward contracts	Cost of Goods Sold	\$(1.8	) \$1.9	\$2.3

**CONCENTRATIONS OF CREDIT RISK** In the normal course of business, we provide credit to customers. We periodically evaluate the creditworthiness of our customers and we maintain reserves for potential credit losses.

Sales to GM were approximately 73% of our total net sales in 2012 and 2011, and 75% of our total net sales in 2010. Accounts and other receivables due from GM were \$325.8 million at year-end 2012 and \$234.7 million at year-end

2011. Sales to Chrysler Group LLC (Chrysler) were approximately 10% of our total net sales in 2012, 8% in 2011 and 9% in 2010. Accounts receivable due from Chrysler were \$43.5 million at year-end 2012 and \$29.1 million at year-end 2011. No other single customer accounted for more than 10% of our consolidated net sales in any year presented.

In addition, our total GM postretirement cost sharing asset was \$273.0 million as of December 31, 2012 and \$270.6 million as of December 31, 2011. See Note 6 - Employee Benefit Plans for more detail on this cost sharing asset.

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

We diversify the concentration of invested cash and cash equivalents among different financial institutions and we monitor the selection of counterparties to other financial instruments to avoid unnecessary concentrations of credit risk.

## 5. FAIR VALUE

The fair value accounting guidance 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 values 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:

Balance Sheet Classification	December 31, 2012		December 31, 2011		Input
	Carrying Amount (in millions)	Fair Value	Carrying Amount (in millions)	Fair Value	
Cash equivalents	\$6.5	\$6.5	\$36.0	\$36.0	Level 1
Prepaid expenses and other					
Currency forward contracts	2.3	2.3	0.1	0.1	Level 2
Other assets and deferred charges					
Currency forward contracts	—	—	0.1	0.1	Level 2
Other accrued expenses					
Currency forward contracts	—	—	5.6	5.6	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. We estimated the fair value of our outstanding debt using available market information and other observable data to be as follows:

	December 31, 2012		December 31, 2011		Input
	Carrying Amount (in millions)	Fair Value	Carrying Amount (in millions)	Fair Value	
Amended Revolving Credit Facility	\$—	\$—	\$—	\$—	Level 2
9.25% Notes	337.5	377.4	379.0	415.0	Level 2
7.875% Notes	300.0	310.1	300.0	295.5	Level 2
7.75% Notes	200.0	216.5	200.0	195.0	Level 2
6.625% Notes	550.0	555.5	—	—	Level 2
5.25% Notes	—	—	249.9	243.8	Level 2

Investments in our defined benefit plans are stated at fair value. See Note 6 - Employee Benefit Plans for additional fair value disclosures of our pension plan assets as of December 31, 2012 and December 31, 2011.

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

**LONG-LIVED ASSETS** In 2012 and 2011, as part of our impairment analysis, we were required to measure the fair value of certain long-lived assets. In 2012, we considered the expected future use of certain long-lived assets remaining at our Detroit Manufacturing Complex. In 2011, we considered the expected future use of the long-lived assets located at our Cheektowaga Manufacturing Facility. Assets that will not be redeployed to other AAM facilities were determined to be fully impaired.

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

Balance Sheet Classification	Fair Value Measurements using Level 3 Inputs (in millions)	Asset Impairment Recorded in Twelve Months ended December 31, 2012	Fair Value Measurements using Level 3 Inputs	Asset Impairment Recorded in Twelve Months ended December 31, 2011
Property, plant and equipment, net	\$—	\$5.8	\$—	\$8.1
Other assets and deferred charges	—	—	—	0.5

In the fourth quarter of 2012, we reassessed the expected future use of certain assets remaining at DMC that were previously leased assets that had been purchased in 2011 for \$18.6 million. As a result, we recorded an impairment charge of \$5.8 million related to the assets that we no longer intend to redeploy and use at another AAM facility. In 2011, at the time we elected to buyout the leases we considered the expected future use of these long-lived assets as part of our fair value measurement and recorded them at their estimated fair value. Assets that were not to be redeployed to other AAM facilities were written down to their estimated net realizable value, which resulted in a net charge to cost of goods sold of \$5.3 million in 2011.

**Finite-lived Intangibles** In 2011, Saab, our former partner in the e-AAM joint venture, filed for bankruptcy and entered into liquidation status. As a result, in 2011, we recorded a \$1.6 million impairment charge to selling, general and administrative expenses to write off the intangible asset associated with the long-term supply agreement with Saab acquired as part of our joint venture formation in 2010. The following table summarizes the impairment of finite-lived intangible assets measured at fair value on a nonrecurring basis subsequent to initial recognition:

Balance Sheet Classification	Fair Value Measurement Using Level 3 Inputs (in millions)	Impairment Recorded in the Twelve Months Ended December 31, 2011
Other assets and deferred charges	\$—	\$1.6

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

6. EMPLOYEE BENEFIT PLANS

**PENSION AND OTHER POSTRETIREMENT DEFINED BENEFIT PLANS** We sponsor various qualified and non-qualified defined benefit pension plans for our eligible associates. We also maintain hourly and salaried benefit plans that provide postretirement medical, dental, vision, legal and life insurance benefits (OPEB) to our eligible retirees and their dependents in the U.S.

As part of the 2009 Settlement and Commercial Agreement, GM confirmed its obligation to share proportionally in the cost of OPEB for eligible retirees based on the length of service an employee had with AAM and GM. We have included in our OPEB obligation the amounts expected to be received pursuant to this agreement of \$273.0 million and \$270.6 million at December 31, 2012 and December 31, 2011, respectively. We have also recorded a corresponding asset for these amounts on our Consolidated Balance Sheet, \$13.3 million that is classified as a current asset and \$259.7 million that is classified as a noncurrent asset as of December 31, 2012.

Actuarial valuations of our benefit plans were made as of December 31, 2012 and 2011. The principal weighted-average assumptions used in the year-end valuation of our U.S. and U.K. plans appear in the following table. The U.S. discount rates are based on an actuarial review of a hypothetical portfolio of long-term, high quality corporate bonds matched against the expected payment stream for each of our plans. The U.K. discount rate is based on a review of long-term bonds, in consideration of the average duration of plan liabilities. The assumptions for expected return on plan assets are based on future capital market expectations for the asset classes represented within our portfolios and a review of long-term historical returns. The rates of increase in compensation and health care costs are based on current market conditions, inflationary expectations and historical information.

	Pension Benefits				OPEB					
	2012		2011		2010		2012	2011	2010	
	U.S.	U.K.	U.S.	U.K.	U.S.	U.K.				
Discount rate	4.01	% 4.30	% 5.10	% 4.65	% 5.70	% 5.35	% 4.05	% 5.10	% 5.70	%
Expected return on plan assets	7.50	% 4.35	% 8.00	% 4.60	% 8.00	% 6.00	% N/A	N/A	N/A	
Rate of compensation increase	4.00	% 3.15	% 4.00	% 3.25	% 3.75	% 3.65	% 4.00	% 4.00	% 3.75	%

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

The accumulated benefit obligation for all defined benefit pension plans was \$828.4 million and \$706.2 million at December 31, 2012 and December 31, 2011, respectively. The following table summarizes the changes in projected benefit obligations and plan assets and reconciles the funded status of the benefit plans, which is the net benefit plan liability:

	Pension Benefits		OPEB		
	December 31, 2012	2011	December 31, 2012	2011	
	(in millions)		(in millions)		
Change in benefit obligation					
Benefit obligation at beginning of year	\$716.7	\$665.4	\$588.4	\$564.3	
Service cost	3.1	4.8	0.4	0.9	
Interest cost	35.1	37.1	15.1	17.1	
Plan amendments	6.1	—	—	—	
Actuarial loss (gain)	97.3	45.5	(7.1	) 11.4	
Change in GM portion of OPEB obligation	—	—	2.4	16.2	
Participant contributions	0.5	0.6	—	—	
Special and contractual termination benefits	12.8	—	18.3	—	
Curtailments	—	(2.5	) —	(10.0	)
Settlements	—	—	(4.7	) —	
Benefit payments	(34.2	) (33.7	)		