STONERIDGE INC
Form 10-K
March 07, 2018

Ohio

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K
ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2017
Commission file number: 001-13337
STONERIDGE, INC.
(Exact name of registrant as specified in its charter)

34-1598949

(State or other jurisdiction of (I.R.S. Employer incorporation or organization) Identification No.)

39675 MacKenzie Drive, Suite 400, Novi, Michigan 48377

(Address of principal executive offices)	(Zip Code)
(248) 489-9300	
Registrant's telephone number, including area code	
Securities registered pursuant to Section 12(b) of the Act:	
Title of each class Common Shares, without par value Name of each exc New York Stock	hange on which registered Exchange
Securities registered pursuant to section 12(g) of the Act:	None
Indicate by check mark if the registrant is a well-known so "Yes x No	easoned issuer, as defined in Rule 405 of the Securities Act.
Indicate by check mark if the registrant is not required to a Act. "Yes x No	file reports pursuant to Section 13 or Section 15(d) of the
Indicate by check mark whether the registrant (1) has filed Securities Exchange Act of 1934 during the preceding 12 required to file such reports), and (2) has been subject to so x Yes." No	
every Interactive Data File required to be submitted and p	ed electronically and posted on its corporate Website, if any, osted pursuant to Rule 405 of Regulation S-T (§ 232.405 of shorter period that the registrant was required to submit and

x Yes "No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this
chapter) 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.

X

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

Large accelerated filer " Accelerated filer x Non-accelerated filer " Smaller reporting company " Emerging growth company " (Do not check if a smaller reporting company)

If an emerging growth company, indicate by checkmark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. "

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act).

"Yes x No

As of June 30, 2017, the aggregate market value of the registrant's Common Shares held by non-affiliates of the registrant was approximately \$417.7 million. The closing price of the Common Shares on June 30, 2017 as reported on the New York Stock Exchange was \$15.41 per share. As of June 30, 2017, the number of Common Shares outstanding was 28,169,087.

The number of Common Shares outstanding as of February 23, 2018 was 28,179,702.

DOCUMENTS INCORPORATED BY REFERENCE

Definitive Proxy Statement for the Annual Meeting of Shareholders to be held on May 15, 2018, into Part III, Items 10, 11, 12, 13 and 14.

INDEX

		Pag
PART I		
Item 1.	<u>Business</u>	<u>1</u>
	Executive Officers of the Company	
Item 1A.	Risk Factors	<u>6</u> <u>7</u>
<u>Item 1B.</u>	<u>Unresolved Staff Comments</u>	<u>15</u>
Item 2.	<u>Properties</u>	<u> 16</u>
Item 3.	<u>Legal Proceedings</u>	<u>17</u> <u>17</u>
<u>Item 4.</u>	Mine Safety Disclosure	<u>17</u>
PART II		
Item 5.	Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	<u>17</u>
Item 6.	Selected Financial Data	<u> 19</u>
Item 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations	<u>21</u>
Item 7A.	Quantitative and Qualitative Disclosures About Market Risk	<u>36</u>
Item 8.	Financial Statements and Supplementary Data	<u>38</u>
<u>Item 9.</u>	Changes in and Disagreements With Accountants on Accounting and Financial Disclosure	<u>77</u>
Item 9A.	Controls and Procedures	<u>77</u>
Item 9B.	Other Information	<u>79</u>
PART II		
<u>Item 10.</u>	Directors, Executive Officers and Corporate Governance	<u>79</u>
<u>Item 11.</u>	Executive Compensation	<u>79</u>
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	<u>79</u>
Item 13.	Certain Relationships and Related Transactions, and Director Independence	<u>80</u>
<u>Item 14.</u>	Principal Accounting Fees and Services	<u>80</u>
PART IV	r -	
<u>Item 15.</u>	Exhibits, Financial Statement Schedules	<u>80</u>
Signature	<u>s</u>	<u>84</u>

i

Forward-Looking Statements

Portions of this report on Form 10-K contain "forward-looking statements" under the Private Securities Litigation Reform Act of 1995. These statements appear in a number of places in this report and may include statements regarding the intent, belief or current expectations of the Company, with respect to, among other things, our (i) future product and facility expansion, (ii) acquisition strategy, (iii) investments and new product development, (iv) growth opportunities related to awarded business and (v) operational expectations. Forward-looking statements may be identified by the words "will," "may," "should," "designed to," "believes," "plans," "projects," "intends," "expects," "estimate "anticipates," "continue," and similar words and expressions. The forward-looking statements are subject to risks and uncertainties that could cause actual events or results to differ materially from those expressed in or implied by the statements. Important factors that could cause actual results to differ materially from those in the forward-looking statements include, among other factors:

- the reduced purchases, loss or bankruptcy of a major customer or supplier; the costs and timing of business realignment, facility closures or similar actions; a significant change in automotive, commercial, off-highway, motorcycle or agricultural vehicle production; competitive market conditions and resulting effects on sales and pricing; the impact on changes in foreign currency exchange rates on sales, costs and results, particularly the Argentinian peso, Brazilian real, Chinese renminbi, euro, Mexican peso and Swedish krona;
- our ability to achieve cost reductions that offset or exceed customer-mandated selling price reductions; customer acceptance of new products; our ability to successfully launch/produce products for awarded business; adverse changes in laws, government regulations or market conditions affecting our products or our customers'
- products;

 our ability to protect our intellectual property and successfully defend against assertions made against us;
- liabilities arising from warranty claims, product recall or field actions, product liability and legal proceedings to which we are or may become a party, or the impact of product recall or field actions on our customers;
- labor disruptions at our facilities or at any of our significant customers or suppliers; the ability of our suppliers to supply us with parts and components at competitive prices on a timely basis; the amount of our indebtedness and the restrictive covenants contained in the agreements governing our indebtedness, including our revolving credit facility;
- capital availability or costs, including changes in interest rates or market perceptions;
 the failure to achieve the successful integration of any acquired company or business;
 risks related to a failure of our information technology systems and networks, and risks associated with current and emerging technology threats and damage from computer viruses, unauthorized access, cyber attack and other similar disruptions; and

the items described in Part I, Item IA ("Risk Factors").

In addition, the forward-looking statements contained herein represent our estimates only as of the date of this filing and should not be relied upon as representing our estimates as of any subsequent date. While we may elect to update these forward-looking statements at some point in the future, we specifically disclaim any obligation to do so, whether to reflect actual results, changes in assumptions, changes in other factors affecting such forward-looking statements or

otherwise.

ii

\mathbf{n}	Α.	\mathbf{n}	T
~	^	ĸ	
1 /	┪.	17	

Item 1. Business.

Overview

Founded in 1965, Stoneridge, Inc. (the "Company") is a global designer and manufacturer of highly engineered electrical and electronic components, modules and systems for the automotive, commercial, off-highway, motorcycle and agricultural vehicle markets. Our products and systems are critical elements in the management of mechanical and electrical systems to improve overall vehicle performance, convenience and monitoring in areas such as emissions control, fuel efficiency, safety, security and infotainment. Our extensive footprint encompasses 27 locations in 14 countries and enables us to supply global and regional automotive, commercial, off-highway, motorcycle and agricultural vehicle markets.

Our custom-engineered products and systems are used to activate equipment and accessories, monitor and display vehicle performance and control, distribute electrical power and signals and provide vehicle security and convenience. Our product offerings consist of (i) sensors, (ii) application-specific actuators, switches and valves, (iii) vehicle and driver information systems, (iv) vehicle management electronics, (v) power and switch distribution modules and telematics, (vi) camera-based vision systems and monitors, (vii) security alarms and vehicle tracking devices and monitoring services and (viii) convenience accessories. We supply the majority of our products, predominantly on a sole-source basis, to many of the world's leading commercial vehicle and automotive original equipment manufacturers ("OEMs") and select non-vehicle OEMs, as well as certain commercial vehicle and automotive Tier 1 suppliers. Our customers are increasingly utilizing electronic technology to comply with more stringent regulations (particularly emissions and safety) and to meet end-user demand for improved vehicle performance and greater convenience. As a result of this trend, per-vehicle electronic content has been increasing. Our technology and our partnership-oriented approach to product design and development enables us to develop next-generation products for this trend.

On January 31, 2017, the Company acquired Exploitatiemaatschappij Berghaaf B.V. ("Orlaco"), an electronics business which designs, manufactures and sells camera-based vision systems, monitors and related products. The acquisition was accounted for as a business combination, and accordingly, the Company's consolidated financial statements herein include the results of Orlaco from the acquisition date to December 31, 2017. See Note 2 to the consolidated financial statements for additional details regarding the Orlaco acquisition.

The Company had a 74% controlling interest in PST Electronica Ltda. ("PST") from December 31, 2011 through May 15, 2017. On May 16, 2017, the Company acquired the remaining 26% noncontrolling interest in PST, which was accounted for as an equity transaction. As such, PST is now a wholly owned subsidiary. See Note 3 to the consolidated financial statements for additional details regarding the acquisition of PST's noncontrolling interest.

Segments and Products

We conduct our business in three reportable business segments which are the same as our operating segments: Control Devices, Electronics and PST.

Control Devices. Our Control Devices segment designs and manufactures products that monitor, measure or activate specific functions within a vehicle. This segment includes product lines such as sensors, actuators, valves and switches. Sensor products are employed in major vehicle systems such as the emissions, safety, powertrain, braking, climate control, steering and suspension systems. Actuator products enable OEMs to deploy power functions in a vehicle and can be designed to integrate switching and control functions including our shift by wire product. Switches transmit signals that activate specific functions. Our switch technology is principally used in two capacities, user-activated and hidden. User-activated switches are used by a vehicle's operator or passengers to manually activate in-vehicle accessories. Hidden switches are not typically visible to vehicle operators or passengers and are engaged to activate or deactivate selected functions as part of normal vehicle operations. We sell these products principally to the automotive market. To a lesser extent, we also sell these products to the commercial vehicle and agricultural markets.

Electronics. Our Electronics segment designs and manufactures electronic instrument clusters, electronic control units and driver information systems and includes the recently acquired Orlaco business, which designs and manufactures camera-based vision systems, monitors and related products. These products collect, store and display vehicle information such as speed, pressure, maintenance data, trip information, operator performance, temperature, distance traveled and driver messages related to vehicle performance. In addition, power distribution modules and systems regulate, coordinate, monitor and direct the operation of the electrical system within a vehicle. These products use state-of-the-art hardware, software and multiplexing technology and are sold principally to the commercial vehicle market through both the OEM and aftermarket channels. The camera-based vision systems and related products of the acquired Orlaco business use its vision processing technology and are sold principally to the off-highway vehicle market.

PST. Our PST segment primarily serves the South American market and specializes in the design, manufacture and sale of in-vehicle audio and video devices, electronic vehicle security alarms, convenience accessories, vehicle tracking devices and monitoring services primarily for the automotive and motorcycle markets. This segment includes product lines such as alarms, convenience applications, vehicle monitoring and tracking devices and infotainment systems. These products improve the performance, safety and convenience features of our customers' vehicles. PST sells its products through the aftermarket distribution channel, to factory authorized dealer installers, also referred to as original equipment services, direct to OEMs and through mass merchandisers.

Segment	Product Category	2017	2016	2015
Control Devices	Sensors, switches, valves and actuators	54 %	59 %	52 %
Electronics	Electronic instrument clusters, electronic control units driver information systems and camera-based vision systems	34	29	33
PST	Security alarms, vehicle tracking devices and monitoring services and convenience accessories	12	12	15

Our products and systems are sold to numerous OEM and Tier 1 customers, as well as aftermarket distributors and mass merchandisers, for use on many different vehicle platforms. We supply multiple parts to many of our principal OEM and Tier 1 customers under requirements contracts for a particular vehicle model. These contracts range in duration from one year to the production life of the model, which commonly extends for three to seven years.

The following table sets forth for the periods indicated, the percentage of net sales derived from our principal end markets for the years ended December 31:

Principal End Markets	2017	2016	2015
Automotive	46 %	6 50 9	6 42 %
Commercial vehicle	29	33	37
Aftermarket distributors and mass merchandisers	12	12	15

Off-highway and other

13 5

6

For further information related to our reportable segments and financial information about geographic areas, see Note 13 to the consolidated financial statements.

Production Materials

The principal production materials used in the Company's manufacturing process are molded plastic components and resins, copper, precious metals and certain electrical components such as printed circuit boards, semiconductors, microprocessors, memory devices, resistors, capacitors, fuses, relays, infotainment devices and cameras. We purchase production materials pursuant to both annual contract and spot purchasing methods. Such materials are available from multiple sources, but we generally establish collaborative relationships with a qualified supplier for each of our key production materials in order to lower costs and enhance service and quality. As global demand for our production materials increases, we may have difficulties obtaining adequate production materials from our suppliers to satisfy our customers. Any extended period of time for which we cannot obtain adequate production material or which we experience an increase in the price of production material would materially affect our results of operations and financial condition.

Patents, Trademarks and Intellectual Property

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

Industry Cyclicality and Seasonality

The markets for products in each of our reportable segments have been cyclical. Because these products are used principally in the production of vehicles for the automotive, commercial, off-highway, motorcycle and agricultural vehicle markets, revenues and therefore results of operations, are significantly dependent on the general state of the economy and other factors, like the impact of environmental regulations on our customers, which affect these markets. A significant decline in automotive, commercial, off-highway, motorcycle and agricultural vehicle production of our principal customers could adversely impact the Company. Our Electronics and Control Devices segments are typically not affected by seasonality, however the demand for our PST segment consumer products is typically higher in the second half of the year, the fourth quarter in particular.

Customers

We have several customers which account for a significant percentage of our sales. The loss of any significant portion of our sales to these customers, or the loss of a significant customer, would have a material adverse impact on our financial condition and results of operations. We supply numerous different products to each of our principal customers. Contracts with several of our customers provide for supplying their requirements for a particular model, rather than for manufacturing a specific quantity of products. Such contracts range from one year to the life of the model, which is generally three to seven years. These contracts are subject to potential renegotiation from time to time, which may affect product pricing and generally may be terminated by our customers at any time. Therefore, the loss of a contract for a major model or a significant decrease in demand for certain key models or group of related models sold by any of our major customers would have a material adverse impact on the Company. We may enter into contracts to supply products, the introduction of which may then be delayed or cancelled. We also compete to supply products for successor models, and are therefore subject to the risk that the customer will not select the Company to produce products on any such model, which could have a material adverse impact on our financial condition and results of operations.

Due to the competitive nature of the markets we serve, we face pricing pressures from our customers in the ordinary course of business. In response to these pricing pressures we have been able to effectively manage our production costs by the combination of lowering certain costs and limiting the increase of others, the net impact of which has not been material. However, if we are unable to effectively manage production costs in the future to mitigate future pricing pressures, our results of operations would be adversely affected.

The following table presents our principal customers, as a percentage of net sales:

Years ended December 31	2017	2016	2015
Ford Motor Company	14 %	17 %	14 %
General Motors Company	7	7	5
Daimler	6	6	6
Volvo	6	6	6
Scania Group	5	6	7
Other	62	58	62

Backlog

The Company defines backlog as the cumulative remaining sales for awarded programs for the next five years. The Company's backlog was \$3.5 billion as of December 31, 2017, compared to \$3.0 billion as of December 31, 2016. The Company's estimated net sales may be impacted by various assumptions, including new program vehicle production levels, customer price reductions, currency exchange rates and program launch timing. In addition, the Company typically enters into customer agreements at the beginning of a vehicle life cycle with the intent to fulfill purchasing requirements for the entire vehicle production life cycle. These agreements may be terminated by customers at any time and, accordingly, expected net sales information does not represent firm orders or firm commitments.

Competition

The markets for our products in our reportable segments are highly competitive. We compete based on technological innovation, price, quality, performance, service and delivery. We compete for new business both at the beginning of the development of new models and upon the redesign of existing models for OEM customers. New model development generally begins two to five years before the marketing of such models to the public. Once a supplier has been selected to provide parts for a new program, an OEM customer will usually continue to purchase those parts from the selected supplier for the life of the program, although not necessarily for any model redesigns. We compete for aftermarket and mass merchandiser sales based on price, product functionality, quality and service.

Our diversity in products creates a wide range of competitors, which vary depending on both market and geographic location. We compete based on strong customer relations and a fast and flexible organization that develops technically effective solutions at or below target price. We compete against the following companies:

Control Devices. Our primary competitors include BorgWarner, Bosch, Continental AG, CTS Corporation, Delphi Technologies, Denso Corporation, ETO Magnetic Corp., GHSP, Kongsberg Automotive, Methode Electronics, NTK Technologies, Inc., Sensata, and ZF Friedrichshafen AG.

Electronics. Our primary competitors include Actia Group, Aptiv, Bosch, Continental AG, Dongfeng Electronics Technology Co., Ltd., Hella KGaA Hueck & Co., Magneti Marelli S.p.A., Mekra Lang GmbH and Visteon.

PST. Our primary competitors include Autotrac, CalAmp Corporation, Hinor, Ituran, Kostal, Lennox, MultiLaser, Onix, Pioneer Corporation, Sascar, Taramps and Tury.

Product Development

Our research and development efforts for our reportable segments are largely product design and development oriented and consist primarily of applying known technologies to customer requests. We work closely with our customers to solve customer requests using innovative approaches. The majority of our development expenses are related to customer-sponsored programs where we are involved in designing custom-engineered solutions for specific applications or for next generation technology. To further our vehicle platform penetration, we have also developed collaborative relationships with the design and engineering departments of key customers. These collaborative efforts have resulted in the development of new and complimentary products and the enhancement of existing products.

While our engineering and product development departments are organized by market, our segments interact and collaborate on new products. The product development operations are complimented by technology groups in Barneveld, Netherlands; Campinas, Brazil; Canton, Massachusetts; Juarez, Mexico; Lexington, Ohio; Pune, India; São Paulo, Brazil; Shanghai, China and Stockholm, Sweden.

We use efficient and quality oriented work processes to address our customers' high standards. Our product development technical resources include a full complement of computer-aided design and engineering software systems, including (i) virtual three-dimensional modeling, (ii) functional simulation and analysis capabilities and (iii) data links for rapid prototyping. These systems enable us to expedite product design and the manufacturing process to shorten the development time and ultimately time to market.

We have further strengthened our electrical engineering competencies through investment in equipment such as (i) automotive electro-magnetic compliance test chambers, (ii) programmable automotive and commercial vehicle transient generators, (iii) circuit simulators and (iv) other environmental test equipment. Additional investment in 3-D printing product machining equipment has allowed us to fabricate new product samples in a fraction of the time required historically. Our product development and validation efforts are supported by full service, on-site test labs at most manufacturing facilities, thus enabling cross-functional engineering teams to optimize the product, process and system performance before tooling initiation.

We have invested, and will continue to invest heavily in technology to develop new products for our customers. Product development costs incurred in connection with the development of new products and manufacturing methods, to the extent not recoverable from the customer, are expensed as incurred. Such costs amounted to approximately \$48.9 million, \$40.2 million, and \$38.8 million for 2017, 2016, and 2015, respectively, or 5.9%, 5.8%, and 6.0% of net sales for these periods.

We will continue to prioritize investment spending toward the design and development of new products over sustaining existing product programs for specific customers, which allows us to sell our products to multiple customers. The typical product development process takes three to five years to show tangible results. As part of our effort to evaluate our investment spending, we review our current product portfolio and adjust our spending to either accelerate or eliminate our investment in these products based on our position in the market and the potential of the market and product.

Environmental and Other Regulations

Our operations are subject to various federal, state, local and foreign laws and regulations governing, among other things, emissions to air, discharge to water and the generation, handling, storage, transportation, treatment and disposal of waste and other materials. We believe that our business, operations and facilities have been and are being operated in compliance, in all material respects, with applicable environmental and health and safety laws and regulations, many of which provide for substantial fines and criminal sanctions for violations.

Employees

As of December 31, 2017, we had approximately 4,500 employees, approximately 73% of whom were located outside the United States. Although we have no collective bargaining agreements covering U.S. employees, a significant number of employees located in Brazil, China, Estonia, Mexico, Netherlands, Sweden, and the United Kingdom either (i) are represented by a union and are covered by a collective bargaining agreement, or (ii) are covered by a work council or other employment arrangements required by law. We believe that relations with our employees are good.

Joint Ventures

We form joint ventures in various global markets in order to achieve several strategic objectives including (i) diversifying our business by expanding in high-growth regions, (ii) employing complementary design processes, growth technologies and intellectual capital, and (iii) realizing cost savings from combined sourcing.

We have a 49% noncontrolling equity interest in Minda Stoneridge Instruments Ltd. ("Minda"). Based in India, Minda manufactures electromechanical/electronic instrumentation equipment and sensors primarily for the automotive, motorcycle and commercial vehicle markets. We leverage our investment in Minda by sharing our knowledge and expertise in electrical components and systems and expanding Minda's product offering through the joint development of our products designed for the market in India.

Sale of Wiring Business

We sold the assets and liabilities of our Wiring business on August 1, 2014. As a result, the Wiring business has been classified as discontinued operations for all periods presented in the Company's financial statements, and therefore has been excluded from continuing operations, segment results and other information herein for all periods presented. The Wiring business designed and manufactured wiring harness products and assembled instruments panels for sale principally to the commercial, agricultural and off-highway vehicle markets.

Executive Officers of the Company

Each executive officer of the Company serves the Board of Directors at its pleasure. The Board of Directors appoints corporate officers annually. The following table sets forth the names, ages, and positions of the executive officers of the Company:

Name	Age	Position
Jonathan B. DeGaynor	51	President, Chief Executive Officer and Director
Robert R. Krakowiak	47	Chief Financial Officer and Treasurer
Thomas A. Beaver	64	Vice President of the Company and President of Global Sales
Thomas M. Dono, Jr.	45	Chief Legal Officer
Caetano Ferraiolo	50	President of the PST Eletronics Division
Robert J. Hartman Jr.	51	Chief Accounting Officer
Anthony L. Moore	54	Vice President of Operations
Alisa A. Nagle	50	Chief Human Resources Officer
Michael D. Sloan	61	Vice President of the Company
Robert Willig	55	President of the Control Devices Division

Jonathan B. DeGaynor, President, Chief Executive Officer and Director. Mr. DeGaynor was appointed as President and Chief Executive Officer in March 2015. He has served as a director since May 2015. Prior to joining Stoneridge, Mr. DeGaynor served as the Vice President of Strategic Planning and Innovation of Guardian Industries Corp. ("Guardian"), from October 2014 until March 2015. Mr. DeGaynor served as Vice President of Business Development, Managing Director Asia for SRG Global, Inc., a Guardian company, from 2008 through September 2014. Mr. DeGaynor served as Chief Operating Officer, International for Autocam Corporation from 2005 to 2008. Prior to that, Mr. DeGaynor held positions of increasing responsibility with Delphi Corporation from 1993 to 2005.

Robert R. Krakowiak, Chief Financial Officer and Treasurer. Mr. Krakowiak was appointed as Chief Financial Officer and Treasurer in August 2016. Prior to joining Stoneridge, Mr. Krakowiak served as Vice President, Treasurer and Investor Relations at Visteon Corporation from 2012 until August 2016. Prior to that, Mr. Krakowiak held the following positions at Owens Corning: from 2009 until 2012, Vice President of Finance (Composite Solutions Business); from 2008 until 2009, Vice President—Corporate Financial Planning and Analysis; from 2006 until 2008, Vice President and Controller (Roofing and Asphalt); and from 2005 until 2006, Assistant Treasurer.

Thomas A. Beaver, Vice President of the Company and President of Global Sales. Mr. Beaver has served as Vice President of the Company and President of Global Sales since May 2012. Prior to that, Mr. Beaver served as Vice President of the Company and Vice President of Global Sales and Systems Engineering from January 2005 to May 2012. From January 2000 to January 2005, Mr. Beaver served as Vice President of Stoneridge Sales and Marketing.

Thomas M. Dono, Jr., Chief Legal Officer. Mr. Dono was appointed as Chief Legal Officer in January 2018. Prior to joining Stoneridge, Mr. Dono served as Executive Vice President, General Counsel and Corporate Secretary at Metaldyne Performance Group, Inc. from July 2016 to April 2017. Prior to that, Mr. Dono served as Senior Vice President, Legal Affairs, General Counsel and Corporate Secretary at Key Safety Systems, Inc. from May 2009 to July 2016.

Caetano Ferraiolo, President of the PST Electronics Division. Mr. Ferraiolo was appointed to President of the PST Electronics Division in June 2017. Mr. Ferraiolo joined the Company in 2015 and previously served as the Chief Operating Officer of PST. From 2010 to 2015 he served as Vice President of Operations for Cannondale Sports Group in Brazil. Prior to that, Mr. Ferraiolo served as Director of European Commercial and Development, Autocam Corporation from 2005 to 2010.

Robert J Hartman Jr., Chief Accounting Officer. Mr. Hartman was appointed as Chief Accounting Officer and to the role of principal accounting officer in July 2016. Prior to that, Mr. Hartman served as Corporate Controller of the Company since 2006 and prior to that as Stoneridge's Director of Internal Audit from 2003.

Anthony L. Moore, Vice President of Operations. Mr. Moore was appointed as Vice President of Operations in May 2016. Prior to joining the Company, he served as Global Vice President of Integrated Supply Chain and Operations at Ingersoll Rand, Compressed Air Systems from October 2015. Prior to that, Mr. Moore served as Chief Product Development and Supply Chain Officer at Remington Outdoor Company from May 2012 to September 2015. Before that, Mr. Moore was employed at Cooper Industries, Inc. where he held several leadership positions in the areas of supply chain, operations, and engineering from 2008.

Alisa A. Nagle, Chief Human Resources Officer. Ms. Nagle has served as Chief Human Resources Officer since joining the Company in November 2015. From 2007 until her employment with the Company, Ms. Nagle served as Vice President of Human Resources – Global Aftermarket and Original Equipment Groups and Global Central Functions at Johnson Controls, Inc.

Michael D. Sloan, Vice President of the Company. Mr. Sloan has served as Vice President of the Company since December 2009. Previously, Mr. Sloan served as President of the Control Devices Division from July 2009 to October 2017. Prior to that, Mr. Sloan served as Vice President and General Manager of Stoneridge Hi-Stat from February 2004 to July 2009.

Robert Willig, President of the Control Devices Division. Mr. Willig was appointed to President of the Control Devices Division in October 2017. Until his employment with the Company, Mr. Willig served as President and Chief Executive Officer of Plasan Carbon Composites from April 2017 to October 2017; President of Driveline Americas, GKN PLC from April 2013 to July 2016; and President of Sinter Americas, GKN PLC from September 2010 to April 2013. Prior to that, he served as President of the Power Transmission Division of Tomkins PLC from 2008.

Available Information

We make available, free of charge through our website (www.stoneridge.com), our Annual Report on Form 10-K ("Annual Report"), Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, all amendments to those reports, and other filings with the U.S. Securities and Exchange Commission ("SEC"), as soon as reasonably practicable after they are filed with the SEC. Our Corporate Governance Guidelines, Code of Business Conduct and Ethics, Code of Ethics for Senior Financial Officers, Whistleblower Policy and Procedures and the charters of the Board of Director's Audit, Compensation and Nominating and Corporate Governance Committees are posted on our website as well.

Copies of these documents will be available to any shareholder upon request. Requests should be directed in writing to Investor Relations at Stoneridge, Inc., 39675 MacKenzie Drive, Suite 400, Novi, Michigan 48377.

The SEC maintains a website (www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, including the Company. The public may also read and copy any materials we file with the SEC at the SEC's Public Reference Room at 100 F. Street, NE, Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330.

Item 1A. Risk Factors.

Our business is cyclical and a downturn in the automotive, commercial, off-highway, motorcycle and agricultural vehicle markets as well as overall economic conditions could reduce the sales and profitability of our business.

The demand for products in our Control Devices and Electronics segments are largely dependent on the domestic and foreign production of automotive, commercial, off-highway, motorcycle and agricultural vehicles. The markets for our products have been cyclical, because new vehicle demand is dependent on, among other things, consumer spending and is tied closely to the overall strength of the economy. Because the majority of our products are used principally in the production of vehicles for the automotive, commercial, off-highway, motorcycle and agricultural vehicle markets, our net sales, and therefore our results of operations, are significantly dependent on the general state of the economy and other factors which affect these markets. A decline in automotive, commercial, off-highway, motorcycle or agricultural vehicle production, or a material decline in market share by our significant customers, could adversely affect our results of operations and financial condition.

In 2017, approximately 88% of our net sales were derived from automotive, commercial, off-highway, motorcycle and agricultural vehicle markets while approximately 12% were derived from aftermarket distributors, mass merchandisers and monitoring services markets.

We have foreign currency translation and transaction risks that may materially adversely affect our operating results, financial condition and liquidity.

The financial position and results of operations of our international subsidiaries are initially recorded in various foreign currencies and then translated into U.S. dollars at the applicable exchange rate for inclusion in our consolidated financial statements. The strengthening of the U.S. dollar against these foreign currencies ordinarily has a negative effect on our reported sales and operating margin (and conversely, the weakening of the U.S. dollar against these foreign currencies has a positive impact). The volatility of currency exchange rates may materially adversely affect our operating results, including foreign currency forward contracts. To mitigate a portion of our exposure to fluctuations in foreign currency exchange rates we use derivative financial instruments, including foreign currency contracts, to reduce the effect of such fluctuations on foreign currency denominated intercompany transactions, inventory purchases and other foreign currency exposures.

We are subject to risks related to our international operations.

Approximately 43% of our net sales in 2017 were derived from sales outside of North America. At December 31, 2017, significant concentrations of net assets outside of North America included \$36.5 million in South America and \$184.7 million in Europe and Other. Non-current assets outside of North America accounted for approximately 65% of our non-current assets as of December 31, 2017. International sales and operations are subject to significant risks, including, among others:

· political and economic instability;

- ·restrictive trade policies;
- ·economic conditions in local markets;
- ·currency exchange controls;
- ·labor unrest;
- ·difficulty in obtaining distribution support and potentially adverse tax consequences; and

the imposition of product tariffs and the burden of complying with a wide variety of international and U.S. export laws.

We may not realize sales represented by awarded business.

We base our growth projections, in part, on business awards made by our customers. These business awards generally renew annually during a program life cycle. Failure of actual production orders from our customers to approximate these business awards could have a material adverse effect on our business, financial condition or results of operations.

The prices that we can charge some of our customers are predetermined and we bear the risk of costs in excess of our estimates, in addition to the risk of adverse effects resulting from general customer demands for cost reductions and quality improvements.

Our supply agreements with some of our customers require us to provide our products at predetermined prices. In some cases, these prices decline over the course of the contract and may require us to meet certain productivity and cost reduction targets. In addition, our customers may require us to share productivity savings in excess of our cost reduction targets. The costs that we incur in fulfilling these contracts may vary substantially from our initial estimates. Unanticipated cost increases or the inability to meet certain cost reduction targets may occur as a result of several factors, including increases in the costs of labor, components or materials. In some cases, we are permitted to pass on to our customers the cost increases associated with specific materials. However, cost overruns that we cannot pass on to our customers could adversely affect our business, financial condition or results of operations.

OEM customers have exerted and continue to exert considerable pressure on component suppliers to reduce costs, improve quality and provide additional design and engineering capabilities and continue to demand and receive price reductions and measurable increases in quality through their use of competitive selection processes, rating programs and various other arrangements. We may be unable to generate sufficient production cost savings in the future to offset required price reductions. Additionally, OEMs have generally required component suppliers to provide more design engineering input at earlier stages of the product development process, the costs of which have, in some cases, been absorbed by the suppliers. Future price reductions, increased quality standards and additional engineering capabilities required by OEMs may reduce our profitability and have a material adverse effect on our business, financial condition or results of operations.

Our business is very competitive and increased competition could reduce our sales and profitability.

The markets for our products are highly competitive. We compete based on technological innovation, price, quality, performance, service and delivery. Many of our competitors are more diversified and have greater financial and other resources than we do. In addition, with respect to certain products, some of our competitors are divisions of our OEM customers. We cannot assure that our business will not be adversely affected by competition or that we will be able to maintain our profitability if the competitive environment changes.

The loss or insolvency of any of our principal customers would adversely affect our future results.

We are dependent on several principal customers for a significant percentage of our net sales. In 2017, our top five customers were Ford Motor Company, General Motors Company, Daimler, Volvo and Scania Group which comprised 14%, 7%, 6%, 6% and 5% of our net sales, respectively. In 2017, our top ten customers accounted for 51% of our net sales. The loss of any significant portion of our sales to these customers would have a material adverse effect on our results of operations and financial condition. In addition, we have significant receivable balances related to these customers and other major customers that would be at risk in the event of their bankruptcy.

The discontinuation of, loss of business or lack of commercial success, with respect to a particular vehicle model for which the Company is a significant supplier could reduce the Company's sales and harm its profitability.

Although the Company has purchase orders from many of its customers, these purchase orders generally provide for the supply of a customer's annual requirements for a particular vehicle model and assembly plant, or in some cases, for the supply of a customer's requirements for the life of a particular vehicle model, rather than for the purchase of a specific quantity of products. In addition, it is possible that customers could elect to manufacture components

internally that are currently produced by outside suppliers, such as the Company. The discontinuation of, the loss of business with respect to or a lack of commercial success of a particular vehicle model for which the Company is a significant supplier, could reduce the Company's sales and have a material adverse effect on our business, financial condition or results of operations.

Our inability to effectively manage the timing, quality and costs of new program launches could adversely affect our financial performance.

In connection with the award of new business, we obligate ourselves to deliver new products and services that are subject to our customers' timing, performance and quality standards. Additionally, as a Tier 1 supplier, we must effectively coordinate the activities of numerous suppliers in order for the program launches of our products to be successful. Given the complexity of new program launches, we may experience difficulties managing product quality, timeliness and associated costs. In addition, new program launches require a significant ramp up of costs; however, our sales related to these new programs generally are dependent upon the timing and success of our customers' introduction of new vehicles. Our inability to effectively manage the timing, quality and costs of these new program launches could adversely affect our business, financial condition or results of operations.

We are dependent on the availability and price of raw materials and other supplies.

We require substantial amounts of raw materials and other supplies, and substantially all such materials we require are purchased from outside sources. The availability and prices of raw materials and other supplies may be subject to curtailment or change due to, among other things, new laws or regulations, suppliers' allocations to other purchasers and interruptions in production by suppliers, weather emergencies, natural disasters, commercial disputes, acts of terrorism or war, changes in exchange rates and worldwide price levels. If demand for raw materials increases, we may have difficulties obtaining adequate raw materials and other supplies from our suppliers to satisfy our customers. At times, we have experienced difficulty obtaining adequate supplies of semiconductors and memory chips. In addition, there have been challenges at times in obtaining timely supply of nylon and resins for our Control Devices segment and audio component parts for our PST segment. If we cannot obtain adequate raw materials and other supplies, or if we experience an increase in the price of raw materials and other supplies, our business, financial condition or results of operations could be materially adversely affected.

We use a variety of commodities, including copper, zinc, resins and certain other commodities. Increasing commodity costs could have a negative impact on our results. We have sought at times to alleviate the effect of increasing costs by selectively hedging a portion of our exposure. The inability to effectively hedge any commodity cost increase may have a material adverse effect on our business, financial condition or results of operations.

We rely on independent dealers and distributors to sell certain products in the aftermarket sales channel and a disruption to this channel would harm our business.

Because we sell certain products such as security accessories and driver information products to independent dealers and distributors, we are subject to many risks, including risks related to their inventory levels and support for our products. If dealers and distributors do not maintain sufficient inventory levels to meet customer demand, our sales could be negatively impacted.

Our dealer network also sells products offered by our competitors. If our competitors offer our dealers more favorable terms, those dealers may de-emphasize or decline to carry our products. In the future, we may not be able to retain or attract a sufficient number of qualified dealers and distributors. Our inability to maintain successful relationships with dealers and distributors, or to expand our distribution channels, could have a material adverse effect on our business, financial condition or results of operations.

We must implement and sustain a competitive technological advantage in producing our products to compete effectively.

Our products are subject to changing technology, which could place us at a competitive disadvantage relative to alternative products introduced by competitors. Our success will depend on our ability to continue to meet customers' changing specifications with respect to technological innovation, price, quality, performance, service and delivery by implementing and sustaining competitive technological advances. Our business may, therefore, require significant recurring additional capital expenditures and investment in product development and manufacturing and management information systems. We cannot assure that we will be able to achieve the technological advances or introduce new products that may be necessary to remain competitive. Our inability to continuously improve existing products, to develop new products and to achieve technological advances could have a material adverse effect on our business, financial condition or results of operations.

Our Global Positioning Systems ("GPS") products depend upon satellites maintained by the United States Department of Defense. If a significant number of these satellites become inoperable, unavailable or are not replaced, or if the policies of the United States government for the use of the GPS without charge are changed, our business will suffer.

The GPS is a satellite-based navigation and positioning system consisting of a constellation of orbiting satellites. The satellites and their ground control and monitoring stations are maintained and operated by the United States Department of Defense. The Department of Defense does not currently charge users for access to the satellite signals. These satellites and their ground support systems are complex electronic systems subject to electronic and mechanical failures and possible sabotage.

If a significant number of satellites were to become inoperable, unavailable or are not replaced, it would impair the current utility of our GPS products and the growth of market opportunities. In addition, there can be no assurance that the U.S. government will remain committed to the operation and maintenance of GPS satellites over a long period, or that the policies of the U.S. government that provide for the use of the GPS without charge and without accuracy degradation will remain unchanged. Because of the increasing commercial applications of the GPS, other U.S. government agencies may become involved in the administration or the regulation of the use of GPS signals. Any of the foregoing factors could affect the willingness of buyers of our products to select GPS-based products instead of products based on competing technologies, which could adversely affect our operational revenues, financial condition and results of operation.

We may incur material product liability costs.

We may be subject to product liability claims in the event that the failure of any of our products results in personal injury or death and we cannot assure that we will not experience material product liability losses in the future. We cannot assure that our product liability insurance will be adequate for liabilities ultimately incurred or that it will continue to be available on terms acceptable to us. In addition, if any of our products prove to be defective, we may be required to participate in government-imposed or customer OEM-instituted recalls involving such products. A successful claim brought against us that exceeds available insurance coverage or a requirement to participate in any product recall could have a material adverse effect on our business, financial condition or results of operations.

Increased or unexpected product warranty claims could adversely affect us.

We typically provide our customers a warranty covering workmanship, and in some cases materials, on products we manufacture. Our warranty generally provides that products will be free from defects and adhere to customer specifications. If a product fails to comply with the warranty, we may be obligated or compelled, at our expense, to correct any defect by repairing or replacing the defective product. Our customers are increasingly seeking to hold suppliers responsible for product warranties, which could negatively impact our exposure to these costs. We maintain warranty reserves in an amount based on historical trends of units sold and payment amounts, combined with our current understanding of the status of existing claims. To estimate the warranty reserves, we must forecast the resolution of existing claims, as well as expected future claims on products previously sold. The amounts estimated to be due and payable could differ materially from what we may ultimately be required to pay. An increase in the rate of warranty claims or the occurrence of unexpected warranty claims could have a material adverse effect on our customer relations, our financial condition or results of operations.

If we fail to protect our intellectual property rights or maintain our rights to use licensed intellectual property or are found liable for infringing the rights of others, our business could be adversely affected.

Our intellectual property, including our patents, trademarks, copyrights, trade secrets and license agreements, are important in the operation of our businesses, and we rely on the patent, trademark, copyright and trade secret laws of the United States and other countries, as well as nondisclosure agreements, to protect our intellectual property rights. We may not, however, be able to prevent third parties from infringing, misappropriating or otherwise violating our intellectual property, breaching any nondisclosure agreements with us, or independently developing technology that is similar or superior to ours and not covered by our intellectual property. Any of the foregoing could reduce any competitive advantage we have developed, cause us to lose sales or otherwise harm our business. We cannot assure that any intellectual property will provide us with any competitive advantage or will not be challenged, rejected, cancelled, invalidated or declared unenforceable. In the case of pending patent applications, we may not be successful in securing issued patents, or securing patents that provide us with a competitive advantage for our businesses. In addition, our competitors may design products around our patents that avoid infringement and violation of our intellectual property rights.

We cannot be certain that we have rights to use all intellectual property used in the conduct of our businesses or that we have complied with the terms of agreements by which we acquire such rights, which could expose us to infringement, misappropriation or other claims alleging violations of third party intellectual property rights. Third parties have asserted and may assert or prosecute infringement claims against us in connection with the services and products that we offer, and we may or may not be able to successfully defend these claims. Litigation, either to enforce our intellectual property rights or to defend against claims regarding intellectual property rights of others, could result in substantial costs and a diversion of our resources. Any such claims and resulting litigation could require us to enter into licensing agreements (if available on acceptable terms or at all), pay damages and cease making or selling certain products and could result in a loss of our intellectual property protection. Moreover, we may need to redesign some of our products to avoid future infringement liability. We also may be required to indemnify customers or other third parties at significant expense in connection with such claims and actions. Any of the foregoing could have a material adverse effect on our business, financial condition or results of operations.

Our debt obligations could limit our flexibility in managing our business and expose us to risks.

As of December 31, 2017, there was \$121.0 million in borrowings outstanding on our revolving credit facility (the "Credit Facility"). In addition, we are permitted under our Credit Facility to incur additional debt, subject to specified limitations. Our leverage and the terms of our indebtedness may have important consequences including the following:

we may have difficulty satisfying our obligations with respect to our indebtedness, and if we fail to comply with these requirements, an event of default could result;

we may be required to dedicate a substantial portion of our cash flow from operations to required payments on ·indebtedness, thereby reducing the availability of cash flow for working capital, capital expenditures and other general corporate activities;

covenants relating to our debt may limit our ability to obtain additional financing for working capital, capital expenditures and other general corporate activities;

covenants relating to our debt may limit our flexibility in planning for, or reacting to, changes in our business and the industry in which we operate;

·we may be placed at a competitive disadvantage against any less leveraged competitors.

These and other consequences of our leverage and the terms of our indebtedness could have a material adverse effect on our business, financial condition or results of operations.

Covenants in our Credit Facility may limit our ability to pursue our business strategies.

Our Credit Facility limits our ability to, among other things:

- ·incur additional debt and guarantees;
- ·pay dividends and repurchase our shares;
- ·make other restricted payments, including investments;
- ·create liens;
- ·sell or otherwise dispose of assets, including capital shares of subsidiaries;
- ·enter into agreements that restrict dividends from subsidiaries;
- ·consolidate, merge or sell or otherwise dispose of all or substantially all of our assets; and
- ·substantially change the nature of our business.

The agreement governing our Credit Facility requires us to maintain a maximum leverage ratio of 3.00 to 1.00, and a minimum interest coverage ratio of 3.50 to 1.00 and places a maximum annual limit on capital expenditures. Our ability to comply with these covenants as well as the negative covenants under the terms of our indebtedness, may be affected by events beyond our control.

A breach of any of the negative covenants under our indebtedness or our inability to comply with the leverage and interest ratio requirements in the Credit Facility could result in a default. If a default occurs, the lenders under the Credit Facility could elect to declare all outstanding borrowings, together with accrued interest and other fees, to be immediately due and payable and terminate any commitments they have to provide further borrowings, and the Credit Facility lenders could pursue foreclosure and other remedies against us and our assets.

We have limited or no redundancy for certain of our manufacturing facilities, and therefore damage or disruption to those facilities could interrupt our operations, increase our costs of doing business and impair our ability to deliver our products on a timely basis.

If certain of our existing production facilities become incapable of manufacturing products for any reason, we may be unable to meet production requirements, we may lose revenue and we may not be able to maintain our relationships with our customers. Without operation of certain existing production facilities, we may be limited in our ability to deliver products until we restore the manufacturing capability at the particular facility, find an alternative manufacturing facility or arrange an alternative source of supply. We carry business interruption insurance to cover lost revenue and profits in an amount we consider adequate, this insurance does not cover all possible situations and may be insufficient. Also, our business interruption insurance would not compensate us for the loss of opportunity and potential adverse impact on relations with our existing customers resulting from our inability to produce products for them.

A failure of our information technology (IT) networks and systems, or the inability to successfully implement upgrades to our enterprise resource planning (ERP) systems, could adversely impact our business and operations.

We rely upon information technology networks and systems to process, transmit and store electronic information, and to manage or support a variety of business processes and/or activities. The secure operation of these IT networks and systems and the proper processing and maintenance of this information are critical to our business operations. Despite the implementation of security measures, our IT networks and systems are at risk to damages from computer viruses, unauthorized access, cyber-attack and other similar disruptions. The occurrence of any of these events could compromise our IT networks and systems, and the information stored there could be accessed, publicly disclosed or lost. Any such access, disclosure, loss of information or disruption of our operations could cause significant damage to our reputation, affect our relationships with our customers, suppliers and employees, lead to claims against the Company and ultimately harm our business. We may be required to incur significant costs to protect against damage caused by these disruptions or security breaches in the future.

Also, we continually expand and update our IT networks and systems in response to the changing needs of our business and periodically upgrade our ERP systems. Should our networks or systems not be implemented

successfully, or if the systems do not perform in a satisfactory manner once implementation is complete, our business and operations could be disrupted and our results of operations could be adversely affected, including our ability to report accurate and timely financial results.

We may be subject to risks relating to our information technology systems and cybersecurity.

We rely on information technology systems to process, transmit and store electronic information and manage and operate our business. A breach in security could expose us and our customers and suppliers to risks of misuse of confidential information, manipulation and destruction of data, production downtimes and operations disruptions, which in turn could adversely affect our reputation, competitive position, business or results of operations. While we have taken reasonable steps to protect the Company from cybersecurity risks and security breaches (including enhancing our firewall, workstation, email security and network monitoring and alerting capabilities, and training employees around phishing, malware and other cybersecurity risks), and we have policies and procedures to prevent or limit the impact of systems failures, interruptions, and security breaches, there can be no assurance that such events will not occur or that they will be adequately addressed if they do. Although we rely on commonly used security and processing systems to provide the security and authentication necessary to effect the secure transmission of data, these precautions may not protect our systems from all potential compromises or breaches of security.

Privacy and security concerns relating to the Company's current or future products and services could damage its reputation and deter current and potential users from using them.

We may gain access to sensitive, confidential or personal data or information that is subject to privacy and security laws, regulations and customer-imposed controls. Concerns about our practices with regard to the collection, use, disclosure, or security of personal information or other privacy related matters, even if unfounded, could damage our reputation and adversely affect our financial condition or operating results. Furthermore, regulatory authorities around the world are considering a number of legislative and regulatory proposals concerning cybersecurity and data protection. In addition, the interpretation and application of consumer and data protection laws in the U.S., Europe and elsewhere are often uncertain and in flux. Complying with these various laws could cause the Company to incur substantial costs.

Compliance with environmental and other governmental regulations could be costly and require us to make significant expenditures.

Our operations are subject to various federal, state, local and foreign laws and regulations governing, among other things:

- · the discharge of pollutants into the air and water;
- ·the generation, handling, storage, transportation, treatment, and disposal of waste and other materials;
- ·the cleanup of contaminated properties; and
- ·the health and safety of our employees.

Our business, operations and facilities are subject to environmental and health and safety laws and regulations, many of which provide for substantial fines for violations. The operation of our manufacturing facilities entails risks and we cannot assure you that we will not incur material costs or liabilities in connection with these operations. In addition, potentially significant expenditures could be required in order to comply with evolving environmental, health and safety laws, regulations or requirements that may be adopted or imposed in the future. Changes in environmental, health and safety laws, regulations and requirements or other governmental regulations could increase our cost of doing business or adversely affect the demand for our products.

Our annual effective tax rate could be volatile and materially change as a result of changes in the mix of earnings and other factors including changes in the recognition and/or release of valuation allowances against deferred tax assets.

Our overall effective tax rate is computed by dividing our total tax expense (benefit) by our total earnings (loss) before tax. However, tax expense and benefits are not recognized on a global basis, but rather on a jurisdictional or legal entity basis. Losses in certain jurisdictions may not provide a current financial statement tax benefit as a result of the need to maintain a valuation allowance against the associated deferred tax asset. Also, management periodically evaluates the realizability of our deferred tax assets which may result in the recognition and/or release of valuation allowances. As a result, changes in the mix of earnings between jurisdictions and changes in the recognition and/or release of valuation allowances, among other factors, could have a significant effect on our overall effective tax rate.

The United States recently passed a comprehensive tax reform bill that could affect our financial performance.

On December 22, 2017, President Trump signed into law new legislation that significantly revises the Internal Revenue Code of 1986, as amended (the "IRC"). The newly enacted federal income tax law, among other things, contains significant changes to corporate taxation, including the reduction of the corporate income tax rate from 35% to 21%, a one-time transition tax on offshore earnings at reduced tax rates regardless of whether the earnings are repatriated, the elimination of U.S. tax on foreign dividends (subject to certain important exceptions), new taxes on certain foreign earnings, a new minimum tax related to payments to foreign subsidiaries and affiliates, immediate deductions for certain new investments and the modification or repeal of many business deductions and credits. Notwithstanding the reduction in the corporate income tax rate, the overall impact of the new federal tax law is uncertain, and our financial performance could be affected. In addition, it is uncertain if, and to what extent, various states will conform to the new tax law and foreign countries will react by adopting tax legislation or taking other actions that could adversely affect our business, financial condition or results of operations.

Significant changes in the North American Free Trade Agreement ("NAFTA") could adversely affect our financial performance.

The United States, Mexico and Canada are currently re-negotiating NAFTA, from which the U.S. government has advised it will withdraw if an agreement on revised terms is not reached. The U.S. government proposed changes to NAFTA that would require automotive products to contain significantly higher North American content, as well as specific U.S. domestic content, in order to obtain duty-free treatment under NAFTA. Canada offered counter-proposals, and the three countries are continuing discussions to achieve revised rules for automotive products. Reflective of the automotive industry, our vehicle parts manufacturing facilities in the United States, Mexico and Canada are highly dependent on duty-free trade within the NAFTA region. A significant number of our facilities are in Mexico and represent a critical component of our supply chain and that of our customers. We have significant imports into the United States, and the imposition of customs duties on these imports could negatively impact our financial performance. If such customs duties are implemented, Mexico and Canada may take retaliatory actions with respect to U.S. imports or U.S. investments in their countries. Any such potential actions could adversely affect our business, financial condition or results of operations.

We may not be able to successfully integrate acquisitions into our business or may otherwise be unable to benefit from pursuing acquisitions.

Failure to successfully identify, complete and/or integrate acquisitions could have a material adverse effect on us. A portion of our growth in sales and earnings has been generated from acquisitions and subsequent improvements in the performance of the businesses acquired. We expect to continue a strategy of selectively identifying and acquiring businesses with complementary products. We cannot assure you that any business acquired by us will be successfully integrated with our operations or prove to be profitable. We could incur substantial indebtedness in connection with our acquisition strategy, which could significantly increase our interest expense.

We anticipate that acquisitions could occur in foreign markets in which we do not currently operate. As a result, the process of integrating acquired operations into our existing operations may result in unforeseen operating difficulties and may require significant financial resources that would otherwise be available for the ongoing development or expansion of existing operations. Any failure to successfully integrate such acquisitions could have a material adverse effect on our business, financial condition or results of operations.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

At December 31, 2017, the Company and its joint venture owned or leased 11 manufacturing facilities, which together contain approximately 1.1 million square feet of manufacturing space. Of these manufacturing facilities, four are used by our Control Devices reportable segment, four are used by our Electronics reportable segment, one is used by our PST reportable segment and two are used by our joint venture, Minda. The following table provides information regarding our facilities:

Location	Owned/ Leased		Square Footage
Control Devices			_
Lexington, Ohio	Owned	Manufacturing/Engineering/Division Office	219,612
Juarez, Mexico (A)		Manufacturing/Engineering	189,327
Canton, Massachusetts	Owned	Manufacturing/Engineering	132,560
Suzhou, China (A)	Leased	Manufacturing	77,253
El Paso, Texas (A)	Leased	Warehouse	57,000
Lexington, Ohio	Leased	Warehouse	15,000
Lexington, Ohio	Leased	Warehouse	2,700
Electronics			
Tallinn, Estonia (B)	Laggad	Manufacturing/Engineering	95 011
· · · · · · · · · · · · · · · · · · ·		Manufacturing/Engineering	85,911
Orebro, Sweden		Manufacturing	77,472
Barneveld, Netherlands		Manufacturing/Engineering/Warehouse	62,700
Stockholm, Sweden		Engineering Office/Division Office	39,600
Dundee, Scotland		Manufacturing/Sales Office/Engineering Office	34,605
Bayonne, France		Sales Office/Warehouse Sales Office/Warehouse	9,655
Jasper, Georgia			6,250 5,507
Lomersheim, Germany		Sales Office/Warehouse	5,597 5,024
Shanghai, China (B)		Engineering Office/Sales Office	5,034
Madrid, Spain		Sales Office/Warehouse	1,545
Ottobrunn, Germany	Leased	Sales Office	1,119
PST			
Manaus, Brazil	Owned	Manufacturing	102,247
São Paulo, Brazil	Owned	Engineering Office/Division Office	45,467
São Paulo, Brazil	Leased	Sales Office	9,246
Buenos Aires, Argentina	Leased	Sales Office	2,906
Corporate and Other			
Novi, Michigan	Lessed	Headquarters	37,713
Stuttgart, Germany		Sales Office/Engineering Office	1,000
Cheonan, South Korea		Sales Office	427
Cheonan, South Rolea	Leaseu	Sales Office	⊤ ∠ /

Joint Venture

Pune, India Owned Manufacturing/Engineering Office/Sales Office 80,000 Chennai, India Leased Manufacturing 25,629

- (A) This facility is also used in the Electronics reportable segment.
- (B) This facility is also used in the Control Devices reportable segment.

Item 3. Legal Proceedings.

We are involved in certain legal actions and claims primarily arising in the ordinary course of business. Although it is not possible to predict with certainty the outcome of these matters, we do not believe that any of the litigation in which we are currently engaged, either individually or in the aggregate, will have a material adverse effect on our business, financial position or results of operations. We are subject to a tax assessment in Brazil related to value added taxes on vehicle tracking and monitoring services for which we believe the likelihood of loss is reasonably possible, but not probable, although it may take years to resolve. In addition, we are subject to litigation regarding patent infringement. We are also subject to the risk of exposure to product liability claims in the event that the failure of any of our products causes personal injury or death to users of our products as well as product warranty and recall claims. There can be no assurance that we will not experience any material losses related to product liability, warranty or recall claims. In addition, if any of our products prove to be defective, we may be required to participate in a government-imposed or customer OEM-instituted recall involving such products. See additional details of these matters in Note 10 to the consolidated financial statements.

Item	4.	Mine	Safety	Disclosure.
1111111	т.	TATHE	Daict	Disciosui C.

Not Applicable.

PART II

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

Our shares are listed on the New York Stock Exchange ("NYSE") under the symbol "SRI." As of February 23, 2018, we had 28,179,702 Common Shares, without par value, outstanding which were owned by approximately 200 shareholders of record. This does not include persons whose stock is in nominee or "street name" accounts held by brokers.

Since the Company's initial public offering in 1997, we have not paid or declared dividends, which are restricted under the Credit Facility. We may only pay cash dividends on our Common Shares of up to \$7.0 million annually if immediately prior to and immediately after the payment is made, no event of default under our Credit Facility shall have occurred. We currently intend to use cash flows from our earnings for acquisitions, working capital, capital

expenditures, general corporate purposes and reduction in outstanding indebtedness. Accordingly, we do not expect to pay cash dividends for the foreseeable future.

High and low sales prices for our Common Shares for each quarter ended during 2017 and 2016 are as follows:

High	Low
\$19.50	\$16.14
\$20.82	\$14.16
\$19.98	\$14.72
\$25.34	\$19.55
\$15.17	\$10.51
\$16.99	\$13.57
\$19.20	\$14.84
\$18.62	\$13.42
	\$19.50 \$20.82 \$19.98 \$25.34 \$15.17 \$16.99 \$19.20

There were no repurchases of Common Shares made by us during the years ended December 31, 2017 or 2016, other than the repurchase of Common Shares of 132,211 and 126,539, respectively, to satisfy employee tax withholdings associated with the vesting of restricted Common Shares.

Performance Graph

Set forth below is a line graph comparing the cumulative total return of a hypothetical investment in our Common Shares with the cumulative total return of hypothetical investments in the Morningstar Auto Parts Industry Group Index and the NYSE Composite Index based on the respective market price of each investment as of December 31, 2012, 2013, 2014, 2015, 2016, and 2017 assuming in each case an initial investment of \$100 on December 31, 2012, and reinvestment of dividends.

	2012	2013	2014	2015	2016	2017
Stoneridge, Inc.	\$100	\$249	\$251	\$289	\$346	\$446
Morningstar Auto Parts Index	\$100	\$155	\$172	\$161	\$171	\$212
NYSE Composite Index	\$100	\$126	\$135	\$130	\$145	\$173

For information on "Related Stockholder Matters" required by Item 201(d) of Regulation S-K, refer to Item 12 of this report.

Item 6. Selected Financial Data.

The following table sets forth selected historical financial data and should be read in conjunction with the consolidated financial statements and notes related thereto and other financial information included elsewhere herein. The selected historical data was derived from our consolidated financial statements.

Years ended December 31	2017 (A) (in thousar	2016 nds, except j	2015 per share da	2014 ta)	2013
Statement of Operations Data: Net sales:	`	, ,		,	
Control Devices	\$447,528	\$408,132	\$333,010	\$306,658	\$291,145
Electronics (A)	282,383	205,256	216,544	214,141	189,809
PST	94,533	82,589	95,258	139,780	178,532
Total net sales	\$824,444	\$695,977	\$644,812	\$660,579	\$659,486
Gross profit	\$248,140	\$195,439	\$176,978	\$190,874	\$205,955
Operating income (loss):					
Control Devices	\$72,555	\$61,815	\$44,690	\$35,387	\$32,331
Electronics (A)	18,119	14,798	13,784	17,444	20,732
PST (E)	2,661	(3,462)	(7,542)	(59,587)	7,211
Unallocated Corporate (H)	(35,965)				
Total operating income (loss)	\$57,370	\$44,082	\$27,815	\$(25,823)	\$42,403
Equity in earnings of investees	\$1,636	\$1,233	\$608	\$815	\$476
Income (loss) before income taxes from continuing operations ^(F)	\$52,582	\$39,185	\$20,230	\$(53,060)	\$23,326
Income (loss) from continuing operations $^{(A)}(B)(C)(D)(E)(F)$	\$45,049	\$75,574	\$20,777	\$(51,204)	\$20,529
Loss from discontinued operations (G)	-	-	(210)	(9,387)	(4,021)
Net income (loss) $^{(A)}(B)(C)(D)(E)(F)(G)$	45,049	75,574	20,567	(60,591)	16,508
Net income (loss) attributable to noncontrolling interest $(D)(E)$	(130)	(1,887)	(2,207)	(13,483)	1,377
Net income (loss) attributable to Stoneridge, Inc.	\$45,179	\$77,461	\$22,774	\$(47,108)	\$15,131
Basic earnings (loss) per share from continuing operations attributable to Stoneridge, Inc.	\$1.61	\$2.79	\$0.84	\$(1.40)	\$0.72

Diluted earnings (loss) per share from continuing operations attributable to Stoneridge, Inc.	\$1.57	\$2.74	\$0.82	\$(1.40) \$0.70	
Basic loss per share attributable to discontinued operations	\$-	\$-	\$(0.01) \$(0.35) \$(0.15)
Diluted loss per share attributable to discontinued operations	\$-	\$-	\$(0.01) \$(0.35) \$(0.14)
Basic earnings (loss) per share attributable to Stoneridge, Inc.	\$1.61	\$2.79	\$0.83	\$(1.75) \$0.57	
Diluted earnings (loss) per share attributable to Stoneridge, Inc.	\$1.57	\$2.74	\$0.81	\$(1.75) \$0.56	

Other Continuing Operations Data:					
Design and development	\$48,877	\$40,212	\$38,792	\$41,609	\$40,372
Capital expenditures	\$32,170	\$24,476	\$28,735	\$23,516	\$21,576
Depreciation and amortization (I)	\$27,930	\$23,258	\$22,274	\$27,105	\$29,286
Balance Sheet Data (as of December 31):					
Working capital	\$167,245	\$128,184	\$123,859	\$125,197	\$215,880
Total assets	\$559,037	\$394,529	\$364,252	\$398,751	\$588,322
Long-term debt, net of current portion	\$124,852	\$75,060	\$104,458	\$110,651	\$185,045
Shareholders' equity	\$244,072	\$192,077	\$106,429	\$113,806	\$188,534

The amounts for 2017 include the acquisition of the Orlaco business as of the acquisition date which is included (A) within our Electronics operating segment and is disclosed in Note 2 to the Company's consolidation financial statements.

- The amounts for 2017 include the impact of the Tax Legislation, a net tax benefit of \$(9,062), consisting of an increase in tax expense of \$6,207 due to the one-time deemed repatriation tax, offset by the favorable impact of the reduced tax rate on the Company's net deferred tax liabilities and other deferred tax adjustments of \$(15,269) related to certain earnings included in the one-time transition tax.
 - (C) The Company recorded a release of a valuation allowance associated with its U.S. federal, certain state and foreign deferred tax assets of \$48.5 million for the year ended December 31, 2016.
- (D) The Company recorded a full valuation allowance on PST's net deferred tax assets of \$1,237 for the year ended December 31, 2015 of which \$322 was attributable to noncontrolling interest.
- (E) The Company recorded a goodwill impairment of \$51,458 related to PST during the year ended December 31, 2014 of which \$11,304 was attributable to noncontrolling interest.
- (F) The Company recorded a loss on extinguishment of debt of \$10,607 related to the redemption of the 9.5% senior notes during the year ended December 31, 2014.
- The Company sold its Wiring business during the year ended December 31, 2014. As such, for all periods (G) presented the Company reported this business as discontinued operations in the Company's consolidated financial statements.
- $(H) \\ Unallocated corporate expenses include, among other items, accounting/finance, human resources, information technology and legal costs as well as share-based compensation.$

(I) These amounts represent depreciation and amortization on fixed and certain finite-lived intangible assets.

Item	7. Management	's Disc	ussion an	ıd Analysis	of Financial	Condition :	and Results of	Operations.

We are a global designer and manufacturer of highly engineered electrical and electronic components, modules and systems primarily for the automotive, commercial, off-highway, motorcycle and agricultural vehicle markets.

On January 31, 2017, the Company acquired Exploitatiemaatschappij Berghaaf B.V. ("Orlaco"). As such, the Company's consolidated financial statements herein include the results of Orlaco from the acquisition date to December 31, 2017. On May 16, 2017, the Company also acquired the remaining 26% noncontrolling interest in PST.

The following discussion and analysis should be read in conjunction with the consolidated financial statements and notes related thereto and other financial information included elsewhere herein.

Segments

We are organized by products produced and markets served. Under this structure, our operations have been reported using the following segments:

Control Devices. This segment includes results of operations that manufacture sensors, switches, valves and actuators.

Electronics. This segment includes results of operations from the production of electronic instrument clusters, electronic control units and driver information systems and includes the newly acquired Orlaco business, which designs and manufactures camera-based vision systems, monitors and related products.

PST. This segment includes results of operations that design and manufacture electronic vehicle alarms, convenience accessories, vehicle tracking devices and monitoring services and in-vehicle audio and video devices.

Overview

The Company had net income attributable to Stoneridge, Inc. of \$45.2 million, or \$1.57 per diluted share, for the year ended December 31, 2017.

Net income attributable to Stoneridge, Inc. in 2017 decreased by \$32.3 million, or \$1.17 per diluted share, from \$77.5 million, or \$2.74 per diluted share, for the year ended December 31, 2016 primarily due to the release of the valuation allowance on our U.S. federal, certain state and foreign deferred tax assets during 2016 of \$49.6 million, or \$1.75 per diluted share, attributable to Stoneridge, Inc. This decrease was partially offset by increased sales and operating margins in all of our operating segments, including the impact of the acquired Orlaco business.

In 2017, our net sales increased by \$128.5 million, or 18.5% while our operating income increased \$13.3 million, or 30.1%.

Our Control Devices segment net sales increased by 9.7% primarily as a result of new product sales and increased sales volume in the North American automotive market as well as increased sales volume in China, and to a lesser extent, the North American commercial vehicle market. Segment operating income increased by 17.4% relative to 2016.

Our Electronics segment net sales increased by 37.6% primarily due to an increase in European and North American off-highway vehicle product sales substantially related to the acquired Orlaco business, as well as an increase in sales volume in European and North American commercial vehicle products. Segment gross margin improved primarily due to lower material and overhead costs as a percentage of sales as well as a favorable mix related to Orlaco product sales. Operating income for the segment increased by 22.4% relative to 2016.

Our PST segment net sales increased by 14.5% primarily due to an increase in monitoring service revenues as well as a favorable foreign currency translation that increased sales. Operating income improved by \$6.1 million compared to 2016 due to lower direct material costs related to a favorable movement in foreign currency exchange rates and favorable sales mix related to higher monitoring service revenues.

At December 31, 2017 and 2016, we had cash and cash equivalents of \$66.0 million and \$50.4 million, respectively. Cash and cash equivalents increased during 2017 primarily due to cash flows from operations and net debt financing offset by capital expenditures and cash paid for business acquisitions. At December 31, 2017 and 2016 we had \$121.0 million and \$67.0 million, respectively, in borrowings outstanding on our \$300.0 million Credit Facility. The increase in the Credit Facility balance during 2017 was the result of borrowing to fund the Orlaco acquisition with a partial offset from voluntary principal payments.

Outlook

The Company continues to drive strong financial performance through top-line growth that exceeded our underlying markets and continued operating efficiency improvement which contributed to higher, sustainable long-term margins. The Company continues to benefit from its focus on a product portfolio with embedded intelligence. The Company believes that focusing on intelligence products that address industry megatrends will have a positive impact on both our top-line growth and underlying margins.

The North American automotive vehicle market is expected to increase 0.3 million units to 17.4 million units in 2018, which will favorably impact our Control Devices segment. We also expect sales growth in our China automotive market in 2018 related to our sensor products.

The North American commercial vehicle market increased slightly in 2017 and we expect it to increase slightly again in 2018. We expect the European commercial vehicle market in 2018 to remain at approximately the same level with 2017.

Our PST segment revenues and operating performance began to improve in the second half of 2017 due to the stabilization of the Brazilian economy and the automotive and consumer markets we serve. In January 2018, the International Monetary Fund ("IMF") forecasted the Brazil gross domestic product to grow 1.9% in 2018 and 2.1% in 2019. As the Brazilian economy improves, we expect favorable movements in our served market channels and improved financial performance for PST.

Other Matters

As the Company no longer has a valuation allowance against its U.S. federal, certain state and certain foreign deferred tax assets, its effective tax rate is higher in 2017 as compared to 2016. Actual cash taxes paid as a percentage of

income in 2017 is consistent with historical amounts.

A significant portion of our sales are outside of the United States. These sales are generated by our non-U.S. based operations, and therefore, movements in foreign currency exchange rates can have a significant effect on our results of operations, which are presented in U.S. dollars. A significant portion of our raw materials purchased by our Electronics and PST segments are denominated in U.S. dollars, and therefore movements in foreign currency exchange rates can also have a significant effect on our results of operations. The U.S. dollar weakened significantly against the Swedish krona, euro and Brazilian real in 2016 and 2017 favorably impacting our material costs and our reported results.

We regularly evaluate the performance of our businesses and their cost structures, including personnel, and make necessary changes thereto in order to optimize our results. We also evaluate the required skill sets of our personnel and periodically make strategic changes. As a consequence of these actions, we incur severance related costs which we refer to as business realignment charges.

Because of the competitive nature of the markets we serve, we face pricing pressures from our customers in the ordinary course of business. In response to these pricing pressures we have been able to effectively manage our production costs by the combination of lowering certain costs and limiting the increase of others, the net impact of which to date has not been material. However, if we are unable to effectively manage production costs in the future to mitigate future pricing pressures, our results of operations would be adversely affected.

In March 2016, we announced the relocation of our corporate headquarters from Warren, Ohio to Novi, Michigan, which occurred primarily during the fourth quarter of 2016. The new headquarters has expanded our presence in the Detroit metropolitan area and improved access to key customers, decision makers and influencers in the automotive and commercial vehicle markets that we serve.

Year Ended December 31, 2017 Compared To Year Ended December 31, 2016

Consolidated statements of operations as a percentage of net sales are presented in the following table (in thousands):

					Dollar
					increase /
Years ended December 31		2017		2016	(decrease)
Net sales	\$824,444	100.0%	\$695,977	100.0%	\$ 128,467
Costs and expenses:					
Cost of goods sold	576,304	69.9	500,538	71.9	75,766
Selling, general and administrative	141,893	17.2	111,145	16.0	30,748
Design and development	48,877	5.9	40,212	5.8	8,665
Operating income	57,370	7.0	44,082	6.3	13,288
Interest expense, net	5,783	0.7	6,277	0.9	(494)
Equity in earnings of investee	(1,636)	(0.2)	(1,233)	(0.2)	(403)
Other expense (income), net	641	0.1	(147)	-	788
Income before income taxes	52,582	6.4	39,185	5.6	13,397
Provision (benefit) for income taxes	7,533	0.9	(36,389)	(5.2)	43,922
Net income	45,049	5.5	75,574	10.8	(30,525)
Net loss attributable to noncontrolling interest	(130)	-	(1,887)	(0.3)	1,757
Net income attributable to Stoneridge, Inc.	\$45,179	5.5 %	\$77,461	11.1 %	\$ (32,282)

Net Sales. Net sales for our reportable segments, excluding inter-segment sales are summarized in the following table (in thousands):

					Dollar	Percen	ıt
Years ended December 31		2017		2016	increase	increas	se
Control Devices	\$447,528	54.3	% \$408,132	58.6	% \$39,396	9.7	%
Electronics	282,383	34.2	205,256	29.5	77,127	37.6	%
PST	94,533	11.5	82,589	11.9	11,944	14.5	%
Total net sales	\$824,444	100.0	0% \$695,977	100.0	% \$128,467	18.5	%

Our Control Devices segment net sales increased primarily as a result of new product sales and increased sales volume in the North American automotive market of \$23.5 million and increased sales volume in the China automotive, commercial vehicle and various other markets of \$8.9 million, \$4.2 million and \$2.8 million, respectively, which were offset by an unfavorable foreign currency translation of \$0.3 million.

Our Electronics segment net sales increased primarily due to an increase in European and North American off-highway vehicle product sales of \$54.9 million and \$11.6 million, respectively, primarily related to the acquired Orlaco business as well as an increase in sales volume in our European and North American commercial vehicle products of \$6.7 million and \$5.6 million, respectively. These increases were partially offset by an unfavorable foreign currency translation of \$1.4 million and unfavorable pricing of \$2.6 million on products nearing the end of program life.

Our PST segment net sales increased primarily due to an increase in monitoring service revenues as well as a favorable foreign currency translation that increased sales by \$6.2 million, or 7.5%.

Net sales by geographic location are summarized in the following table (in thousands):

					Dollar	Percent	t
Years ended December 31		2017		2016	increase	increas	e
North America	\$471,770	57.2 %	6 \$428,046	61.5 %	\$43,724	10.2	%
South America	94,533	11.5	82,589	11.9	11,944	14.5	%
Europe and Other	258,141	31.3	185,342	26.6	72,799	39.3	%
Total net sales	\$824,444	100.0%	6 \$695,977	100.0%	\$128,467	18.5	%

The increase in North American net sales was primarily attributable to new product sales and increased sales volumes in our North American automotive market of \$23.4 million and an increase in sales volumes in North American off-highway, commercial vehicle and various other markets of \$11.6 million, \$4.3 million and \$2.8 million, respectively. The increase in net sales in South America was primarily due to an increase in monitoring service revenues as well as favorable foreign currency translation that increased sales by \$6.2 million. The increase in net sales in Europe and Other was primarily due to the increase in European off-highway vehicle products of \$54.9 million substantially related to Orlaco as well as an increase in sales volume in our European commercial vehicle products and in the China automotive market of \$14.3 million and \$8.9 million, respectively. These increases were partially offset by an unfavorable foreign currency translation of \$1.7 million and unfavorable pricing of \$2.5 million on products nearing the end of program life.

Cost of Goods Sold and Gross Margin. Cost of goods sold increased by 15.1% primarily related to an increase in net sales. Our gross margin improved by 2.0% to 30.1% in 2017 compared to 28.1% for 2016. Our material cost as a percentage of net sales decreased by 0.9% to 50.6% in 2017 compared to 51.5% for 2016. Our direct material costs as a percentage of sales in our Control Devices segment remained consistent with 2016 while the lower direct material costs as a percentage of sales in our Electronics and PST segments resulted from favorable foreign currency movements associated with U.S. dollar denominated purchases, which were partially offset by the expense from the step up of the Orlaco inventory to fair value of \$1.6 million in our Electronics segment. Also, our Electronics segment was benefited by lower overhead costs as a percentage of sales associated with the acquired Orlaco business. Our Electronics segment overhead as a percentage of net sales decreased by 1.2% to 12.2% in 2017 compared to 13.4% for 2016.

Our Control Devices segment gross margin improved due to an increase in sales offset by higher warranty costs.

Our Electronics segment gross margin improved primarily due to lower material and overhead costs as a percentage of sales resulting from favorable movement in foreign currency exchange rates and a favorable mix related to Orlaco product sales.

Our PST segment gross margin improved due to lower direct material costs related to a favorable movement in foreign currency exchange rates and a favorable sales mix related to higher monitoring service revenues.

Selling, General and Administrative ("SG&A"). SG&A expenses increased by \$30.7 million compared to 2016 primarily due to higher costs in our Electronics segment substantially related to the acquisition of Orlaco of \$19.1 million, which includes expense of \$4.9 million for the increase in fair value of earn-out consideration. Our Electronics segment also experienced higher business realignment charges of \$1.0 million compared to 2016. Our unallocated corporate and PST segments' SG&A costs also increased, which were partially offset by slightly lower SG&A costs in our Control Devices segment. Unallocated corporate SG&A costs increased due to higher wages, incentive compensation and professional fees as well as Orlaco transaction costs of \$1.3 million. Additionally, unallocated corporate SG&A included grant income of \$0.3 million (see Note 11 to our consolidated financial statements) in 2017 compared to headquarter relocation expense of \$1.8 million for 2016. PST SG&A costs increased during the current period due to expense for the fair value of earn-out consideration of \$2.6 million, unfavorable movements in foreign currency exchange rates and higher incentive compensation, which were partially offset by lower business realignment charges of \$0.7 million. Control Devices SG&A costs decreased slightly due to other income from a cancellation claim partially offset by higher wages, benefits and legal fees.

Design and Development ("D&D"). D&D costs increased by \$8.7 million primarily due to higher D&D costs in our Electronics segment substantially related to the acquired Orlaco business and new product design and development in our Control Devices and PST segments, which were partially offset by a \$1.1 million decrease in business realignment charges primarily related to our Electronics segment.

Operating Income. Operating income (loss) is summarized in the following table by reportable segment (in thousands):

			Dollar	Percent	
			increase /	increase /	
Years ended December 31	2017	2016	(decrease)	(decrease))
Control Devices	\$72,555	\$61,815	\$ 10,740	17.4	%
Electronics	18,119	14,798	3,321	22.4	%
PST	2,661	(3,462)	6,123	NM	
Unallocated corporate	(35,965)	(29,069)	(6,896)	(23.7)%
Operating income	\$57,370	\$44,082	\$ 13,288	30.1	%

NM – not meaningful

Our Control Devices segment operating income increased primarily due to an increase in sales, which was partially offset by higher warranty and D&D costs.

Our Electronics segment operating income increased due to the acquisition of Orlaco. Excluding the impact of the acquired Orlaco business, operating income decreased primarily due to higher D&D costs.

Our PST segment operating performance improved primarily due to higher sales related to monitoring services, higher gross profit resulting from a favorable sales mix of higher monitoring service revenues and a \$0.8 million decrease in business realignment costs. This was partially offset by expense for the fair value of earn-out consideration of \$2.6 million.

Our unallocated corporate operating loss increased primarily due to higher wages, incentive compensation and professional fees as well as Orlaco transaction costs of \$1.3 million.

Operating income (loss) by geographic location is summarized in the following table (in thousands):

			Dollar	Percent	į
Years ended December 31	2017	2016	increase	increas	e
North America	\$37,937	\$34,220	\$3,717	10.9	%
South America	2,661	(3,462)	6,123	NM	
Europe and Other	16,772	13,324	3,448	25.9	%
Operating income	\$57,370	\$44,082	\$13,288	30.1	%

Our North American operating results improved due to increased sales in the North American automotive market, which were partially offset by higher wages, incentive compensation, professional fees, warranty and Orlaco transaction costs. The improved performance in South America was primarily due to higher sales, higher gross profit resulting from a favorable sales mix of higher monitoring service revenues and a decrease in business realignment costs. Our operating results in Europe and Other improved primarily due to higher sales of European off-highway, China automotive and European commercial vehicle products and lower material and overhead costs resulting from a favorable movement in foreign currency exchange rates.

Interest Expense, *net*. Interest expense, net decreased by \$0.5 million compared to the prior year primarily due to lower PST interest expense which was partially offset by higher interest expense related to our Credit Facility resulting from the additional borrowings to fund the Orlaco acquisition.

Equity in Earnings of Investee. Equity earnings for Minda were \$1.6 million and \$1.2 million for 2017 and 2016, respectively. The increase compared to the prior period was due to higher sales and a favorable change in foreign currency exchange rates.

Other Expense (Income), net. We record certain foreign currency transaction and forward currency hedge contract (gains) losses as a component of other expense (income), net on the consolidated statement of operations. Other expense (income), net increased by \$0.8 million in 2017 compared to 2016 primarily due to an unfavorable change in foreign currency exchange rates in our Electronics segment partially offset by favorable foreign currency movements in our PST segment.

Provision (Benefit) for Income Taxes. We recognized income tax expense (benefit) of \$7.5 million and \$(36.4) million for federal, state and foreign income taxes for 2017 and 2016, respectively. The change in tax expense for the year ended December 31, 2017 compared to the same period for 2016 was predominantly due to the release of U.S. federal, certain state and foreign valuation allowances in 2016 and the impact of the enactment of the Tax Cuts and Jobs Act ("Tax Legislation") in the United States on December 22, 2017. The effective tax rate increased to 14.3% in 2017 from (92.8)% in 2016, primarily due to the release of U.S. federal, certain state and foreign valuation allowances in 2016 and the impact of the Tax Legislation in 2017.

The Tax Legislation significantly revises the U.S. corporate income tax by, among other things, lowering corporate income tax rates and imposing a one-time transition tax on deemed repatriated earnings of foreign subsidiaries. The impact to 2017 of the Tax Legislation was an increase in tax expense of \$6.2 million due to the one-time deemed repatriation tax, offset by the favorable impacts of the reduced tax rate on the Company's net deferred tax liabilities and other deferred tax adjustments of \$(15.3) million related to certain earnings included in the one-time transition tax. Pursuant to the guidance within SEC Staff Accounting Bulletin No. 118 ("SAB 118"), as of December 31, 2017, the Company recognized the provisional effects of the enactment of the Tax Legislation for which measurement could be reasonably estimated. Although the Company continues to analyze certain aspects of the Tax Legislation and refine its assessment, the ultimate impact of the Tax Legislation may differ from these estimates due to continued analysis or further regulatory guidance that may be issued as a result of the Tax Legislation. Pursuant to SAB 118, adjustments to the provisional amounts recorded by the Company as of December 31, 2017 that are identified within a subsequent measurement period of up to one year from the enactment date will be included as an adjustment to tax expense from continuing operations in the period the amounts are determined.

Year Ended December 31, 2016 Compared To Year Ended December 31, 2015

Consolidated statements of operations as a percentage of net sales are presented in the following table (in thousands):

					Dollar increase /
Years ended December 31	2016		2015		(decrease)
Net sales	\$695,977	100.0%	\$644,812	100.0%	\$51,165
Costs and expenses:					
Cost of goods sold	500,538	71.9	467,834	72.6	32,704
Selling, general and administrative	111,145	16.0	110,371	17.1	774
Design and development	40,212	5.8	38,792	6.0	1,420
Operating income	44,082	6.3	27,815	4.3	16,267
Interest expense, net	6,277	0.9	6,365	1.0	(88)
Equity in earnings of investee	(1,233)	(0.2)	(608)	(0.1)	(625)
Other expense (income), net	(147)	-	1,828	0.3	(1,975)
Income before income taxes from continuing operations	39,185	5.6	20,230	3.1	18,955
Income tax benefit from continuing operations	(36,389)	(5.2)	(547)	(0.1)	(35,842)
Income from continuing operations	75,574	10.8	20,777	3.2	54,797
Loss from discontinued operations	-	-	(210)	-	210
•					
Net income	75,574	10.8	20,567	3.2	55,007
Net loss attributable to noncontrolling interest	(1,887)	(0.3)	(2,207)	(0.3)	320
Net income attributable to Stoneridge, Inc.	\$77,461	11.1 %	\$22,774	3.5 %	\$ 54,687

Net Sales. Net sales for our reportable segments, excluding inter-segment sales are summarized in the following table (in thousands):

		2017		Dollar increase /	Percent increase	
Years ended December 31	2016	2015		(decrease)	(decrease	2)
Control Devices	\$408,132	58.6 % \$333,01	0 51.6 %	\$75,122	22.6	%
Electronics	205,256	29.5 216,54	4 33.6	(11,288)	(5.2)%
PST	82,589	11.9 95,258	14.8	(12,669)	(13.3)%
Total net sales	\$695,977	100.0% \$644,81	2 100.1%	\$51,165	7.9	%

Our Control Devices segment net sales increased primarily as a result of new product sales and growth in the North American automotive market of \$77.7 million and new program sales and increased volumes in our China automotive

market of \$4.5 million, which were partially offset by a decrease in the agricultural and other markets and the North American commercial vehicle market of \$4.8 million and \$2.3 million, respectively.

Our Electronics segment net sales decreased primarily as a result of a decrease in sales volume in our North American commercial vehicle products of \$11.9 million, an unfavorable foreign currency translation of \$4.8 million, and a decrease in sales of our European off-highway vehicle products of \$0.8 million, which were partially offset by an increase in sales of European commercial vehicle products of \$7.2 million.

Our PST segment net sales decreased primarily due to lower product volume resulting from continued weakness in the Brazilian economy and automotive market and an unfavorable foreign currency translation which reduced sales by \$4.0 million, or 4.2%, which were partially offset by an increase in monitoring service sales volume.

Net sales by geographic location are summarized in the following table (in thousands):

				Dollar	Percent	
				increase /	increase /	
Years ended December 31	2016	2015		(decrease)	(decrease))
North America	\$428,046	61.5 % \$369,032	57.2 %	\$59,014	16.0	%
South America	82,589	11.9 95,258	14.8	(12,669)	(13.3)%
Europe and Other	185,342	26.6 180,522	28.0	4,820	2.7	%
Total net sales	\$695,977	100.0% \$644,812	100.0%	\$51,165	7.9	%

The increase in North American net sales was primarily attributable to increased sales of our North American Control Devices automotive products of \$77.7 million, which was partially offset by decreased volume in the North American commercial vehicle market of \$11.9 million and decreased sales in the agricultural and various other markets of \$4.8 million. The decrease in net sales in South America was primarily due to lower product sales volume as a result of continued weakness in the Brazilian economy and automotive market as well as the impact of an unfavorable foreign currency translation. The increase in net sales in Europe and Other was primarily due to an increase in sales volume of our European commercial vehicle products of \$7.2 million and new program sales and increased sales volume in our Chinese automotive market of \$4.5 million, which were partially offset by an unfavorable foreign currency translation of \$4.8 million.

Cost of Goods Sold and Gross Margin. Cost of goods sold increased by 7.0% primarily related to an increase in sales in our Control Devices segment. Our gross margin improved by 0.7% to 28.1% in 2016 compared to 27.4% in 2015. Our material cost as a percentage of net sales increased by 0.1% to 51.5% in 2016 compared to 51.4% in 2015 while aggregated labor and overhead costs as a percentage of sales decreased by 0.8% due to increased sales and a change in product mix in our Control Devices segment. The lower material costs in our Electronics and PST segments due to a favorable change in foreign currency exchange rates were more than offset by higher direct material costs as a percentage of sales in our Control Devices segment resulting from a change in mix of products sold.

Our Control Devices segment gross margin decreased despite increased sales volume due to higher warranty related costs and an unfavorable change in mix of products sold.

Our Electronics segment gross margin increased primarily due to lower material costs resulting from a favorable movement in foreign currency exchange rates.

Our PST segment gross margin improved as a result of lower material costs resulting from a favorable movement in foreign currency exchange rates, which was substantially offset by lower sales volume and a \$0.2 million increase in business realignment charges. PST business realignment charges were \$0.4 million and \$0.2 million for 2016 and 2015, respectively.

Selling, General and Administrative. SG&A expenses increased by \$0.8 million compared to 2015 as lower costs in our PST, Control Devices and Electronics segments were more than offset by higher costs in our unallocated corporate segment. SG&A costs in our unallocated corporate segment increased as a result of headquarter relocation costs of \$1.8 million, higher wages, incentive-based compensation, higher consulting, professional, and legal fees of which a significant portion related to mergers and acquisitions activity, which were partially offset by lower business realignment charges of \$0.3 million. SG&A costs in our PST and Electronics segments decreased due to foreign currency translation resulting from movement in foreign currency exchange rates. PST SG&A costs also decreased due to lower employee costs as a result of business realignment actions, lower selling related expenses and professional fees and movement in foreign currency exchange rates, which were partially offset by a \$0.6 million increase in business realignment costs. SG&A business realignment charges were \$1.1 million and \$0.5 million for 2016 and 2015, respectively.

Design and Development. D&D costs increased by \$1.4 million primarily due to an \$0.8 million increase in business realignment costs in our Electronics segment and an increase in product development costs in our Control Devices and Electronics segments. The increase in D&D costs in our Control Devices and Electronics segments were partially offset by lower employee costs as a result of business realignment actions, lower product design costs and movement in foreign currency exchange rates in our PST segment. D&D business realignment charges were \$1.1 million and \$0.3 million in 2016 and 2015, respectively.

Operating Income. Operating income (loss) is summarized in the following table by reportable segment (in thousands):

			Dollar	Percent	
			increase /	increase /	'
Years ended December 31	2016	2015	(decrease)	(decrease)
Control Devices	\$61,815	\$44,690	\$ 17,125	38.3	%
Electronics	14,798	13,784	1,014	7.4	%
PST	(3,462)	(7,542)	4,080	54.1	%
Unallocated corporate	(29,069)	(23,117)	(5,952)	(25.7)%
Operating income	\$44,082	\$27,815	\$ 16,267	58.5	%

Our Control Devices segment operating income increased primarily as a result of an increase in sales volume and lower SG&A costs, which were partially offset by higher warranty and D&D costs.

Our Electronics segment operating income increased despite lower sales volume due to a higher gross profit as material costs decreased as a result of a favorable change in foreign currency exchange rates and lower SG&A costs, which were partially offset by higher D&D costs primarily related to business realignment.

PST's operating performance improved due to lower material costs resulting from a favorable change in foreign currency exchange rates compared to the prior year, lower SG&A and D&D employee costs as a result of the business realignment actions and movement in foreign currency exchange rates, which were partially offset by higher business realignment charges of \$1.0 million.

Our unallocated corporate operating loss increased primarily as a result of higher wages, incentive-based compensation, headquarter relocation costs of \$1.8 million and higher consulting, professional, and legal fees of which a significant portion related to M&A activity. These were partially offset by lower share-based compensation expense as 2015 included \$2.2 million of expense for the acceleration of the vesting associated with the retirement of our former President and CEO while 2016 had \$0.5 million of expense related to the modification of the retirement

notice provisions of certain awards.

Operating income (loss) by geographic location is summarized in the following table (in thousands):

			Dollar	Percent	
			increase /	increase /	
Years ended December 31	2016	2015	(decrease)	(decrease)
North America	\$34,220	\$24,620	\$ 9,600	39.0	%
South America	(3,462)	(7,542)	4,080	(54.1)%
Europe and Other	13,324	10,737	2,587	24.1	%
Operating income	\$44,082	\$27,815	\$ 16,267	58.5	%

Our North American operating results improved primarily due to increased sales in the North American automotive market which was partially offset by higher SG&A expenses in our unallocated corporate segment and higher warranty and D&D costs in our Control Devices segment. The improved performance in South America was primarily due to lower SG&A and D&D costs resulting from business realignment actions, which were partially offset by lower gross profit as a result of lower product sales volume and a \$1.0 million increase in business realignment charges. Our results in Europe and Other improved as higher D&D costs primarily related to higher business realignment charges were more than offset by higher gross profit from lower material costs and SG&A expenses.

Interest Expense, net. Interest expense, net decreased by \$0.1 million compared to the prior year primarily due to a lower average debt balance outstanding at Corporate and PST, which was offset by a higher weighted-average interest rate related to PST.

Equity in Earnings of Investee. Equity earnings for Minda increased primarily due to lower income tax expense as well as higher sales and operating income, which were partially offset by an unfavorable change in foreign currency translation.

Other Expense (Income), net. We record certain foreign currency transaction and forward currency hedge contract gains and losses as a component of other expense (income), net in the consolidated statement of operations. Other expense (income), net improved by \$1.9 million due to an increase in net gains.

Provision (Benefit) for Income Taxes. We recognized an income tax benefit of \$(36.4) million and \$(0.5) million from continuing operations for federal, state and foreign income tax for 2016 and 2015, respectively. The effective tax rate decreased to (92.8)% in 2016 from (2.7)% in 2015. The increase in tax benefit and decrease in the effective rate for the year ended December 31, 2016 compared to the same period for 2015 was predominantly due to the impact of releasing the U.S. federal, certain state and foreign valuation allowances that were previously recorded against certain of our deferred tax assets.

Liquidity and Capital Resources

Summary of Cash Flows for the years ended December 31, 2017 and 2016 (in thousands):

			Dollar increase /
Years ended December 31	2017	2016	(decrease)
Net cash provided by (used for):	2017	2010	(decrease)
Operating activities	\$78,908	\$65,277	\$13,631
Investing activities	(108,640)	(23,824)	(84,816)
Financing activities	40,785	(43,371)	84,156
Effect of exchange rate changes on cash and cash equivalents	4,561	(2,054)	6,615
Net change in cash and cash equivalents	\$15,614	\$(3,972)	\$19,586

Cash provided by operating activities increased primarily due to an increase in non-cash items including deferred income taxes, change in fair value of the PST and Orlaco earn-out considerations and amortization of Orlaco intangible assets. Our receivable terms and collections rates have remained consistent between periods presented.

Net cash used for investing activities increased primarily due to payments made for the acquisition of the Orlaco business of \$77.3 million as well as higher capital expenditures.

Net cash provided by financing activities increased primarily due to increased borrowings on the Credit Facility to fund the acquisition of the Orlaco business, which was partially offset by unscheduled partial repayments of our Credit Facility of \$41.0 million and the payment for the remaining noncontrolling interest in PST.

Summary of Cash Flows for the years ended December 31, 2016 and 2015 (in thousands):

			Dollar increase /
Years ended December 31	2016	2015	(decrease)
Net cash provided by (used for):			
Operating activities	\$65,277	\$54,805	\$10,472
Investing activities	(23,824)	(30,370)	6,546
Financing activities	(43,371)	(11,019)	(32,352)
Effect of exchange rate changes on cash and cash equivalents	(2,054)	(2,076)	22
Net change in cash and cash equivalents	\$(3,972)	\$11,340	\$(15,312)

Cash provided by operating activities, which includes cash flows from the Wiring discontinued operations in 2015, increased primarily due to an increase in net income which was partially offset by higher working capital. Our receivable terms and collections rates have remained consistent between periods presented.

Net cash used for investing activities decreased due to lower capital expenditures in the current period. Also, there were payments related to the sale of the Wiring business of \$1.2 million in 2015, which did not recur in 2016.

Net cash used for financing activities increased primarily due to unscheduled partial repayment of our Credit Facility of \$33.0 million.

Summary of Future Cash Flows

The following table summarizes our future cash outflows resulting from financial contracts and commitments, as of December 31, 2017 (in thousands):

		Less than			After
	Total	1 year	2-3 years	4-5 years	5 years
Credit Facility	\$121,000	\$ -	\$ -	\$121,000	\$-
Debt	8,044	4,192	3,301	551	-
Operating leases	23,529	5,560	7,613	4,402	5,954
Total contractual obligations	\$152,573	\$ 9.752	\$10,914	\$125,953	\$5,954

Management will continue to focus on efficiently managing its weighted-average cost of capital and believes that cash flows from operations and the availability of funds from our Credit Facility provides sufficient liquidity to meet our future growth and operating needs.

As outlined in Note 4 to our consolidated financial statements, our Credit Facility permits borrowing up to a maximum level of \$300.0 million which includes an accordion feature which allows the Company to increase the availability by up to \$80.0 million upon the satisfaction of certain conditions. This variable rate facility provides the flexibility to refinance other outstanding debt or finance acquisitions through September 2021. The Credit Facility contains certain financial covenants that require the Company to maintain a maximum leverage ratio of 3.00 to 1.00 and a minimum interest coverage ratio of 3.50 to 1.00 and places a maximum annual limit on capital expenditures. The Credit Facility also contains affirmative and negative covenants and events of default that are customary for credit arrangements of this type including covenants which place restrictions and/or limitations on the Company's ability to

borrow money, make capital expenditures and pay dividends. The Credit Facility had an outstanding balance of \$121.0 million at December 31, 2017. The Company has outstanding letters of credit of \$2.0 million. The Company was in compliance with all covenants at December 31, 2017. The covenants included in our Credit Facility to date have not and are not expected to limit our financing flexibility.

PST maintains several short-term obligations and long-term loans used for working capital purposes. At December 31, 2017, there was \$8.0 million outstanding on the PST term loans. The PST loans at December 31, 2017 mature as follows: \$4.2 million in 2018, \$2.7 million in 2019, \$0.6 million in 2020 and \$0.5 million in 2021.

The Company's wholly owned subsidiary located in Stockholm, Sweden, has an overdraft credit line which allows overdrafts on the subsidiary's bank account up to a maximum level of 20.0 million Swedish krona, or \$2.4 million, at December 31, 2017. At December 31, 2017, there were no overdrafts on the bank account.

Although the Company's notes and credit facilities contain various covenants, the Company has not experienced a violation which would limit or preclude their use or accelerate the maturity and does not expect these covenants to restrict our financing flexibility. The Company has been and expects to continue to remain in compliance with these covenants during the term of the notes and credit facilities.

Our future results could also be adversely affected by unfavorable changes in foreign currency exchange rates. We have significant foreign denominated transaction exposure in certain locations, especially in Argentina, Brazil, China, Estonia, Mexico, the Netherlands, Sweden and United Kingdom. We have entered into foreign currency forward contracts to reduce our exposure related to certain foreign currency fluctuations. See Note 9 to the consolidated financial statements for additional details. Our future results could also be unfavorably affected by increased commodity prices as commodity fluctuations impact the cost of our raw material purchases.

At December 31, 2017, we had cash and cash equivalents of approximately \$66.0 million, of which \$11.0 million was held in the United States and \$55.0 million was held in foreign locations. The Company has not provided deferred taxes related to the undistributed earnings of certain foreign subsidiaries because of management's intent and ability to indefinitely reinvest such earnings. Also, the Company has not provided deferred taxes related to the undistributed earnings of foreign subsidiaries for which management does not intend to indefinitely reinvest, as these earnings are subject to the one-time transition tax and any foreign tax is not expected to be material. The increase in cash and cash equivalents from \$50.4 million at December 31, 2016 was primarily due to cash provided from operating activities and net debt financing, which were offset by capital expenditures and cash paid for business acquisition during 2017.

Commitments and Contingencies

See Note 10 to the consolidated financial statements for disclosures of the Company's commitments and contingencies.

Seasonality

Our Control Devices and Electronics segments are not typically materially affected by seasonality, however the demand for our PST segment consumer products is generally higher in the second half of the year, the fourth quarter in particular.

Inflation and International Presence

By operating internationally, we are affected by foreign currency exchange rates and the economic conditions of certain countries. Furthermore, given the current economic climate and recent fluctuations in certain commodity prices, we believe that an increase in such items could significantly affect our profitability. See Note 9 to the consolidated financial statements for additional details on the Company's commodity price and foreign currency exchange rate risks.

Off-balance Sheet Arrangements

At December 31, 2017, we do not have any off-balance sheet arrangements that have, or are, in the opinion of management, reasonably likely to have, a current or future material effect on our financial condition or results of operations.

Critical Accounting Policies and Estimates

The preparation of financial statements in conformity with U.S. Generally Accepted Accounting Principles ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent liabilities at the date of the consolidated financial statements, and the reported amounts of revenues and expenses during the reporting period.

On an ongoing basis, we evaluate estimates and assumptions used in our consolidated financial statements. We base our estimates on historical experience and on various other factors that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results could differ from these estimates.

Our critical accounting policies, those most important to the financial presentation and those that are the most complex, subjective or require significant judgment, are as follows.

Revenue Recognition and Sales Commitments. We recognize revenues from the sale of products, net of actual and estimated returns of products sold based on historical authorized returns, at the point of passage of title, which is either at the time of shipment or upon customer receipt based on the terms of the sale. We often enter into agreements with our customers at the beginning of a given vehicle's expected production life. Once such agreements are entered into, it is our obligation to fulfill the customers' purchasing requirements for the entire production life of the vehicle. These agreements are subject to potential renegotiation from time to time, which may affect product pricing. In certain limited instances, we may be committed under existing agreements to supply products to our customers at selling prices which are not sufficient to cover the direct cost to produce such products. In such situations, we recognize losses immediately. These agreements generally may also be terminated by our customers at any time.

On an ongoing basis, we receive blanket purchase orders from our customers, which include pricing terms. Purchase orders do not always specify quantities. We recognize revenue based on the pricing terms included in our purchase orders as our products are shipped to our customers. In certain instances, we may be asked to provide our customers with annual cost reductions as part of certain agreements. In addition, we have ongoing adjustments to our pricing arrangements with our customers based on the related content, the cost of our products and other commercial factors. Such pricing adjustments are recognized as they are negotiated with our customers.

Warranties. Our warranty liability is established based on our best estimate of the amounts necessary to settle existing and future claims on products sold as of the balance sheet dates. This estimate is based on historical trends of units sold and payment amounts, combined with our current understanding of the status of existing claims. To estimate the warranty liability, we are required to forecast the resolution of existing claims as well as expected future claims on products previously sold. Although we believe that our warranty liability is adequate and that the judgment applied is appropriate, such amounts estimated to be due and payable could differ materially from what will actually transpire in the future.

Allowance for Doubtful Accounts. We have concentrations of sales and trade receivable balances with key customers. Therefore, it is critical that we evaluate the collectability of accounts receivable based on a combination of factors. In circumstances where we are aware of a specific customer's inability to meet their financial obligations, a specific allowance for doubtful accounts is recorded against amounts due to reduce the net recognized receivable to the amount we reasonably believe will be collected. In addition, we review historical trends for collectability in determining an estimate for our allowance for doubtful accounts. If economic circumstances change substantially, estimates of the recoverability of amounts due to the Company could be reduced by a material amount. We do not have collateral requirements with our customers.

Contingencies. We are subject to legal proceedings and claims, including product liability claims, commercial or contractual disputes, environmental enforcement actions and other claims that arise in the normal course of business. We routinely assess the likelihood of any adverse judgments or outcomes to these matters, as well as ranges of probable losses, by consulting with internal personnel principally involved with such matters and with our outside legal counsel handling such matters.

We have accrued for estimated losses when it is probable that a liability or loss has been incurred and the amount can be reasonably estimated. Contingencies by their nature relate to uncertainties that require the exercise of judgment both in assessing whether or not a liability or loss has been incurred and estimating that amount of probable loss. The liabilities may change in the future due to new developments or changes in circumstances. The inherent uncertainty related to the outcome of these matters can result in amounts materially different from any provisions made with respect to their resolution.

Inventory Valuation. Inventories are valued at the lower of cost or net realizable value using the FIFO method for our Electronics and Control Devices segments and average cost method for our PST segment. Where appropriate, standard cost systems are utilized for purposes of determining cost and the standards are adjusted as necessary to approximate actual costs. Estimates of the lower of cost or net realizable value of inventory are determined based upon current economic conditions, historical sales quantities and patterns and, in some cases, the specific risk of loss on specifically identified inventories. We adjust our excess and obsolescence reserve at least on a quarterly basis. Excess inventories are quantities of items that exceed anticipated sales or usage for a reasonable period.

Long-Lived and Finite-Lived Assets. We review the carrying value of our long-lived assets and finite-lived intangible assets for impairment when events or circumstances indicate that their carrying value may not be recoverable. Factors that we consider important that could trigger our testing of the related asset groups for an impairment include current period operating or cash flow losses combined with a history of operating or cash flow losses, a projection or forecast that demonstrates continuing losses, significant adverse changes in the business climate within a particular business or current expectations that a long-lived asset will be sold or otherwise disposed of significantly before the end of its estimated useful life. To test for impairment, the estimated undiscounted cash flows expected to be generated from the use and disposal of the asset or asset group is compared to its carrying value. An asset group is established by identifying the lowest level of cash flows generated by the group of assets that are largely independent of cash flows of other assets. If cash flows cannot be separately and independently identified for a single asset, we will determine whether an impairment has occurred for the group of assets for which we can identify projected cash flows. If these undiscounted cash flows are less than their respective carrying values, an impairment charge would be recognized to the extent that the carrying values exceed estimated fair values. The estimation of undiscounted cash flows and fair value requires us to make assumptions regarding future operating results. The results of the impairment testing are dependent on these estimates which require judgment. The occurrence of certain events, including changes in economic and competitive conditions, could impact cash flows eventually realized and management's ability to accurately assess whether an asset is impaired.

Goodwill. Goodwill is tested for impairment at least annually and whenever events or changes in circumstances indicate that the carrying value may not be recoverable. The valuation methodologies employed by the Company use subjective measures including forward looking financial information and discount rates that directly impact the resulting fair values used to test the Company's business units for impairment. We acquired Orlaco on January 31, 2017 and based on the purchase price in excess of the fair value of net assets acquired, goodwill was recorded. Our impairment testing performed in 2017 concluded that the goodwill fair value exceeded its carrying value. See Note 2 to our consolidated financial statements for more information on our application of this accounting standard, including the valuation techniques used to determine the fair value of goodwill.

Share-Based Compensation. The estimate for our share-based compensation expense involves a number of assumptions. We believe each assumption used in the determination of share-based compensation expense is reasonable because it takes into account the experience of the plan and reasonable expectations associated with performance and market based conditions. We estimate volatility and forfeitures based on historical data, future expectations and the expected term of the share-based compensation awards. The assumptions, however, involve inherent uncertainties. As a result, if other assumptions had been used, share-based compensation expense could have varied.

Income Taxes. Deferred income taxes are provided for temporary differences between the amount of assets and liabilities for financial reporting purposes and the basis of such assets and liabilities as measured by tax laws and regulations. Our deferred tax assets include, among other items, net operating loss carryforwards and tax credits that can be used to offset taxable income in future periods and reduce income taxes payable in those future periods. Our U.S. state net operating losses expire at various times and the foreign net operating losses expire at various times or have indefinite expiration dates. Our U.S. federal general business credits, if unused, begin to expire in 2023, and the

state and foreign tax credits expire at various times.

Accounting standards require that deferred tax assets be reduced by a valuation allowance if, based on all available evidence, it is considered more likely than not that some portion or all of the recorded deferred tax assets will not be realized in future periods. This assessment requires significant judgment, and in making this evaluation, the Company considers available positive and negative evidence, including the potential to carryback net operating losses and credits, the future release of certain taxable temporary differences, actual and forecasted results, and tax planning strategies that are both prudent and feasible. Risk factors include U.S. and foreign economic conditions that affect the automotive and commercial vehicle markets of which the Company has significant operations.

The Company has not provided deferred taxes related to the undistributed earnings of foreign subsidiaries for which management does not intend to indefinitely reinvest, as these earnings are subject to the one-time transition tax and are not subject to additional U.S. tax upon repatriation. Any foreign tax on repatriation of earnings not intended to be indefinitely reinvested is expected to be immaterial.

Recently Adopted Accounting Standards

In August 2017, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2017-12, "Derivatives and Hedging (Topic 815)": Targeted Improvements to Accounting for Hedging Activities", which amends and simplifies existing guidance in order to allow companies to more accurately present the economic effects of risk management activities in the financial statements. As early adoption is permitted, the Company adopted this standard in the third quarter of 2017, which did not have a material impact on its consolidated financial statements.

In May 2017, the FASB issued ASU 2017-09, "Compensation-Stock Compensation (Topic 718)", which clarifies when to account for a change to the terms or conditions of a share-based payment award as a modification. Under the new guidance, modification accounting is required only if the fair value, the vesting conditions or the classification of the award changes as a result of the change in terms or conditions. If an award is not probable of vesting at the time a change is made, the new guidance clarifies that no new measurement date will be required if there is no change to the fair value, vesting conditions, and classification. As early adoption is permitted, the Company adopted this standard in the second quarter of 2017, which did not have a material impact on its consolidated financial statements.

In January 2017, the FASB issued ASU 2017-04, "Simplifying the Test for Goodwill Impairment (Topic 350)". It eliminates Step 2 from the goodwill impairment test. As a result, an entity should recognize an impairment charge for the amount by which the carrying amount of goodwill exceeds the reporting unit's fair value, not to exceed the carrying amount of goodwill. The Company adopted this standard on January 1, 2017, which did not have a material impact on its consolidated financial statements.

In March 2016, the FASB issued ASU 2016-09, "Compensation - Stock Compensation (Topic 718)", which is intended to simplify several aspects of the accounting for share-based payment award transactions including how excess tax benefits should be classified in the Company's consolidated financial statements. The new standard simplifies the treatment of share based payment transactions by recognizing the impact of excess tax benefits or deficiencies related to exercised or vested awards in income tax expense in the period of exercise or vesting. The new standard also modifies the diluted earnings per share calculation using the treasury stock method by eliminating the excess tax benefits or deficiencies from the calculation. These changes have been recognized prospectively. The presentation of excess tax benefits in the statement of consolidated cash flows was also modified to be included with other income tax cash flows as an operating activity. The Company adopted this standard as of January 1, 2017 utilizing the prospective transition method for excess tax benefits in the consolidated statement of cash flows. The Company had unrecognized tax benefits related to share-based payment awards of \$1,729 as of December 31, 2016, which upon adoption was recorded in other long-term assets with a corresponding increase to retained earnings associated with the cumulative effect of the accounting change.

In November 2015, the FASB issued ASU 2015-17, "Income Taxes (Topic 740)", which simplifies the presentation of deferred income taxes. Under previous guidance, entities were required to separate deferred income tax liabilities and assets into current and noncurrent amounts in the balance sheet on a jurisdiction by jurisdiction basis. ASU 2015-17 requires that all deferred income taxes be classified as noncurrent in the balance sheet. The Company adopted this standard in 2016 and applied it prospectively. As such, all deferred tax asset and liabilities have been classified as non-current in the balance sheet at December 31, 2017 and 2016.

In September 2015, the FASB issued ASU 2015-16, "Business Combinations (Topic 805)", which simplifies the accounting for measurement-period adjustments related to business combinations. ASU 2015-16 requires that an acquirer recognize adjustments to provisional amounts that are identified during the measurement period in the reporting period in which the adjustment amounts are determined. The amendments in the ASU require that the acquirer record, in the same period's financial statements, the effect on earnings of changes in depreciation, amortization, or other income effects, if any, as a result of the change to the provisional amounts, calculated as if the accounting had been completed at the acquisition date. The Company adopted this standard as of January 1, 2016, and was applied prospectively. The adoption did not have a material impact on the Company's consolidated financial statements or disclosures.

In July 2015, the FASB issued ASU 2015-11, "Simplifying the Measurement of Inventory (Topic 330)", which requires that inventory be measured at the lower of cost or net realizable value. Prior to the issuance of the new guidance, inventory was measured at the lower of cost or market. Replacing the concept of market with the single measurement of net realizable value is intended to reduce its' cost and complexity. The Company adopted this standard as of January 1, 2017, which did not have a material impact on its consolidated financial statements or disclosures.

Recently Issued Accounting Standards Not Yet Adopted as of December 31, 2017

In January 2017, the FASB issued ASU 2017-01, "Clarifying the Definition of a Business (Topic 805)". It revises the definition of a business and provides a framework to evaluate when an input and a substantive process are present in an acquisition to be considered a business. This guidance is effective for annual periods beginning after December 15, 2017. The Company will adopt this standard as of January 1, 2018, which is not expected to have any impact on its consolidated financial statements.

In October 2016, the FASB issued ASU No. 2016-16, "Accounting for Income Taxes: Intra-Entity Asset Transfers of Assets Other than Inventory (Topic 740)". This guidance requires that the tax effects of all intra-entity sales of assets other than inventory be recognized in the period in which the transaction occurs. The new guidance is effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. Early adoption as of the beginning of an annual reporting period is permitted. The guidance is to be applied on a modified retrospective basis through a cumulative-effect adjustment to retained earnings as of the beginning of the period of adoption. The Company will adopt this standard as of January 1, 2018, which is not expected to have a material impact on its consolidated financial statements.

In August 2016, the FASB issued ASU 2016-15, "Statement of Cash Flows - Classification of Certain Cash Receipts and Cash Payments (Topic 230)", which provides guidance on the presentation and classification of certain cash receipts and cash payments in the statement of cash flows in order to reduce diversity in practice. The ASU is effective for interim and annual periods beginning after December 15, 2017 with early adoption permitted. The Company will adopt this standard as of January 1, 2018, which is not expected to have any impact on its consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, "Leases (Topic 842)", which will require that a lessee recognize assets and liabilities on the balance sheet for all leases with a lease term of more than twelve months, with the result being the recognition of a right of use asset and a lease liability. The amendment is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. The Company expects to adopt this standard as of January 1, 2019. The Company is currently evaluating the impact of adopting this standard on its consolidated financial statements, which will require right of use assets and lease liabilities be recorded in the consolidated balance sheet for operating leases with a lease term of more than twelve months.

In May 2014, the FASB issued ASU 2014-09 "Revenue from Contracts with Customers (Topic 606)", which is the new comprehensive revenue recognition standard that will supersede existing revenue recognition guidance under U.S. GAAP. The standard's core principle is that a company will recognize revenue when it transfers promised goods or services to a customer in an amount that reflects the consideration to which a company expects to be entitled in exchange for those goods or services. To achieve this principle, an entity identifies the contract with a customer,

identifies the separate performance obligations in the contract, determines the transaction price, allocates the transaction price to the separate performance obligations and recognizes revenue when each separate performance obligation is satisfied. This ASU allows for both retrospective and prospective methods of adoption. The new standard became effective for annual and interim periods beginning after December 15, 2017. The Company will adopt this standard January 1, 2018 using the modified retrospective transition method and will not have a material impact on its results of operations or financial position; however, the Company will have expanded disclosures consistent with the requirements of the new standard. The Company will continue to evaluate its contracts with customers analyzing the impact, if any, on revenue from the sale of production parts, particularly in regards to material rights, variable consideration and the impact of termination clauses on the timing of revenue recognition.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Interest Rates

We are exposed to interest rate risk primarily from the effects of changes in interest rates. At December 31, 2017, approximately 97.0% of our outstanding debt was floating-rate and 3.0% was fixed-rate. We estimate that a 1.0% change in the interest costs of our floating-rate debt outstanding as of December 31, 2017 would change interest expense on an annual basis by approximately \$1.3 million.

Currency Exchange Rates

In addition to the United States, we have significant operations in Europe, South America, Mexico and China. As a result we are subject to translation risk because of the transactions of our foreign operations are in local currency (particularly the Brazilian real, Chinese renminbi, Mexican peso, euro, Swedish krona and Argentinian peso) and must be translated into U.S. dollars. As currency exchange rates fluctuate, the translation of our consolidated statements of operations into U.S. dollars affects the comparability of revenues, expenses, operating income (loss), net income (loss) and earnings (loss) per share between years.

We use derivative financial instruments, including foreign currency forward contracts, to mitigate our exposure to fluctuations in foreign currency exchange rates by reducing the effect of such fluctuations on foreign currency denominated intercompany transactions, inventory purchases and other foreign currency exposures.

As discussed in detail in Note 9 to our consolidated financial statements, we enter into foreign currency forward contracts the purpose of which is to reduce exposure related to the Company's euro-denominated receivables as well as to reduce exposure to future Mexican peso-denominated purchases and U.S. dollar purchases by our non-U.S. dollar functional currency European business units. These foreign currency contracts outstanding at December 31, 2017 expire throughout 2018. We estimate that a 10.0% unidirectional change in currency exchange rates would result in a change in fair value at December 31, 2017 by approximately \$1.1 million. It is important to note that the change in fair value of the foreign currency forward contacts would be partially offset by changes in the underlying exposures being hedged.

We estimate that a 10.0% unidirectional change in currency exchange rates relative to the U.S dollar would have changed our income before income taxes for the year ended December 31, 2017 by approximately \$1.9 million.

Commodity Price Risk

The competitive marketplace in which we operate may limit our ability to recover increased costs through higher prices. As such, we are subject to market risk with respect to commodity price fluctuations principally related to our purchases of purchase of copper, zinc, resins and certain other commodities through a combination of fixed price agreements, staggered short-term contract maturities and commercial negotiations with our suppliers and customers. In the future, if we believe that the terms of a fixed price agreement become beneficial to us, we will enter into another such instrument. We may also consider pursuing alternative commodities or alternative suppliers to mitigate this risk over a period of time.

Item 8. Financial Statements and Supplementary Data.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

AND FINANCIAL STATEMENT SCHEDULE

Consolidated Financial Statements:	Pag
Report of Independent Registered Public Accounting Firm	<u>39</u>
Consolidated Balance Sheets as of December 31, 2017 and 2016	<u>40</u>
Consolidated Statements of Operations for the Years Ended December 31, 2017, 2016, 2015	<u>41</u>
Consolidated Statements of Comprehensive Income (Loss) for the Years Ended December 31, 2017, 2016, 2015	<u>42</u>
Consolidated Statements of Cash Flows for the Years Ended December 31, 2017, 2016, 2015	<u>43</u>
Consolidated Statements of Shareholders' Equity for the Years Ended December 31, 2017, 2016, 2015	<u>44</u>
Notes to Consolidated Financial Statements	<u>45</u>
Financial Statement Schedule: Schedule II – Valuation and Qualifying Accounts	<u>76</u>

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Stoneridge, Inc. and Subsidiaries

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Stoneridge, Inc. and Subsidiaries (the Company) as of December 31, 2017 and 2016, the related consolidated statements of operations, comprehensive income (loss), cash flows and shareholders' equity for each of the three years in the period ended December 31, 2017, and the related notes and schedule (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the consolidated financial position of the Company as of December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated March 6, 2018 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates

made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2002. Detroit, MI March 6, 2018

CONSOLIDATED BALANCE SHEETS

(in thousands)	December 31, 2017	December 31, 2016	
ASSETS			
Current assets:			
Cash and cash equivalents	\$ 66,003	\$ 50,389	
Accounts receivable, less reserves of \$1,109 and \$1,630, respectively	142,438	113,225	
Inventories, net	73,471	60,117	
Prepaid expenses and other current assets	21,457	17,162	
Total current assets	303,369	240,893	
Long-term assets:			
Property, plant and equipment, net	110,402	91,500	
Intangible assets, net	75,243	39,260	
Goodwill	38,419	931	
Investments and other long-term assets, net	31,604	21,945	
Total long-term assets	255,668	153,636	
Total assets	\$ 559,037	\$ 394,529	
LIABILITIES AND SHAREHOLDERS' EQUITY			
Current liabilities:			
Current portion of debt	\$ 4,192	\$ 8,626	
Accounts payable	79,386	62,594	
Accrued expenses and other current liabilities	52,546	41,489	
Total current liabilities	136,124	112,709	
Long-term liabilities:			
Revolving credit facility	121,000	67,000	
Long-term debt, net	3,852	8,060	
Deferred income taxes	18,874	9,760	
Other long-term liabilities	35,115	4,923	
Total long-term liabilities	178,841	89,743	
Shareholders' equity:			
Preferred Shares, without par value, 5,000 shares authorized, none issued	-	-	
Common Shares, without par value, 60,000 shares authorized, 28,966 and 28,966			
shares issued and 28,180 and 27,850 shares outstanding at December 31, 2017 and	-	-	
2016, respectively, with no stated value			
Additional paid-in capital	228,486	206,504	
	(7,118) (5,632)	

Common Shares held in treasury, 786 and 1,116 shares at December 31, 2017 and 2016, respectively, at cost

,		
Retained earnings	92,264	45,356
Accumulated other comprehensive loss	(69,560) (67,913
Total Stoneridge, Inc. shareholders' equity	244,072	178,315
Noncontrolling interest	-	13,762
Total shareholders' equity	244,072	192,077
Total liabilities and shareholders' equity	\$ 559,037	\$ 394,529

The accompanying notes are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENTS OF OPERATIONS

Years ended December 31 (in thousands, except per share data)	2017	2016	2015
Net sales	\$824,444	\$695,977	\$644,812
Costs and expenses: Cost of goods sold Selling, general and administrative Design and development	576,304 141,893 48,877	500,538 111,145 40,212	467,834 110,371 38,792
Operating income	57,370	44,082	27,815
Interest expense, net Equity in earnings of investee Other expense (income), net	5,783 (1,636) 641	6,277 (1,233) (147)	
Income before income taxes	52,582	39,185	20,230
Provision (benefit) for income taxes	7,533	(36,389)	(547)
Income from continuing operations	45,049	75,574	20,777
Discontinued operations: Loss on disposal, net of tax	-	-	(210)
Loss from discontinued operations	-	-	(210)
Net income	45,049	75,574	20,567
Net loss attributable to noncontrolling interest	(130)	(1,887)	(2,207)
Net income attributable to Stoneridge, Inc.	\$45,179	\$77,461	\$22,774
Earnings per share from continuing operations attributable to Stoneridge, Inc.: Basic Diluted	\$1.61 \$1.57	\$2.79 \$2.74	\$0.84 \$0.82
Loss per share attributable to discontinued operations: Basic Diluted	\$0.00 \$0.00	\$0.00 \$0.00	\$(0.01) \$(0.01)
Earnings per share attributable to Stoneridge, Inc.: Basic Diluted	\$1.61 \$1.57	\$2.79 \$2.74	\$0.83 \$0.81

Weighted-average shares outstanding:

Basic	28,082	27,764	27,338
Diluted	28,772	28,309	27,959

The accompanying notes are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

Years ended December 31, (in thousands)	2017	2016	2015
Net income	\$45,049	\$75,574	\$20,567
Less: Net loss attributable to noncontrolling interest	(130)	(1,887)	(2,207)
Net income attributable to Stoneridge, Inc.	45,179	77,461	22,774
Other comprehensive income (loss), net of tax attributable to Stoneridge, Inc.:			
Foreign currency translation	15,473	2,401	(24,693)
Benefit plan adjustment	-	(84)	(45)
Unrealized gain (loss) on derivatives (1)	(125)	(408)	389
Other comprehensive income (loss), net of tax attributable to Stoneridge, Inc.	15,348	1,909	(24,349)
Comprehensive income (loss) attributable to Stoneridge, Inc.	\$60,527	\$79,370	\$(1,575)

(1) Net of tax benefit of \$(68), \$(10) and \$0 for the years ended December 31, 2017, 2016 and 2015, respectively.

The accompanying notes are an integral part of these consolidated financial statements.

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

Years ended December 31, (in thousands)	2017	2016	2015
OPERATING ACTIVITIES:			
Net income	\$45,049	\$75,574	\$20,567
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation	21,490	19,998	18,964
Amortization, including accretion of deferred financing costs	6,764	3,615	3,833
Deferred income taxes	(5,959)	(38,747)	(2,165)
Earnings of equity method investee	(1,636)		
(Gain) loss on fixed assets	(1,796)	48	74
Share-based compensation expense	7,265	6,134	7,224
Tax benefit related to share-based compensation expense	(858)		
Change in fair value of earn-out contingent consideration	7,485		-
Loss on disposal of Wiring business	-	-	210
Changes in operating assets and liabilities, net of effect of business combination:			
Accounts receivable, net	(15,156)	(18,694)	(489)
Inventories, net	(2,132)	4,519	(4,340)
Prepaid expenses and other assets	(10,177)		(295)
Accounts payable	10,492	10,980	6,577
Accrued expenses and other liabilities	18,077	1,408	5,253
Net cash provided by operating activities	78,908	65,277	54,805
INVESTING ACTIVITIES:			
Capital expenditures	(32,170)	(24,476)	(28,735)
Proceeds from sale of fixed assets	77	652	64
Insurance proceeds for fixed assets	711	_	-
Business acquisition, net of cash acquired	(77,258)	_	(469)
Payments related to sale of Wiring business	-	_	(1,230)
Net cash used for investing activities	(108,640)	(23,824)	(30,370)
FINANCING ACTIVITIES:			
Acquisition of noncontrolling interest, including transaction costs	(1,848)	_	-
Revolving credit facility borrowings	95,000	_	-
Revolving credit facility payments	(41,000)	(33,000)	-
Proceeds from issuance of debt	2,748	16,223	22,540
Repayments of debt	(11,573)		
Other financing costs	(61)	(399)	
Repurchase of Common Shares to satisfy employee tax withholding	(2,481)	(1,424)	
Tax benefits related to share-based compensation expense	-	977	-
Net cash provided by (used for) financing activities	40,785	(43,371)	(11,019)
Effect of exchange rate changes on cash and cash equivalents	4,561	(2,054)	(2,076)
Net change in cash and cash equivalents	15,614	(3,972)	11,340

Edgar Filing: STONERIDGE INC - Form 10-K

Cash and cash equivalents at beginning of period	50,389	54,361	43,021
Cash and cash equivalents at end of period	\$66,003	\$50,389	\$54,361
Supplemental disclosure of cash flow information: Cash paid for interest Cash paid for income taxes, net	\$5,746 \$7,093	\$5,786 \$3,386	\$6,092 \$2,494
Supplemental disclosure of non-cash operating and financing activities: Bank payment of vendor payables under short-term debt obligations	\$-	\$3,764	\$5,323

The accompanying notes are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

(in thousands)	Number of Common Shares outstandi		Number of treasury shares	Additional paid-in capital	Common Shares held in treasury	earnings (accumulated	Accumulate other comprehen loss]	Noncontro enterest	ollin	Fotal g sharehold equity	ers'
BALANCE, JANUARY 1, 2015	28,221		632	\$192,892	\$ (1,284)	\$ (54,879)	\$ (45,473) :	\$ 22,520		\$ 113,806	
Net income (loss)	-		-	-	-	22,774	-		(2,207)	20,567	
Benefit plan adjustments, net	-		-	-	-	-	(45)	-		(45)
Unrealized gain on derivatives, net	-		-	-	-	-	389		-		389	
Currency translation adjustments	-		-	-	-	-	(24,693)	(7,033)	(31,726)
Issuance of restricted Common Shares	172		(118)	-	-	-	-		-		-	
Forfeited restricted Common Shares	(239)	239	-	-	-	-		-		-	
Repurchased Common Shares for treasury	(242)	242	-	(2,924)	-	-		-		(2,924)
Share-based compensation	-		-	6,362	-	-	-		-		6,362	
BALANCE, DECEMBER 31, 2015	27,912		995	199,254	(4,208)	(32,105)	(69,822)	13,310		106,429	
Net income (loss)	-		-	-	-	77,461	-		(1,887)	75,574	
Benefit plan adjustments, net	-		-	-	-	-	(84)	-		(84)
Unrealized loss on derivatives, net	-		-	-	-	-	(408)	-		(408)
Currency translation adjustments	-		-	-	-	-	2,401		2,339		4,740	
Issuance of restricted Common Shares	67		(8)	-	-	-	-		-		-	
Forfeited restricted Common Shares	(3)	3	-	-	-	-		-		-	
Repurchased Common Shares for treasury	(126)	126	-	(1,424)	-	-		-		(1,424)

Edgar Filing: STONERIDGE INC - Form 10-K

Tax benefit from share based compensation transactions			977							977	
Share-based compensation	-	-	6,273	-	-	-		-		6,273	
BALANCE, DECEMBER 31, 2016	27,850	1,116	206,504	(5,632)	45,356	(67,913)	13,762		192,077	
Net income (loss)	-	-	-	-	45,179	-		(130)	45,049	
Unrealized loss on derivatives, net	-	-	-	-	-	(125)	-		(125)
Currency translation adjustments	-	-	-	-	-	15,473		826		16,299	
Acquisition of noncontrolling interest, net	-	-	15,820	-	-	(16,995)	(14,458)	(15,633)
Issuance of restricted Common Shares	462	(462)	-	-	-	-		-		-	
Repurchased Common Shares for treasury	(132)	132	-	(1,486)	-	-		-		(1,486)
Share-based compensation	-	-	6,162	-	-	-		-		6,162	
Adoption of ASU 2016-09 (Note 2)	-	-	-	-	1,729	-		-		1,729	
BALANCE, DECEMBER 31, 2017	28,180	786	\$228,486	\$ (7,118)	\$ 92,264	\$ (69,560) :	\$ -		\$ 244,072	

The accompanying notes are an integral part of these consolidated financial statements.

(in thousands, except share and per share data, unless otherwise indicated)

1. Organization and Nature of Business

Stoneridge, Inc. and its subsidiaries are global designers and manufacturers of highly engineered electrical and electronic components, modules and systems for the automotive, commercial, off-highway, motorcycle and agricultural vehicle markets.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying consolidated financial statements include the accounts of Stoneridge, Inc. and its wholly-owned and majority-owned subsidiaries (collectively, the "Company"). Intercompany transactions and balances have been eliminated in consolidation. The Company analyzes its ownership interests in accordance with Accounting Standards Codification ("ASC") "Consolidations (Topic 810)" to determine whether they are a variable interest entity and, if so, whether the Company is the primary beneficiary.

On January 31, 2017, the Company acquired Exploitatiemaatschappij Berghaaf B.V. ("Orlaco"), an electronics business which designs, manufactures and sells camera-based vision systems, monitors and related products. The acquisition was accounted for as a business combination, and accordingly, the Company's consolidated financial statements herein include the results of Orlaco from the acquisition date to December 31, 2017. See Acquisitions in Note 2 below to the consolidated financial statements for additional details regarding the Orlaco acquisition.

The Company had a 74% controlling interest in PST Eletrônica Ltda. ("PST") from December 31, 2011 through May 15, 2017. On May 16, 2017, the Company acquired the remaining 26% noncontrolling interest in PST, which was accounted for as an equity transaction. As such, PST is now a wholly owned subsidiary. See Note 3 to the consolidated financial statements for additional details regarding the acquisition of PST's noncontrolling interest.

The Company's investment in Minda Stoneridge Instruments Ltd. ("Minda") for the years ended December 31, 2017, 2016 and 2015 has been determined to be an unconsolidated entity, and therefore is accounted for under the equity method of accounting based on 49% ownership.

Accounting Estimates

The preparation of financial statements in conformity with U.S. Generally Accepted Accounting Principles ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, including certain self-insured risks and liabilities, disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Because actual results could differ from those estimates, the Company revises its estimates and assumptions as new information becomes available.

Cash and Cash Equivalents

The Company's cash and cash equivalents include actively traded money market funds with short-term investments in marketable securities, primarily U.S. government securities. Cash and cash equivalents are stated at cost, which approximates fair value, due to the highly liquid nature and short-term duration of the underlying securities with original maturities of 90 days or less.

Accounts Receivable and Concentration of Credit Risk

Revenues are principally generated from the automotive, commercial, off-highway, motorcycle and agricultural vehicle markets. The Company's largest customers are Ford Motor Company and General Motors Company, primarily related to the Control Devices and Electronics reportable segments and accounted for the following percentages of consolidated net sales for the years ended December 31, 2017, 2016 and 2015:

(in thousands, except share and per share data, unless otherwise indicated)

Accounts receivable are recorded at the invoice price, net of an estimate of allowance for doubtful accounts and other reserves.

Allowance for Doubtful Accounts

The Company evaluates the collectability of accounts receivable based on a combination of factors. In circumstances where the Company is aware of a specific customer's inability to meet its financial obligations, a specific allowance for doubtful accounts is recorded against amounts due to reduce the net recognized receivable to the amount the Company reasonably believes will be collected. Additionally, the Company reviews historical trends for collectability in determining an estimate for its allowance for doubtful accounts. If economic circumstances change substantially, estimates of the recoverability of amounts due to the Company could be reduced by a material amount. The Company does not have collateral requirements with its customers.

Sales of Accounts Receivable

The Company's PST segment sold selected accounts receivable on a full recourse basis to an unrelated financial institution in Brazil. PST accounts for these transactions as sales of accounts receivable. As such, in accordance with ASC 860, "Transfers and Servicing", the sales of accounts receivable are reflected as a reduction of accounts receivable in the consolidated balance sheets and the loss on sale is recorded within interest expense, net in the consolidated statements of operations while the proceeds received from the sale are included in the cash flows from operating activities in the consolidated statements of cash flows.

During 2017, PST sold \$2,520 (7,983 Brazilian real ("R\$")) accounts receivable at a loss of \$86 (R\$273), which represents the implicit interest on the transaction, and received proceeds of \$2,434 (R\$7,710). PST did not have any remaining credit exposure at December 31, 2017 related to the receivables sold.

During 2016, PST sold \$15,297 (R\$53,886) of accounts receivable at a loss of \$459 (R\$1,615), which represents the implicit interest on the transaction, and received proceeds of \$14,838 (R\$52,271). PST had a remaining credit exposure of \$1,067 (R\$3,476) at December 31, 2016 related to the receivables sold for which payment from the

customer was not yet due.

Inventories

Inventories are valued at the lower of cost (using either the first-in, first-out ("FIFO") or average cost methods) or net realizable value. The Company evaluates and adjusts as necessary its excess and obsolescence reserve on a quarterly basis. Excess inventories are quantities of items that exceed anticipated sales or usage for a reasonable period. The Company has guidelines for calculating provisions for excess inventories based on the number of months of inventories on hand compared to anticipated sales or usage. Management uses its judgment to forecast sales or usage and to determine what constitutes a reasonable period. Inventory cost includes material, labor and overhead. Inventories consist of the following:

	December 31,	December 31,
	2017	2016
Raw materials	\$ 47,588	\$ 35,665
Work-in-progress	5,806	7,483
Finished goods	20,077	16,969
Total inventories, net	\$ 73,471	\$ 60,117

Inventory valued using the FIFO method was \$54,837 and \$37,765 at December 31, 2017 and 2016, respectively. Inventory valued using the average cost method was \$18,634 and \$22,352 at December 31, 2017 and 2016, respectively.

(in thousands, except share and per share data, unless otherwise indicated)

Pre-production Costs Related to Long-term Supply Arrangements

Engineering, research and development and other design and development costs for products sold on long-term supply arrangements are expensed as incurred unless the Company has a contractual guarantee for reimbursement from the customer which are capitalized as pre-production costs. Costs for molds, dies and other tools used to make products sold on long-term supply arrangements for which the Company either has title to the assets or has the noncancelable right to use the assets during the term of the supply arrangement are capitalized in property, plant and equipment and amortized to cost of sales over the shorter of the term of the arrangement or over the estimated useful lives of the assets, typically three to five years. Costs for molds, dies and other tools used to make products sold on long-term supply arrangements for which the Company has a contractual guarantee to a lump sum reimbursement from the customer are capitalized either as a component of prepaid expenses and other current assets or an investment and other long term assets, net within the consolidated balance sheets. Capitalized pre-production costs were \$9,260 and \$6,859 at December 31, 2017 and 2016, respectively. At December 31, 2017 and 2016, \$8,894 and \$6,446 were recorded as a component of prepaid expenses and other current assets on the consolidated balance sheets while the remaining amounts were recorded as a component of investments and other long term assets, net.

Discontinued Operations

Wiring Business

On May 26, 2014, the Company entered into an asset purchase agreement to sell substantially all of the assets and liabilities of the former Wiring segment to Motherson Sumi Systems Ltd., an India-based manufacturer of diversified products for the global automotive industry and a limited company incorporated under the laws of the Republic of India, and MSSL (GB) LIMITED, a limited company incorporated under the laws of the United Kingdom (collectively, "Motherson"), for \$65,700 in cash and the assumption of certain related liabilities of the Wiring business.

On August 1, 2014, the Company completed the sale of substantially all of the assets and liabilities of its Wiring business to Motherson for \$71,386 in cash that consisted of the stated purchase price and estimated working capital on the closing date. The final purchase price was subject to post-closing working capital and other adjustments. Upon the final resolution of the working capital and other adjustments in the second quarter of 2015, the Company returned \$1,230 in cash to Motherson.

The following tables display summarized activity in our consolidated statements of operations for discontinued operations during the year ended December 31, 2015 related to the Wiring business. There was no impact from discontinued operations for the years ended December 31, 2017 or 2016.

Year ended December 31	2015
Loss on disposal	\$(241)
Income tax benefit on loss on disposal	31
Loss on disposal, net of tax	(210)
Loss from discontinued operations	\$(210)

Acquisitions

Orlaco

On January 31, 2017, Stoneridge B.V., an indirect wholly-owned subsidiary of Stoneridge, Inc., acquired Orlaco. Orlaco designs, manufactures and sells camera-based vision systems, monitors and related electronic products primarily to the heavy off-road machinery, commercial vehicle, lifting crane and warehousing and logistics industries. Stoneridge and Orlaco jointly developed the MirrorEye mirror replacement system, which is a system solution to improve the safety and fuel economy of commercial vehicles. The MirrorEye system integrates Orlaco's vision processing technology and Stoneridge's driver information capabilities as well as the combined software capabilities of both businesses. The acquisition of Orlaco enhances the Stoneridge's Electronics segment global technical capabilities in vision systems and facilitates entry into new markets.

(in thousands, except share and per share data, unless otherwise indicated)

The aggregate consideration for the Orlaco acquisition was $\[\in \]$ 74,939 (\$79,675), which included customary estimated adjustments to the purchase price. The Company paid $\[\in \]$ 67,439 (\$71,701) in cash, and $\[\in \]$ 7,500 (\$7,974) is held in an escrow account for a period of eighteen months to secure the payment obligations of the seller under the terms of the purchase agreement. The purchase price is subject to certain customary adjustments set forth in the purchase agreement. The escrow amount will be transferred promptly following the completion of the escrow period. The Company may also be required to pay an additional amount up to $\[\in \]$ 7,500 as contingent consideration ("earn-out consideration") if certain performance targets are achieved during the first two years.

The acquisition date fair value of the total consideration transferred consisted of the following:

Cash	\$79,675
Fair value of earn-out consideration and other adjustments	4,208
Total purchase price	\$83,883

The following table summarizes the estimated fair value of the assets acquired and liabilities assumed at the acquisition date (including measurement period adjustments). The purchase price and associated allocation is preliminary pending the filing of certain pre-acquisition tax returns. Based upon information obtained, certain of the fair value amounts previously estimated were adjusted during the measurement period. These measurement period adjustments related to updated valuation reports and appraisals received from our external valuation specialists, as well as revisions to internal estimates. The changes in estimates recorded at December 31, 2017 include an increase in inventory of \$265; an increase in intangible assets of \$113; an increase in deferred tax liabilities of \$212; a decrease in other long-term assets of \$684; an increase in other current liabilities of \$29; a decrease in accounts receivable of \$201; a decrease in other long-term liabilities of \$563 and a decrease in earn-out consideration of \$1,007. The measurement period and working capital adjustments resulted in a decrease to goodwill of \$1,078.

At January 31, 2017	
Cash	\$2,165
Accounts receivable	7,929
Inventory	9,409
Prepaid and other current assets	298
Property, plant and equipment	6,668
Identifiable intangible assets	38,739
Other long-term assets	6
Total identifiable assets acquired	65,214

Accounts payable	3,020
Other current liabilities	834
Deferred tax liabilities	10,206
Warranty liability	899
Total liabilities assumed	14,959
Net identifiable assets acquired	50,255
Goodwill	33,628
Net assets acquired	\$83,883

(in thousands, except share and per share data, unless otherwise indicated)

Assets acquired and liabilities assumed were recorded at estimated fair values based on management's estimates, available information, and reasonable and supportable assumptions. Also, the Company utilized a third-party to assist with certain estimates of fair values, including:

·Fair value estimate for inventory was based on a comparative sales method

Fair value estimate for property, plant and equipment was based on appraised values utilizing cost and market approaches

Fair values for intangible assets were based on a combination of market and income approaches, including the relief from royalty method

Fair value for the earn-out consideration was based on a Monte Carlo simulation analysis utilizing forecasted earnings before interest, taxes, depreciation and amortization ("EBITDA") for the 2017 and 2018 earn-out period as well as a growth rate reduced by the market required rate of return

These fair value measurements are classified within Level 3 of the fair value hierarchy. See Note 9 for details on fair value hierarchy.

Goodwill is calculated as the excess of the fair value of consideration transferred over the fair market value of the identifiable assets and liabilities and represents the future economic benefits arising from other assets acquired that could not be separately recognized. The goodwill is not deductible for income tax purposes.

Of the \$38,739 of acquired identifiable intangible assets, \$27,518 was assigned to customer lists with a 15-year useful life; \$5,142 was assigned to trademarks with a 20-year useful life; and \$6,079 was assigned to technology with a 7-year weighted-average useful life.

The Company recognized \$1,259 of acquisition related costs in the consolidated statement of operations as a component of selling, general and administrative ("SG&A") expense for the year ended December 31, 2017.

Included in the Company's statement of operations for the year ended December 31, 2017 are post-acquisition sales of \$65,045, and net income of \$3,317 related to Orlaco which are included in results of the Electronics segment. The Company's statement of operations also included \$1,636 of expense in cost of goods sold ("COGS") for the year ended December 31, 2017 associated with the step-up of the Orlaco inventory to fair value and the \$4,853 fair value adjustment for earn-out consideration in SG&A expenses for the year ended December 31, 2017.

The following unaudited pro forma information reflects the Company's consolidated results of operations as if the acquisition had taken place on January 1, 2016. The unaudited pro forma information is not necessarily indicative of the results of operations that the Company would have reported had the transaction actually occurred at the beginning of these periods, nor is it necessarily indicative of future results.

Years ended December 31	2017	2016
Net sales	\$829,474	\$752,864
Net income attributable to Stoneridge, Inc. and subsidiaries	\$45,283	\$82,178

(in thousands, except share and per share data, unless otherwise indicated)

Property, Plant and Equipment

Property, plant and equipment are recorded at cost and consist of the following:

	2017	2016
Land and land improvements	\$4,863	\$3,376
Buildings and improvements	37,581	32,271
Machinery and equipment	192,107	180,944
Office furniture and fixtures	10,070	6,813
Tooling	75,038	67,261
Information technology	27,466	23,632
Vehicles	881	398
Leasehold improvements	2,841	2,583
Construction in progress	24,312	16,854
Total property, plant, and equipment	375,159	334,132
Less: accumulated depreciation	(264,757)	(242,632)
Property, plant and equipment, net	\$110,402	\$91,500

Depreciation is provided using the straight-line method over the estimated useful lives of the assets. Depreciation expense for the years ended December 31, 2017, 2016 and 2015 was \$21,490, \$19,998 and \$18,964, respectively. Depreciable lives within each property classification are as follows:

Buildings and improvements 10-40 years
Machinery and equipment 3-10 years
Office furniture and fixtures 3-10 years
Tooling 2-5 years
Information technology 3-7 years
Vehicles 3-5 years

Leasehold improvements shorter of lease term or 3-10 years

Maintenance and repair expenditures that are not considered improvements and do not extend the useful life of the property, plant and equipment are charged to expense as incurred. Expenditures for improvements and major renewals are capitalized. When assets are retired or otherwise disposed of, the related cost and accumulated depreciation are

removed from the accounts, and any gain or loss on the disposition is recorded in the consolidated statements of operations as a component of SG&A expenses.

(in thousands, except share and per share data, unless otherwise indicated)

Impairment of Long-Lived or Finite-Lived Assets

The Company reviews the carrying value of its long-lived assets and finite-lived intangible assets for impairment when events or circumstances indicate that their carrying value may not be recoverable. Factors the Company considers important that could trigger testing of the related asset groups for an impairment include current period operating or cash flow losses combined with a history of operating or cash flow losses, a projection or forecast that demonstrates continuing losses, significant adverse changes in the business climate within a particular business or current expectations that a long-lived asset will be sold or otherwise disposed of significantly before the end of its estimated useful life. To test for impairment, the estimated undiscounted cash flows expected to be generated from the use and disposal of the asset or asset group is compared to its carrying value. An asset group is established by identifying the lowest level of cash flows generated by the group of assets that are largely independent of cash flows of other assets. If cash flows cannot be separately and independently identified for a single asset, we will determine whether an impairment has occurred for the group of assets for which we can identify projected cash flows. If these undiscounted cash flows are less than their respective carrying values, an impairment charge would be recognized to the extent that the carrying values exceed estimated fair values. The estimation of undiscounted cash flows and fair value requires us to make assumptions regarding future operating results over the life of the asset or the life of the primary asset in the asset group. The results of the impairment testing are dependent on these estimates which require judgment. The occurrence of certain events, including changes in economic and competitive conditions, could impact cash flows eventually realized and management's ability to accurately assess whether an asset is impaired.

Goodwill and Other Intangible Assets

Goodwill

The total purchase price associated with acquisitions is allocated to the acquisition date fair values of identifiable assets acquired and liabilities assumed with the excess purchase price assigned to goodwill.

Goodwill was \$38,419 and \$931 at December 31, 2017 and 2016, respectively, all of which relates to the Electronics segment. The increase in goodwill is related to the Orlaco acquisition as further discussed in Note 2. Goodwill is not amortized, but instead is tested for impairment at least annually, or earlier when events and circumstances indicate that it is more likely than not that such assets have been impaired, by applying a fair value-based test.

Goodwill and changes in the carrying amount of goodwill by segment for the years ended December 31, 2017 and 2016 were as follows:

Balance at January 1, 2017 Acquisition of business Currency translation Balance at December 31, 2017	Electronics \$ 931 33,628 3,860 \$ 38,419
	Electronics
Balance at January 1, 2016	\$ 981
Currency translation	(50)
Balance at December 31, 2016	\$ 931

The Company's cumulative goodwill impairment loss since inception was \$300,083 at December 31, 2017 and 2016 which includes PST's goodwill impairment in 2014 and goodwill impairment recorded by the Company's Control Devices segment in 2008 and 2004.

(in thousands, except share and per share data, unless otherwise indicated)

Other Intangible Assets

Other intangible assets, net at December 31, 2017 and 2016 consisted of the following:

	Acquisition	Accumulated	
As of December 31, 2017	cost	amortization	Net
Customer lists	\$ 57,672	\$ (12,695	\$44,977
Tradenames	23,546	(5,646	17,900
Technology	17,443	(5,077	12,366
Other	41	(41) -
Total	\$ 98,702	\$ (23,459	\$75,243
	Acquisition	Accumulated	
As of December 31, 2016	cost	amortization	Net
Customer lists	\$ 27,476	\$ (9,138	\$18,338
Tradenames	18,116	(4,558	13,558
Technology	10,862	(3,498	7,364
Other	41	(41) -
Total	\$ 56,495	\$ (17,235	\$39,260

Other intangible assets, net at December 31, 2017 include customer lists, tradenames and technology of \$16,014, \$12,448 and \$6,558, respectively, related to the PST segment and \$28,963, \$5,452 and \$5,808, respectively, related to the Electronics segment.

The Company recognized \$6,440, \$3,259 and \$3,445 of amortization expense related to intangible assets in 2017, 2016 and 2015, respectively. Amortization expense is included as a component of SG&A on the consolidated statements of operations. Annual amortization expense for intangible assets is estimated to be approximately \$6,800 for the years 2018 through 2022. The weighted-average remaining amortization period is approximately 13 years.

Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consist of the following:

As of December 31	2017	2016
Compensation related liabilities	\$22,429	\$16,329
Product warranty and recall obligations	6,867	6,727
Accrued income taxes	6,897	1,930
Other (A)	16,353	16,503
Total accrued expenses and other current liabilities	\$52,546	\$41,489

(A) "Other" is comprised of miscellaneous accruals, none of which individually contributed a significant portion of the total.

Income Taxes

The Company accounts for income taxes using the liability method. Deferred income taxes reflect the tax consequences on future years of differences between the tax basis of assets and liabilities and their financial reporting amounts. Future tax benefits are recognized to the extent that realization of such benefits is more likely than not to occur. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in the period that includes the enactment date.

(in thousands, except share and per share data, unless otherwise indicated)

Deferred tax assets are recognized to the extent that these assets are more likely than not to be realized (See Note 5). In making such a determination, the Company considers all available positive and negative evidence, including future release of existing taxable temporary differences, projected future taxable income, tax planning strategies, and results of recent operations. Release of some or all of a valuation allowance would result in the recognition of certain deferred tax assets and a decrease to income tax expense for the period the release is recorded.

The Company's policy is to provide for uncertain tax positions and the related interest and penalties based upon management's assessment of whether a tax benefit is more likely than not to be sustained upon examination by tax authorities. To the extent the Company prevails in matters for which a liability for an unrecognized tax benefit is established or is required to pay amounts in excess of the liability, the Company's effective tax rate in a given financial statement period may be affected.

Currency Translation

The financial statements of foreign subsidiaries, where the local currency is the functional currency, are translated into U.S. dollars using exchange rates in effect at the period end for assets and liabilities and average exchange rates during each reporting period for the results of operations. Adjustments resulting from translation of financial statements are reflected as a component of accumulated other comprehensive loss in the Company's consolidated balance sheets.

Foreign currency transactions are remeasured into the functional currency using translation rates in effect at the time of the transaction with the resulting adjustments included on the consolidated statements of operations within other expense, net. These foreign currency transaction losses (gains), including the impact of hedging activities, were \$500, \$(268) and \$1,693 for the years ended December 31, 2017, 2016 and 2015, respectively.

Revenue Recognition and Sales Commitments

The Company recognizes revenues from the sale of products, net of actual and estimated returns, at the point of passage of title, which is either at the time of shipment or upon customer receipt based upon the terms of the sale. The

Company recognizes monitoring service revenues as the services are provided to customers. The Company collects certain taxes and fees on behalf of government agencies and remits such collections on a periodic basis. The taxes are collected from customers but are not included in net sales. Estimated returns are based on historical authorized returns. The Company often enters into agreements with its customers at the beginning of a given vehicle's expected production life. Once such agreements are entered into, it is the Company's obligation to fulfill the customers' purchasing requirements for the entire production life of the vehicle. These agreements are subject to potential renegotiation from time to time, which may affect product pricing.

Shipping and Handling Costs

Shipping and handling costs are included in COGS on the consolidated statements of operations.

Product Warranty and Recall Reserves

Amounts accrued for product warranty and recall claims are established based on the Company's best estimate of the amounts necessary to settle existing and future claims on products sold as of the balance sheet dates. These accruals are based on several factors including past experience, production changes, industry developments and various other considerations including insurance coverage. The Company can provide no assurances that it will not experience material claims or that it will not incur significant costs to defend or settle such claims beyond the amounts accrued or beyond what the Company may recover from its suppliers. The current portion of the product warranty and recall reserve is included as a component of accrued expenses and other current liabilities on the consolidated balance sheets. Product warranty and recall includes \$3,112 and \$2,617 of a long-term liability at December 31, 2017 and 2016, respectively, which is included as a component of other long-term liabilities on the consolidated balance sheets.

(in thousands, except share and per share data, unless otherwise indicated)

The following provides a reconciliation of changes in the product warranty and recall reserve:

Years ended December 31	2017	2016
Product warranty and recall at beginning of period	\$9,344	\$6,419
Accruals for products shipped during period	4,933	4,978
Assumed warranty liability related to Orlaco	899	-
Aggregate changes in pre-existing liabilities due to claim developments	4,899	(116)
Settlements made during the period	(10,407)	(1,967)
Foreign currency translation	311	30
Product warranty and recall at end of period	\$9,979	\$9,344

Design and Development Costs

Expenses associated with the development of new products, and changes to existing products are charged to expense as incurred, and are included in the Company's consolidated statements of operations as a separate component of costs and expenses. These product development costs amounted to \$48,877, \$40,212 and \$38,792 for the years ended December 31, 2017, 2016 and 2015, respectively, or 5.9%, 5.8% and 6.0% of net sales for these respective periods.

Research and Development Activities

The Company's Electronics and Control Devices segments enter into research and development contracts with certain customers, which generally provide for reimbursement of costs. The Company incurred and was reimbursed for contracted research and development costs of \$14,946, \$12,764 and \$9,659 for the years ended December 31, 2017, 2016 and 2015, respectively.

Share-Based Compensation

At December 31, 2017, the Company had two types of share-based compensation plans: (1) Long-Term Incentive Plan for employees and (2) the Amended Directors' Restricted Shares Plan, for non-employee directors. The Long-Term Incentive Plan is made up of the Long-Term Incentive Plan which expired on June 30, 2007, the Amended and Restated Long-Term Incentive Plan, as amended, which expired on April 24, 2016 and the 2016 Long-Term Incentive Plan that was approved by shareholders on May 10, 2016, and expires on May 10, 2026.

Total compensation expense recognized as a component of SG&A expense on the consolidated statements of operations for share-based compensation arrangements was \$7,265, related to higher attainment of performance-based awards and accelerated expense associated with the retirement of eligible employees, \$6,134, including \$545 related to the modification of the retirement notice provisions of certain awards, and \$7,224, including \$2,225 from the accelerated vesting in connection with the retirement of the Company's former President and Chief Executive Officer, for the years ended December 31, 2017, 2016 and 2015, respectively. Of these amounts, \$11, \$(117) and \$828 for the years ended December 31, 2017, 2016 and 2015, respectively, were related to the Long-Term Cash Incentive Plan "Phantom Shares" discussed in Note 8. There was no share-based compensation expense capitalized in inventory during 2017, 2016 or 2015.

Financial Instruments and Derivative Financial Instruments

Financial instruments, including derivative financial instruments, held by the Company include cash and cash equivalents, accounts receivable, accounts payable, long-term debt and foreign currency forward contracts. The carrying value of cash and cash equivalents, accounts receivable and accounts payable is considered to be representative of fair value because of the short maturity of these instruments. See Note 9 for fair value disclosures of the Company's financial instruments.

Common Shares Held in Treasury

The Company accounts for Common Shares held in treasury under the cost method (applied on a FIFO basis) and includes such shares as a reduction of total shareholders' equity.

(in thousands, except share and per share data, unless otherwise indicated)

Earnings Per Share

Basic earnings per share was computed by dividing net income attributable to Stoneridge Inc. by the weighted-average number of Common Shares outstanding for each respective period. Diluted earnings per share was calculated by dividing net income attributable to Stoneridge, Inc. by the weighted-average of all potentially dilutive Common Shares that were outstanding during the periods presented.

Actual weighted-average Common Shares outstanding used in calculating basic and diluted net income per share were as follows:

Years ended December 31	2017	2016	2015
Basic weighted-average Common Shares outstanding	28,082,114	27,763,990	27,337,954
Effect of dilutive shares	689,531	544,932	621,208
Diluted weighted-average Common Shares outstanding	28,771,645	28,308,922	27,959,162

There were 134,250 performance-based restricted Common Shares outstanding at December 31, 2015. There were no performance-based restricted Common Shares outstanding at December 31, 2017 or 2016. There were also 766,538, 843,140 and 573,885 performance-based right to receive Common Shares outstanding at December 31, 2017, 2016 and 2015. These performance-based restricted and right to receive Common Shares are included in the computation of diluted earnings per share based on the number of Common Shares that would be issuable if the end of the year were the end of the contingency period.

Deferred Financing Costs, net

Deferred financing costs are amortized over the life of the related financial instrument using the straight-line method, which approximates the effective interest method. Deferred finance cost amortization and debt discount accretion for the years ended December 31, 2017, 2016 and 2015 was \$324, \$355 and \$388, respectively, and is included as a component of interest expense, net in the consolidated statements of operations. As permitted by ASU 2015-03, the Company has elected to continue to present deferred financing costs related to the Credit Facility within long-term assets in the Company's consolidated balance sheets. Deferred financing costs, net, were \$1,208 and \$1,471, as of

December 31, 2017 and 2016, respectively.

(in thousands, except share and per share data, unless otherwise indicated)

Changes in Accumulated Other Comprehensive Loss by Component

Changes in accumulated other comprehensive loss for the years ended December 31, 2017 and 2016 were as follows:

Balance at January 1, 2017	currency translation	Unrealized gain (loss) on derivatives \$ (18	p	Benefit dan djustment	Total \$(67,913)
Other comprehensive income before reclassifications Amounts reclassified from accumulated other comprehensive loss Net other comprehensive income (loss), net of tax Reclassification of foreign currency translation associated with noncontrolling interest acquired	15,473 - 15,473 (16,995)	509 (634 (125)	- - -	15,982 (634) 15,348 (16,995)
Balance at December 31, 2017	\$(69,417)	\$ (143) \$	-	\$(69,560)
Balance at January 1, 2016	\$(70,296)	\$ 390	\$	84	\$(69,822)
Other comprehensive income (loss) before reclassifications Amounts reclassified from accumulated other comprehensive loss Net other comprehensive income (loss), net of tax	2,401 - 2,401	(572 164 (408)	(84) (84)	1,829 80 1,909
Balance at December 31, 2016	\$(67,895)	\$ (18) \$; <u>-</u>	\$(67,913)

Reclassifications

Certain prior period amounts have been reclassified to conform to their 2017 presentation in the consolidated financial statements.

Recently Adopted Accounting Standards

In August 2017, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2017-12, "Derivatives and Hedging (Topic 815)": Targeted Improvements to Accounting for Hedging Activities" which amends and simplifies existing guidance in order to allow companies to more accurately present the economic effects of risk management activities in the financial statements. As early adoption is permitted, the Company adopted this standard in the third quarter of 2017, which did not have a material impact on its consolidated financial statements.

In May 2017, the FASB issued ASU 2017-09, "Compensation-Stock Compensation (Topic 718)", which clarifies when to account for a change to the terms or conditions of a share-based payment award as a modification. Under the new guidance, modification accounting is required only if the fair value, the vesting conditions or the classification of the award changes as a result of the change in terms or conditions. If an award is not probable of vesting at the time a change is made, the new guidance clarifies that no new measurement date will be required if there is no change to the fair value, vesting conditions, and classification. As early adoption is permitted, the Company adopted this standard in the second quarter of 2017, which did not have a material impact on its consolidated financial statements.

In January 2017, the FASB issued ASU 2017-04, "Simplifying the Test for Goodwill Impairment (Topic 350)", which eliminates Step 2 from the goodwill impairment test. As a result, an entity should recognize an impairment charge for the amount by which the carrying amount of goodwill exceeds the reporting unit's fair value, not to exceed the carrying amount of goodwill. The Company adopted this standard on January 1, 2017, which did not have a material impact on its consolidated financial statements.

(in thousands, except share and per share data, unless otherwise indicated)

In March 2016, the FASB issued Accounting Standards Update ASU 2016-09, "Compensation - Stock Compensation (Topic 718)", which is intended to simplify several aspects of the accounting for share-based payment award transactions including how excess tax benefits should be classified in the Company's consolidated financial statements. The new standard simplifies the treatment of share based payment transactions by recognizing the impact of excess tax benefits or deficiencies related to exercised or vested awards in income tax expense in the period of exercise or vesting. The new standard also modifies the diluted earnings per share calculation using the treasury stock method by eliminating the excess tax benefits or deficiencies from the calculation. These changes will be recognized prospectively. The new standard also permits companies to recognize forfeitures as they occur as an alternative to utilizing estimated forfeitures rates which has been the required practice. The presentation of excess tax benefits in the statement of consolidated cash flows is also modified to be included with other income tax cash flows as an operating activity. The change can be adopted using a prospective or retrospective transition method. The new standard clarifies that cash paid by an employer when directly withholding shares for tax withholding purposes should be presented as a financing activity in the statement of consolidated cash flows and should be applied retrospectively. This new accounting standard was effective for fiscal years beginning after December 15, 2016, including interim periods within that year. The Company adopted this standard as of January 1, 2017 and had unrecognized tax benefits related to share-based payment awards of \$1,729 as of January 1, 2017. This amount was recorded to investments and other long-term assets, net with a corresponding increase to retained earnings associated with the cumulative effect of the accounting change.

In July 2015, the FASB issued ASU 2015-11, "Simplifying the Measurement of Inventory (Topic 330)", which requires that inventory be measured at the lower of cost or net realizable value. Prior to the issuance of the new guidance, inventory was measured at the lower of cost or market. Replacing the concept of market with the single measurement of net realizable value is intended to reduce cost and complexity. The Company adopted this standard as of January 1, 2017, which did not have a material impact on its consolidated financial statements or disclosures.

Recently Issued Accounting Standards Not Yet Adopted as of December 31, 2017

In January 2017, the FASB issued ASU 2017-01, "Clarifying the Definition of a Business (Topic 805)" which revises the definition of a business and provides a framework to evaluate when an input and a substantive process are present in an acquisition to be considered a business. This ASU is effective for annual periods beginning after December 15, 2017. The Company will adopt this standard as of January 1, 2018, which is not expected to have a material impact on its consolidated financial statements.

In October 2016, the FASB issued ASU 2016-16, "Accounting for Income Taxes: Intra-Entity Asset Transfers of Assets Other than Inventory (Topic 740)". This guidance requires that the tax effects of all intra-entity sales of assets other than inventory be recognized in the period in which the transaction occurs. The new guidance is effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. Early adoption as of the beginning of an annual reporting period is permitted. The guidance is to be applied on a modified retrospective basis through a cumulative-effect adjustment to retained earnings as of the beginning of the period of adoption. The Company will adopt this standard as of January 1, 2018, which is not expected to have a material impact on its consolidated financial statements.

In August 2016, the FASB issued ASU 2016-15, "Statement of Cash Flows - Classification of Certain Cash Receipts and Cash Payments (Topic 230)", which provides guidance on the presentation and classification of certain cash receipts and cash payments in the statement of cash flows in order to reduce diversity in practice. This ASU is effective for interim and annual periods beginning after December 15, 2017 with early adoption permitted. The Company will adopt this standard as of January 1, 2018, which is not expected to have a material impact on its consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, "Leases (Topic 842)", which will require that a lessee recognize assets and liabilities on the balance sheet for all leases with a lease term of more than twelve months, with the result being the recognition of a right of use asset and a lease liability. This ASU is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. The Company expects to adopt this standard as of January 1, 2019. The Company is currently evaluating the impact of adopting this standard on its consolidated financial statements, which will require right of use assets and lease liabilities to be recorded in the consolidated balance sheet for operating leases with a lease term of more than twelve months.

(in thousands, except share and per share data, unless otherwise indicated)

In May 2014, the FASB issued ASU 2014-09, "Revenue from Contracts with Customers (Topic 606)", which is the new comprehensive revenue recognition standard that will supersede existing revenue recognition guidance under U.S. GAAP. The standard's core principle is that a company will recognize revenue when it transfers promised goods or services to a customer in an amount that reflects the consideration to which a company expects to be entitled in exchange for those goods or services. To achieve this principle, an entity identifies the contract with a customer, identifies the separate performance obligations in the contract, determines the transaction price, allocates the transaction price to the separate performance obligations and recognizes revenue when each separate performance obligation is satisfied. This ASU allows for both retrospective and prospective methods of adoption. The new standard became effective for annual and interim periods beginning after December 15, 2017. The Company will adopt this standard January 1, 2018 using the modified retrospective transition method and will not have a material impact on its results of operations or financial position; however, the Company will have expanded disclosures consistent with the requirements of the new standard. The Company will continue to evaluate its contracts with customers analyzing the impact, if any, on revenue from the sale of production parts, particularly in regards to material rights, variable consideration and the impact of termination clauses on the timing of revenue recognition.

3. Investments

Minda Stoneridge Instruments Ltd.

The Company has a 49% interest in Minda, a company based in India that manufactures electronics, instrumentation equipment and sensors for the motorcycle, commercial vehicle and automotive markets. The investment is accounted for under the equity method of accounting. The Company's investment in Minda, recorded as a component of investments and other long-term assets, net on the consolidated balance sheets, was \$10,131 and \$7,952 as of December 31, 2017 and 2016, respectively. Equity in earnings of Minda included in the consolidated statements of operations were \$1,636, \$1,233 and \$608 for the years ended December 31, 2017, 2016 and 2015, respectively.

PST Eletrônica Ltda.

The Company had a 74% controlling interest in PST from December 21, 2011 through May 15, 2017. On May 16, 2017, the Company acquired the remaining 26% noncontrolling interest in PST for \$1,500 in cash along with earn-out consideration. The Company will be required to pay additional earn-out consideration, which is not capped, based on

PST's financial performance in either 2020 or 2021. The estimated fair value of the earn-out consideration as of the acquisition date was \$10,180, and was based on discounted cash flows utilizing forecasted EBITDA in 2020 and 2021. This fair value measurement is classified within Level 3 of the fair value hierarchy and is based upon Level 3 discounted cash flow analysis using key inputs of forecasted future sales as well as a growth rate reduced by the market required rate of return. The transaction was accounted for as an equity transaction, and therefore no gain or loss was recognized in the statement of operations or comprehensive income. The noncontrolling interest balance on the May 16, 2017 acquisition date was \$14,458, of which \$31,453 and (\$16,995) was related to the carrying value of the investment and foreign currency translation, respectively, and accordingly these amounts were reclassified to additional paid-in capital and accumulated other comprehensive loss, respectively.

The following table sets forth a summary of the change in noncontrolling interest:

Years ended December 31	2017	2016	2015
Noncontrolling interest at beginning of period	\$13,762	\$13,310	\$22,550
Net loss	(130)	(1,887)	(2,207)
Foreign currency translation	826	2,339	(7,033)
Comprehensive income (loss)	696	452	(9,240)
Acquisition of noncontrolling interest	(14,458)	-	-
Noncontrolling interest at end of period	\$-	\$13,762	\$13,310

PST has dividends payable to former noncontrolling interest holders of 22,330 Brazilian real (\$6,742) at December 31, 2017, which includes the dividend declared on May 16, 2017 of 9,610 Brazilian real (\$3,092) and 1,879 Brazilian real (\$567) in monetary correction, and 10,842 Brazilian real (\$3,327) at December 31, 2016. The dividend is payable on or before January 1, 2020, and is subject to monetary correction based on the Brazilian National Extended Consumer Price inflation index ("IPCA"). The dividend payable related to PST is recorded within other long-term liabilities on the consolidated balance sheet.

(in thousands, except share and per share data, unless otherwise indicated)

4. Debt

	December 31, 2017	December 31, 2016	Interest rates at December 31, 2017	Maturity
Revolving Credit Facility Credit Facility	\$ 121,000	\$ 67,000	2.62% - 2.81%	September 2021
Dale				•
Debt				
PST short-term obligations	-	5,097		
PST long-term notes	8,016	11,452	9.0% - 12.24%	2019-2021
Other	28	137		
Total debt	8,044	16,686		
Less: current portion	(4,192)	(8,626)	
Total long-term debt, net	\$ 3,852	\$ 8,060		

Revolving Credit Facility

On November 2, 2007, the Company entered into an asset-based credit facility which permitted borrowing up to a maximum level of \$100,000. The Company entered into an Amended and Restated Credit and Security Agreement and a Second Amended and Restated Credit and Security Agreement on September 20, 2010 and December 1, 2011, respectively.

On September 12, 2014, the Company entered into a Third Amended and Restated Credit Agreement (the "Amended Agreement"). The Amended Agreement provides for a \$300,000 revolving credit facility (the "Credit Facility"), which replaced the Company's existing \$100,000 asset-based credit facility and includes a letter of credit subfacility, swing line subfacility and multicurrency subfacility. The Amended Agreement also has an accordion feature which allows the Company to increase the availability by up to \$80,000 upon the satisfaction of certain conditions. The Amended Agreement extended the termination date to September 12, 2019 from December 1, 2016. On March 26, 2015, the Company entered into Amendment No. 1 of the Amended Agreement which amended the definition of Consolidated EBITDA to allow for the add back of cash premiums and other non-cash charges related to the amendment and restatement of the Amended Agreement and the early extinguishment of the Company's 9.5% Senior Notes totaling \$10,507 both of which occurred in second half of 2014. Consolidated EBITDA is used in computing the Company's leverage ratio and interest coverage ratio which are covenants within the Amended Agreement. On February 23, 2016, the Company entered into Amendment No. 2 of the Amended Agreement which amended and waived any default or

potential defaults with respect to the pledging as collateral additional shares issued by a wholly owned subsidiary and newly issued shares associated with the formation of a new subsidiary. On August 12, 2016, the Company entered into Amendment No. 3 of the Amended Agreement which extended the expiration date by two years to September 12, 2021, increased the borrowing sub-limit for the Company's foreign subsidiaries by \$30,000 to \$80,000, increased the basket of permitted loans and investments in foreign subsidiaries by \$5,000 to \$30,000, and provided additional flexibility to the Company for certain permitted corporate transactions involving its foreign subsidiaries as defined, in the Amended Agreement. As a result of Amendment No. 3, the Company capitalized deferred financing costs of \$399, which will be amortized over the remaining term of the Credit Facility. On January 30, 2017, the Company entered into Consent and Amendment No. 4 to the Amended Agreement which amended certain definitions, schedules and exhibits of the Credit Facility, consented to a Dutch Reorganization, and consented to the Orlaco acquisition. As a result of Amendment No. 4, the Company capitalized deferred financing costs of \$61, which will be amortized over the remaining term of the Credit Facility.

Borrowings under the Amended Agreement will bear interest at either the Base Rate, as defined, or the LIBOR Rate, at the Company's option, plus the applicable margin as set forth in the Amended Agreement. The Company is also subject to a commitment fee ranging from 0.20% to 0.35% based on the Company's leverage ratio. The Amended Agreement requires the Company to maintain a maximum leverage ratio of 3.00 to 1.00, and a minimum interest coverage ratio of 3.50 to 1.00 and places a maximum annual limit on capital expenditures. The Amended Agreement also contains other affirmative and negative covenants and events of default that are customary for credit arrangements of this type including covenants which place restrictions and/or limitations on the Company's ability to borrow money, make capital expenditures and pay dividends.

(in thousands, except share and per share data, unless otherwise indicated)

Borrowings outstanding on the Credit Facility at December 31, 2017 and 2016 were \$121,000 and \$67,000, respectively. Borrowings increased under the Credit Facility to fund the Orlaco acquisition described in Note 2 during the first quarter of 2017 which were partially offset by subsequent voluntary principal repayments.

The Company has outstanding letters of credit of \$2,008 and \$3,399 at December 31, 2017 and 2016, respectively.

The Company was in compliance with all Credit Facility covenants at December 31, 2017 and 2016.

Debt

PST maintains several long-term notes used for working capital purposes which have fixed interest rates. As of December 31, 2017 PST did not have any short-term obligations. The weighted-average interest rates of long-term debt of PST at December 31, 2017 was 10.9%. Depending on the specific note, interest is payable either monthly or annually. Scheduled maturities of PST debt at December 31, 2017 are as follows: \$4,164 in 2018, \$2,700 in 2019, \$601 in 2020 and \$551 in 2021.

The Company's wholly-owned subsidiary located in Stockholm, Sweden, has an overdraft credit line which allows overdrafts on the subsidiary's bank account up to a maximum level of 20,000 Swedish krona, or \$2,439 and \$2,196, at December 31, 2017 and 2016, respectively. At December 31, 2017 and 2016, there was no balance outstanding on this bank account.

The Company was in compliance with all debt covenants at December 31, 2017 and 2016.

At December 31, 2017, the future maturities of the Credit Facility and debt were as follows:

Year ended December 31

2018	\$4,192
2019	2,700
2020	601
2021	121,551
2022	-
Total	\$129,044

(in thousands, except share and per share data, unless otherwise indicated)

5. Income Taxes

The income tax expense (benefit) included in the accompanying consolidated statement of operations represents federal, state and foreign income taxes. The components of income (loss) before income taxes and the provision for income taxes consist of the following:

Years ended December 31	2017	2016	2015
Income (loss) before income taxes:			
Domestic	\$36,657	\$35,088	\$22,959
Foreign	15,925	4,097	(2,729)
Total income before income taxes	\$52,582	\$39,185	\$20,230
Provision for income taxes:			
Current:			
Federal	\$2,478	\$760	\$386
State and foreign	11,014	2,575	1,232
Total current expense	\$13,492	\$3,335	\$1,618
Deferred:			
Federal	\$(2,585)	\$(37,828)	\$-
State and foreign	(3,374)	(1,896)	(2,165)
Total deferred benefit	(5,959)	(39,724)	(2,165)
Total income tax (benefit) expense	\$7,533	\$(36,389)	\$(547)

A reconciliation of the Company's effective income tax rate to the statutory federal tax rate is as follows:

Years ended December 31	2017	2016	2015
Statutory U.S. federal income tax rate	35.0 %	35.0	% 35.0 %
State income taxes, net of federal tax benefit	(0.8)	1.9	0.2
Tax credits	(4.2)	(0.8)	(2.8)
Foreign tax rate differential	(4.5)	(4.7)	(3.3)
Impact of change in enacted tax law	(17.2)	-	-
Change in valuation allowance	4.2	(121.6)	(36.0)
Other	1.8	(2.6)	4.2

Effective income tax rate

14.3 % (92.8)% (2.7)%

The Company recognized income tax expense (benefit) of \$7,533 or 14.3%, \$(36,389) or (92.8)% and \$(547) or (2.7)% of income (loss) before income taxes for federal, state and foreign income taxes for the years ended December 31, 2017, 2016 and 2015, respectively. The change in tax expense for the year ended December 31, 2017 compared to the same period for 2016 was predominantly due to the release of the U.S. federal, certain state and foreign valuation allowances in 2016 and the impact of the enactment of the Tax Cuts and Jobs Act ("Tax Legislation") in the United States on December 22, 2017.

The Tax Legislation significantly revises the U.S. corporate income tax by, among other things, lowering corporate income tax rates and imposing a one-time transition tax on deemed repatriated earnings of foreign subsidiaries. The impact of the Tax Legislation was a tax benefit of \$(9,062), consisting of an increase in tax expense of \$6,207 due to the one-time deemed repatriation tax, offset by the favorable impact of the reduced tax rate on the Company's net deferred tax liabilities and other deferred tax adjustments of \$(15,269) related to certain earnings included in the one-time transition tax. Pursuant to the guidance within SEC Staff Accounting Bulletin No. 118 ("SAB 118"), as of December 31, 2017, the Company recognized the provisional effects of the enactment of the Tax Legislation for which measurement could be reasonably estimated. Although the Company continues to analyze certain aspects of the Tax Legislation and refine its assessment, the ultimate impact of the Tax Legislation may differ from these estimates due to continued analysis or further regulatory guidance that may be issued as a result of the Tax Legislation. Pursuant to SAB 118, adjustments to the provisional amounts recorded by the Company as of December 31, 2017 that are identified within a subsequent measurement period of up to one year from the enactment date will be included as an adjustment to tax expense from continuing operations in the period the amounts are determined.

(in thousands, except share and per share data, unless otherwise indicated)

The increase in tax benefit for the year ended December 31, 2016 compared to the same period for 2015 was due to the release of the U.S. federal, certain state and foreign valuation allowances in the fourth quarter of 2016.

The Company has not provided deferred taxes related to the undistributed earnings of foreign subsidiaries for which management does not intend to indefinitely reinvest, as these earnings are subject to the one-time transition tax and are not subject to additional U.S. tax upon repatriation. Any foreign tax on repatriation of earnings not intended to be indefinitely reinvested is expected to be immaterial. At December 31, 2017, the aggregate undistributed earnings of our foreign subsidiaries amounted to \$47,860.

Significant components of the Company's deferred tax assets and liabilities were as follows:

As of December 31	2017	2016
Deferred tax assets:		
Inventories	\$1,921	\$2,156
Employee compensation and benefits	2,647	4,785
Insurance	-	245
Accrued liabilities and reserves	5,187	4,758
Property, plant and equipment	1,045	1,310
Tax loss carryforwards	10,929	28,952
Tax credit carryforwards	29,744	14,135
Other	416	2,851
Gross deferred tax assets	51,889	59,192
Less: Valuation allowance	(11,986)	(11,125)
Deferred tax assets less valuation allowance	39,903	48,067
Deferred tax liabilities:		
Property, plant and equipment	(3,489)	(1,651)
Intangible assets	(22,067)	(13,260)
Outside basis difference in foreign subsidiary	(13,750)	(31,016)
Other	(3,243)	(1,358)
Gross deferred tax liabilities	(42,549)	(47,285)
Net deferred tax assets (liabilities)	\$(2,646)	\$782

The balance sheet classification of our net deferred tax asset is shown below:

Years ended December 31 2017 2016 Long-term deferred tax assets \$16,228 \$10,542 Long-term deferred tax liabilities (18,874) (9,760) Net deferred tax assets (liabilities) \$(2,646) \$782

Based on the Company's review of both positive and negative evidence regarding the realizability of deferred tax assets at December 31, 2017, a valuation allowance continues to be recorded against certain deferred tax assets based upon the conclusion that it was more likely than not they would not be realized. The valuation allowance at December 31, 2017 and 2016 relates primarily to PST.

(in thousands, except share and per share data, unless otherwise indicated)

In 2016, the financial results for the U.S. operation improved significantly due to the earnings growth of Control Devices segment as well as a significant reduction in interest expense as a result of the Company's refinancing activities in the fall of 2014. The U.S. operation was in a three year cumulative income position at December 31, 2016. Based on the available positive and negative evidence and the weight accorded to that evidence at December 31, 2016, the Company determined that the significant positive evidence outweighed the negative evidence. Therefore, the Company concluded that it was more likely than not that the U.S. federal deferred tax assets would be realized (including those that carry expiration dates) and accordingly would no longer provide a valuation allowance against its domestic deferred tax assets. In addition, the Company concluded that it was more likely than not that the certain state and foreign, deferred tax assets would be realized, and as such the previously provided valuation allowances were released.

The Company has net operating loss carry forwards of \$42,571 and \$35,075 for U.S. state and foreign tax jurisdictions, respectively. The U.S. state net operating losses expire at various times and the foreign net operating losses expire at various times or have indefinite lives. The Company has general business and foreign tax credit carry forwards of \$27,336, \$1,753 and \$1,023 for U.S. federal, state and foreign jurisdictions respectively. The U.S. federal general business credits, if unused, begin to expire in 2023, and the state and foreign tax credits expire at various times.

The Company is required to provide a deferred tax liability corresponding to the difference between the financial reporting basis (which was remeasured to fair value upon the acquisition of an additional 24% of PST in 2011) and the tax basis in the previously held 50% ownership interest in PST (the "outside" basis difference). At December 31, 2017, the outside basis difference was reduced by \$8,100 as a result of the one-time transition tax. In 2017, the Company acquired the remaining 26% interest in PST. This outside basis difference will generally remain fixed until (1) dividends from the subsidiary exceed the parent's share of earnings subsequent to the date it became a subsidiary or (2) there is a transaction that affects the Company's ownership of PST.

The following is a reconciliation of the Company's total gross unrecognized tax benefits:

2017 2016 2015 Balance as of January 1 \$3,839 \$4,304 \$3,888

Tax positions related to the current year:

Additions 31 208 201

Tax positions related to the prior years:

 Additions
 523

 Reductions
 (176) (61)

 Expirations of statutes of limitation
 (49) (612) (308)

Balance as of December 31 \$3,645 \$3,839 \$4,304

At December 31, 2017, the Company has classified \$444 as a noncurrent liability and \$3,218 as a reduction to non-current deferred income tax assets. The amount of unrecognized tax benefits is not expected to change significantly during the next 12 months. Management is currently unaware of issues under review that could result in a significant change or a material deviation in this estimate.

If the Company's tax positions are sustained by the taxing authorities in favor of the Company, the amount that would affect the Company's effective tax rate is approximately \$3,645 and \$3,821 at December 31, 2017 and 2016, respectively.

The Company classifies interest expense and, if applicable, penalties which could be assessed related to unrecognized tax benefits as a component of income tax expense (benefit). For the years ended December 31, 2017, 2016 and 2015, the Company recognized approximately \$(33), \$(59) and \$(90) of gross interest and penalties, respectively. The Company has accrued approximately \$32 and \$64 for the payment of interest and penalties at December 31, 2017 and 2016, respectively.

(in thousands, except share and per share data, unless otherwise indicated)

The Company conducts business globally and, as a result, files income tax returns in the U.S. federal jurisdiction and various state and foreign jurisdictions. In the normal course of business, the Company is subject to examination by taxing authorities throughout the world. The following table summarizes the open tax years for each jurisdiction:

Jurisdiction	Open Tax Years
U.S. Federal	2014-2017
Brazil	2012-2017
China	2014-2017
France	2016-2017
Germany	2014-2017
Italy	2012-2017
Mexico	2012-2017
Netherlands	2014-2017
Spain	2013-2017
Sweden	2012-2017
United Kingdom	2016-2017

6. Operating Lease Commitments

The Company leases equipment, vehicles and buildings from third parties under operating lease agreements. For the years ended December 31, 2017, 2016 and 2015, lease expense totaled \$6,261, \$5,290 and \$5,532, respectively.

Future minimum operating lease commitments as of December 31, 2017 were as follows:

Year ended December 31	
2018	\$5,560
2019	4,555
2020	3,058
2021	2,622
2022	1,780
Thereafter	5,954
Total	\$23,529

7. Share-Based Compensation Plans

In April 2006, the Company's shareholders approved the Amended and Restated Long-Term Incentive Plan (the "2006 Plan") and reserved 1,500,000 Common Shares of which the maximum number of Common Shares which may be issued subject to incentive stock options is 500,000. In May 2010, shareholders approved an amendment to the 2006 Plan to increase the number of shares by 1,500,000 to 3,000,000, and in May 2013, shareholders approved another amendment to this plan to increase the number of shares by 1,500,000 to 4,500,000. As the 2006 Plan expired in May 2016, there were no shares available for grant at December 31, 2017 or 2016. As of December 31, 2017, there are 782,368 shares granted subject to future vesting of which 260,775 shares were time-based and 521,593 were performance-based.

In May 2016, the Company's shareholders approved the 2016 Long-Term Incentive Plan (the "2016 Plan") and reserved 1,800,000 Common Shares (of which the maximum number of Common Shares which may be issued). Under the 2016 Plan, as of December 31, 2017, the Company has granted 428,328 share units, of which 170,793 were time-based with cliff vesting using the straight-line method and 257,535 were performance-based. There are 1,390,708 shares available to be granted under the 2016 Plan at December 31, 2017.

In 2016 and 2015, pursuant to the 2006 Plan and in 2017, pursuant to the 2016 Plan, the Company granted time-based and performance-based share units. The time-based share units cliff vest three years after the date of grant. The performance based share units vest and are no longer subject to forfeiture upon the recipient remaining an employee of the Company for three years from the date of grant and, for a portion of the annual awards, upon the Company attaining certain targets of performance measured against a peer group's three year performance in terms of total shareholder return and, for the remaining portion of the annual awards, upon achieving certain annual earnings per share targets established by the Company during the performance period of the award.

(in thousands, except share and per share data, unless otherwise indicated)

The allocation of performance shares granted between total shareholder return and earnings per share were as follows for the years ended December 31:

In April 2005, the Company adopted the Directors' Restricted Shares Plan (the "Director Share Plan") and reserved 500,000 Common Shares for issuance under the Director Share Plan. In May 2013, shareholders approved an amendment to the Director Share Plan to increase the number of shares for issuance by 200,000 to 700,000. Under the Director Share Plan, the Company has cumulatively issued 616,113 restricted Common Shares. As such, there are 83,887 restricted Common Shares available to be issued at December 31, 2017. Shares issued annually under the Director Share Plan vest one year after the date of grant.

Restricted Shares

The fair value of the non-vested time-based restricted Common Share awards was calculated using the market value of the Common Shares on the date of issuance. The weighted-average grant-date fair value of time-based restricted Common Shares granted during the years ended December 31, 2017, 2016 and 2015 was \$18.73, \$13.52 and \$11.41, respectively.

The fair value of the non-vested performance-based restricted Common Share awards with a performance condition requiring the Company to obtain certain earnings per share targets was estimated using the market value of the shares on the date of grant. The fair value of non-vested performance-based restricted Common Share awards with a market condition requiring the Company to obtain a total shareholder return target relative to a group of peer companies was estimated using a Monte Carlo valuation model taking into consideration the probability of achievement using multiple simulations. The awards that use earnings per share as the performance target are expensed beginning when it is probable that the Company will meet the underlying performance condition.

A summary of the status of the Company's non-vested share units as of December 31, 2017 and the changes during the year then ended, are presented below:

	Time-based	l awards	Performance-ba	ased awards
		Weighted-		Weighted-
	Common	average grant	Common	average grant
	Shares	date fair value	Shares	date fair value
Non-vested as of December 31, 2016	612,037	\$ 12.32	825,140	\$ 12.14
Granted	177,664	\$ 18.73	217,495	\$ 21.54
Vested	(310,207)	\$ 12.05	(165,783)	\$ 11.72
Forfeited or cancelled	(36,342)	\$ 13.23	(132,664)	\$ 12.52
Non-vested as of December 31, 2017	443,152	\$ 15.01	744,188	\$ 14.92

As of December 31, 2017, total unrecognized compensation cost related to non-vested time-based share units granted was \$2,543. That cost is expected to be recognized over a weighted-average period of 1.18 years.

For the years ended December 31, 2017, 2016 and 2015, the total fair value of awards vested was \$8,718, \$5,394 and \$9,101, respectively.

As of December 31, 2017, total unrecognized compensation cost related to non-vested performance-based share units granted was \$3,324 for shares probable to vest. That cost is expected to be recognized over a weighted-average period of 0.94 years dependent upon the achievement of performance conditions. As noted above, the Company has issued and outstanding performance-based restricted Common Share awards that use different performance targets (total shareholder return and earnings per share).

(in thousands, except share and per share data, unless otherwise indicated)

The tax benefit realized for the tax deductions from the vesting of restricted Common Shares and option exercises of the share-based payment arrangements was \$858, \$977 and \$0 for the years ended December 31, 2017, 2016 and 2015.

8. Employee Benefit Plans

The Company has certain defined contribution profit sharing and 401(k) plans covering substantially all of its employees in the United States and Europe. The Company provides matching contributions to the Company's 401(k) plan. Company contributions are generally discretionary. For the years ended December 31, 2017, 2016 and 2015, expenses related to these plans amounted to \$2,601, \$1,601 and \$1,487, respectively.

Long-Term Cash Incentive Plan

In 2009, the Company adopted the Stoneridge, Inc. Long-Term Cash Incentive Plan (the "LTCIP") and granted awards to certain officers and key employees. Awards under the LTCIP provided recipients with the right to receive cash three years from the date of grant depending on the Company's earnings per share performance for the defined performance period. If the participant voluntarily terminated employment or was discharged for cause, as defined in the LTCIP, the award would be forfeited.

The Company granted Phantom Share awards under the LTCIP in 2013 that vested in February 2016 and were paid in March 2016 based on the Company's earnings per share performance for each fiscal year of 2013, 2014 and 2015. As of December 31, 2017 and 2016, the Company recorded a liability of \$0 for the performance based awards granted under the LTCIP. There were no performance based awards granted under the LTCIP during the years ended December 31, 2017, 2016 or 2015.

9. Financial Instruments and Fair Value Measurements

Financial Instruments

A financial instrument is cash or a contract that imposes an obligation to deliver, or conveys a right to receive cash or another financial instrument. The carrying values of cash and cash equivalents, accounts receivable and accounts payable are considered to be representative of fair value because of the short maturity of these instruments. The fair value of debt approximates the carrying value of debt.

Derivative Instruments and Hedging Activities

On December 31, 2017, the Company had open foreign currency forward contracts which are used solely for hedging and not for speculative purposes. Management believes that its use of these instruments to reduce risk is in the Company's best interest. The counterparties to these financial instruments are financial institutions with investment grade credit ratings.

Foreign Currency Exchange Rate Risk

The Company conducts business internationally and therefore is exposed to foreign currency exchange rate risk. The Company uses derivative financial instruments as cash flow and fair value hedges to manage its exposure to fluctuations in foreign currency exchange rates by reducing the effect of such fluctuations on foreign currency denominated intercompany transactions, inventory purchases and other foreign currency exposures. The currencies hedged by the Company during 2017, 2016 and 2015 include the euro and Mexican peso. In addition, the Company hedged the U.S. dollar against the Swedish krona and euro on behalf of its European subsidiaries in 2016 and 2015.

These forward contracts were executed to hedge forecasted transactions and were accounted for as cash flow hedges. As such, the effective portion of the unrealized gain or loss was deferred and reported in the Company's consolidated balance sheets as a component of accumulated other comprehensive loss. The cash flow hedges were highly effective. The effectiveness of the transactions has been and will be measured on an ongoing basis using regression analysis and forecasted future purchases of the currency.

In certain instances, the foreign currency forward contracts do not qualify for hedge accounting or are not designated as hedges, and therefore are marked to market with gains and losses recognized in the Company's consolidated statements of operations as a component of other expense (income), net.

(in thousands, except share and per share data, unless otherwise indicated)

The Company's foreign currency forward contracts are designed to offset some of the gains and losses realized on the underlying foreign currency denominated transactions as follows:

Euro-denominated Foreign Currency Forward Contracts

At December 31, 2017 and 2016, the Company held foreign currency forward contracts with an underlying notional amount of \$1,486 and \$1,601, respectively, to reduce the exposure related to the Company's euro-denominated intercompany loans. These contracts expires in June 2018. The euro-denominated foreign currency forward contract was not designated as a hedging instrument. For the years ended December 31, 2017, 2016, and 2015, the Company recognized a loss of \$174 and gains of \$57 and \$336, respectively, in the consolidated statements of operations as a component of other expense (income), net related to the euro-denominated contract.

U.S. dollar-denominated Foreign Currency Forward Contracts - Cash Flow Hedge

The Company entered into on behalf of one of its European Electronics subsidiaries whose functional currency is the Swedish krona, U.S. dollar-denominated currency contracts with a notional amount at December 31, 2015 of \$10,007 which expired ratably on a monthly basis from January 2016 through December 2016. There were no contracts entered into as of December 31, 2017 or 2016.

The Company entered into on behalf of one of its European Electronics subsidiaries whose functional currency is the euro, U.S. dollar-denominated currency contracts with a notional amount at December 31, 2015 of \$2,421 which expired ratably on a monthly basis from January 2016 through December 2016. There were no contracts entered into as of December 31, 2017 or 2016.

The Company evaluated the effectiveness of the U.S. dollar-denominated foreign currency forward contracts held as of December 31, 2015 and during 2016 and concluded that the hedges were effective.

Mexican peso-denominated Foreign Currency Forward Contracts – Cash Flow Hedge

The Company holds Mexican peso-denominated foreign currency contracts with notional amounts at December 31, 2017 of \$9,143 which expire ratably on a monthly basis from January 2018 through December 2018, compared to \$5,699 at December 31, 2016.

The Company evaluated the effectiveness of the Mexican peso-denominated foreign currency forward contracts held as of December 31, 2017 and 2016, and the years then ended, and concluded that the hedges were effective.

The notional amounts and fair values of derivative instruments in the consolidated balance sheets were as follows:

			Accrued expenses and other current liabilities			
	Notional a	mounts ^(A)				
	December 31, December 31,		December 31,	December 31,		
	2017	2016	2017	201	6	
Derivatives designated as hedging instruments:						
Cash flow hedges:						
Forward currency contracts	\$ 9,143	\$ 5,699	\$ 221	\$	28	
Derivatives not designated as hedging instruments:						
Forward currency contracts	\$ 1,486	\$ 1,601	\$ 48	\$	3	

(A) Notional amounts represent the gross contract / notional amount of the derivatives outstanding.

(in thousands, except share and per share data, unless otherwise indicated)

Gross amounts recorded for the cash flow hedges in other comprehensive loss in shareholders' equity and in net income for the years ended December 31 were as follows:

				Gain (loss) reclassified from			
	Gain (loss) recorded in other			other comprehensive income			
	comprehensive income (loss)			(loss) into net income (A)			
	2017	2016	2015	2017	2016	2015	
Derivatives designated as cash flow hedges:							
Forward currency contracts	\$ 441	\$ (582) (671	\$ 634	\$ (164	(1,060)	

(A) Gains and losses reclassified from comprehensive loss into net income were recognized in COGS in the Company's consolidated statements of operations.

The net deferred loss of \$221 on the cash flow hedge derivatives will be reclassified from other comprehensive income (loss) to the consolidated statements of operations in 2018. The Company has measured the ineffectiveness of the forward currency contracts and any amounts recognized in the consolidated financial statements were immaterial for the years ended December 31, 2017, 2016 and 2015.

Fair Value Measurements

The Company's assets and liabilities are measured at fair value on a recurring basis and are categorized using the three levels of the fair value hierarchy based on the reliability of the inputs used. Fair values estimated using Level 1 inputs consist of quoted prices in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date. Fair values estimated using Level 2 inputs, other than quoted prices, are observable for the asset or liability, either directly or indirectly and include among other things, quoted prices for similar assets or liabilities in markets that are active or inactive as well as inputs other than quoted prices that are observable. For forward currency contracts, inputs include foreign currency exchange rates. Fair values estimated using Level 3 inputs consist of significant unobservable inputs.

The following table presents our liabilities that are measured at fair value on a recurring basis and are categorized using the three levels of the fair value hierarchy based on the reliability of inputs used.

		Fair	values esti	December 31, 2017 mated using	Dec 201	· .
		Level 2 Level 3				
	Fair value	inpu	tsinputs	inputs	Fair	r value
Financial liabilities carried at fair value:		_	-	-		
Forward currency contracts	\$ 269	\$ -	\$ 269	\$ -	\$	31
Earn-out consideration	20,746	-	-	20,746		-
Total financial liabilities carried at fair value	\$ 21,015	\$ -	\$ 269	\$ 20,746	\$	31

The following table sets forth a summary of the change in fair value of the Company's Level 3 financial liabilities related to earn-out consideration that are measured at fair value on a recurring basis.

	Orlaco	PST	Total
Balance at December 31, 2016	\$-	\$-	\$-
Fair value on acquisition date	3,243	10,180	13,423
Change in fair value	4,853	2,632	7,485
Foreign currency adjustments	541	(703)	(162)
Balance at December 31, 2017	\$8,637	\$12,109	\$20,746

(in thousands, except share and per share data, unless otherwise indicated)

The earn-out considerations related to Orlaco and PST are recorded within other long-term liabilities on the consolidated balance sheet. The change in fair value of the earn-out considerations are recorded within SG&A expense on the consolidated statements of operations.

The increase in fair value of earn-out consideration related to the Orlaco acquisition is primarily due to actual performance exceeding forecasted performance as well as the reduced time from the period presented to the payment date and foreign currency movements. The increase in fair value of earn-out consideration for PST was due to an increase in expected performance and the reduced time from the period presented to the payment date, which was partially offset by foreign currency. The fair value of the Orlaco and PST earn-out consideration is based on forecasted EBITDA during the performance periods.

There were no transfers in or out of Level 3 from other levels in the fair value hierarchy for the year ended December 31, 2017.

Except for the fair value of assets acquired and liabilities assumed related to the Orlaco acquisition discussed in Note 2, no non-recurring fair value adjustments were required for nonfinancial assets for the years ended December 31, 2017 and 2016.

10. Commitments and Contingencies

In the ordinary course of business, the Company is subject to a broad range of claims and legal proceedings that relate to contractual allegations, product liability, tax audits, patent infringement, employment-related matters and environmental matters. The Company establishes accruals for matters which it believes that losses are probable and can be reasonably estimated. Although it is not possible to predict with certainty the outcome of these matters, the Company is of the opinion that the ultimate resolution of these matters will not have a material adverse effect on its consolidated results of operations or financial position.

As a result of environmental studies performed at the Company's former facility located in Sarasota, Florida, the Company became aware of soil and groundwater contamination at this site. The Company engaged an environmental

engineering consultant to assess the level of contamination and to develop a remediation and monitoring plan for the site. Soil remediation at the site was completed during the year ended December 31, 2010. Upon approval of the remedial action plan by the Florida Department of Environmental Protection, ground water remediation began in the fourth quarter of 2015. During the years ended December 31, 2017, 2016 and 2015, environmental remediation costs incurred were immaterial. At December 31, 2017 and 2016, the Company had accrued an undiscounted liability of \$265 and \$446, respectively, related to future remediation costs. At December 31, 2017 and 2016, \$253 and \$370, respectively, were recorded as a component of accrued expenses and other current liabilities on the consolidated balance sheets while the remaining amounts were recorded as a component of other long-term liabilities. Costs associated with the recorded liability will be incurred to complete the groundwater remediation, with the balance relating to monitoring costs to be incurred over multiple years. The recorded liability is based on assumptions in the remedial action plan. Although the Company sold the Sarasota facility in December 2011, the liability to remediate the site contamination remains the responsibility of the Company. Due to the ongoing site remediation, the closing terms of the sale agreement included a requirement for the Company to maintain a \$2,000 letter of credit for the benefit of the buyer.

During the third quarter of 2017, the Company resolved a legal proceeding, *Verde v. Stoneridge, Inc. et al.*, that was pending in the United States District Court for the Eastern District of Texas, Cause No. 6:14-cv-00225- KNM. The Plaintiff filed this putative class action against the Company and others on March 26, 2014. The Plaintiff had alleged that the Company was involved in the vertical chain of manufacture, distribution, and sale of a control device ("CD") that was incorporated into a Dodge Ram truck purchased by the Plaintiff in 2006. The Plaintiff had alleged that the Company breached express warranties and indemnification provisions by supplying a defective CD that was not capable of performing its intended function. In May 2017, the District Court denied the Plaintiff's motion for class certification. On October 2, 2017, the Company and Plaintiff agreed to settle this matter, and the proceeding was dismissed with prejudice on November 17, 2017. The settlement amount was \$3.

(in thousands, except share and per share data, unless otherwise indicated)

Royal v. Stoneridge, Inc. et al. is a legal proceeding currently pending in the United States District Court for the Western District of Oklahoma, Case No. 5:14-cy-01410-F. The Plaintiffs filed this putative class action against the Company, Stoneridge Control Devices, Inc., and others on December 19, 2014. The Plaintiffs allege that the Company was involved in the vertical chain of manufacture, distribution, and sale of a CD that was incorporated into Dodge Ram trucks purchased by the Plaintiffs between 1999 and 2006. The Plaintiffs allege that the Company and Stoneridge Control Devices, Inc. breached various express and implied warranties, including the implied warranty of merchantability. The Plaintiffs also seek indemnity from the Company and Stoneridge Control Devices, Inc. The putative class consists of all owners of vehicles equipped with the subject CD, which includes various Dodge Ram trucks and other manual transmission vehicles manufactured from 1997–2007, which Plaintiffs allege is more than one million vehicles. The Plaintiffs seek recovery of economic loss damages associated with inspecting and replacing the allegedly defective CD, diminished value of the subject CDs and the trucks in which they were installed, and attorneys' fees and costs. On September 28, 2017, the Company reached an agreement with the Plaintiffs to settle the matter. On January 30, 2018, the Court approved the settlement and entered a final order and judgment consistent with the terms of the settlement agreement. Under the terms of the settlement, the Company will provide a replacement CD to each member of the settlement class who files a claim form with evidence of eligibility to participate. The terms of the settlement do not require the Company to provide members of the settlement class with any cash payments or to reimburse any installation costs associated with replacement of the CDs. Counsel for the Plaintiffs and the settlement class filed a motion with the Court requesting an award of attorneys' fees and costs in an amount not to exceed \$375, and the Company has agreed not to object to any request that does not exceed \$375 and to pay the amount of any award that does not exceed \$375. Counsel for Plaintiffs and the settlement class filed a motion requesting incentive payments to each of the three named Plaintiffs in an amount not to exceed \$5 each, and the Company has agreed not to object to any request that does not exceed \$15 total and to pay the amount of any award that does not exceed \$15 total. The total cost of the settlement remains uncertain because it is difficult to predict how many members of the proposed settlement class will request a replacement CD. The Company believes the likelihood of loss is probable and reasonably estimable (although not certain), and therefore a liability of \$525 for these claims has been recorded as a component of accrued expenses and other current liabilities at December 31, 2017.

On May 24, 2013, the State Revenue Services of São Paulo issued a tax deficiency notice against PST claiming that the vehicle tracking and monitoring services it provides should be classified as communication services, and therefore subject to the State Value Added Tax – ICMS. The State Revenue Services assessment imposed the 25.0% ICMS tax on all revenues of PST related to the vehicle tracking and monitoring services during the period from January 2009 through December 2010. The Brazilian real ("R\$") and U.S. dollar equivalent ("\$") of the aggregate tax assessment is approximately R\$99,300 (\$30,000) at December 31, 2017 which is comprised of Value Added Tax – ICMS of R\$13,200 (\$4,000), interest of R\$74,700 (\$22,600) and penalties of R\$11,400 (\$3,400).

The Company believes that the vehicle tracking and monitoring services are non-communication services, as defined under Brazilian tax law, subject to the municipal ISS tax, not communication services subject to state ICMS tax as

claimed by the State Revenue Services of São Paulo. PST has, and will continue to collect the municipal ISS tax on the vehicle tracking and monitoring services in compliance with Brazilian tax law and will defend its tax position. PST has received a legal opinion that the merits of the case are favorable to PST, determining among other things that the imposition on the subsidiary of the State ICMS by the State Revenue Services of São Paulo is not in accordance with the Brazilian tax code. The Company believes, based on the legal opinion of the Company's Brazilian legal counsel, the Brazil Administrative Court's final ruling on February 27, 2018 in PST's favor for the period from January 2009 through December 2010, and the results of the Brazilian Administrative Court's ruling on another vehicle tracking and monitoring company related to the tax deficiency notice it received, the likelihood of loss is not probable. As a result of the above, as of December 31, 2017 and 2016, no accrual has been recorded with respect to the tax assessment. An unfavorable judgment on this issue for the years assessed and for subsequent years could result in significant costs to the Company and adversely affect our results of operations.

In addition, PST has civil, labor and other non-income tax contingencies for which the likelihood of loss is deemed to be reasonably possible, but not probable, by the Company's legal advisors in Brazil. As a result, no provision has been recorded with respect to these contingencies, which amounted to R\$33,800 (\$10,200) and R\$31,800 (\$9,800) at December, 2017 and 2016, respectively. An unfavorable outcome on these contingencies could result in significant cost to PST and adversely affect its results of operations.

Insurance Recoveries

The Company incurred losses and incremental costs related to the damage to assets caused by a storm at its Mexican production facility in the fourth quarter of 2016 and is pursuing recovery of such costs under applicable insurance policies. Anticipated proceeds from insurance recoveries related to losses and incremental costs that have been incurred ("loss recoveries") are recognized when receipt is probable. Anticipated proceeds from insurance recoveries in excess of the net book value of damaged property, plant and equipment ("insurance gain contingencies") are recognized when all contingencies related to the claim have been resolved.

(in thousands, except share and per share data, unless otherwise indicated)

In 2017, loss recoveries related to the damage of inventory and incremental costs included in costs of sales were \$189 and loss recoveries and insurance gain contingencies related to the damage of property, plant and equipment included within SG&A expense were \$1,923. Cash proceeds related to the damage of inventory and incremental costs of \$500 are included in cash flows from operating activities, while cash proceeds related to the damage of property, plant and equipment of \$711 are included in cash flows from investing activities. As of December 31, 2017, the Company had confirmation of the open insurance claim and recorded a receivable of \$1,644. The cash payment was subsequently collected in January 2018.

11. Headquarter Relocation and Consolidation

During the fourth quarter of 2016, the Company relocated its corporate headquarters from Warren, Ohio to Novi, Michigan and consolidated its other corporate functions into one location. As a result, the Company incurred relocation costs recorded within SG&A expense, which included employee retention, relocation, severance, recruiting, duplicate wages and professional fees, of \$493 and \$1,769 for the years ended December 31, 2017 and 2016, respectively.

In connection with the headquarter relocation, the Company was approved for a Michigan Business Development Program grant of up to \$1,400 based upon the number of new jobs created in Michigan through 2022. As a result of the attainment of the first milestone, grant income of \$338 was recognized during the year ended December 31, 2017 within SG&A expense in the consolidated statements of operations.

12. Restructuring and Business Realignment

In connection with the Electronics segment restructuring initiative, the Company recorded lease related restructuring charges during the years ended December 31, 2017, 2016 and 2015 of \$20, \$59 and \$183, respectively, as part of SG&A expense. At December 31, 2016, the only remaining restructuring accrual related to the terminated property lease in Mitcheldean, United Kingdom, for which the Company accrued \$273 on the consolidated balance sheet as a component of other current liabilities. There were no restructuring accruals as of December 31, 2017.

The expenses for the restructuring activities that relate to the Electronics reportable segment include the following:

	2017	2016	2015
Accrued balance at January 1	\$273	\$458	\$733
Charge to expense	20	59	183
Foreign currency translation	3	(69)	3
Cash payments, net	(296)	(175)	(461)
Accrued balance at December 31	\$-	\$273	\$458

The Company regularly evaluates the performance of its businesses and cost structures, including personnel, and makes necessary changes thereto in order to optimize its results. The Company also evaluates the required skill sets of its personnel and periodically makes strategic changes. As a consequence of these actions, the Company incurs severance related costs which are referred to as business realignment charges.

Business realignment charges by reportable segment were as follows:

Years ended December 31	2017	2016	2015
Electronics (A)	\$1,223	\$1,180	\$317
PST (B)	589	1,437	403
Unallocated Corporate (C)	-	-	309
Total business realignment charges	\$1,812	\$2,617	\$1,029

Severance costs for the year ended December 31, 2017 related to COGS and SG&A were \$56 and \$1,167, respectively. Severance costs for the year ended December 31, 2016 related to SG&A and design and development ("D&D") were \$196 and \$984, respectively. Severance costs for the year ended December 31, 2015 related to SG&A and D&D were \$102 and \$215, respectively.

Severance costs for the year ended December 31, 2017 related to COGS, SG&A and D&D were \$370, \$218 and \$1, respectively. Severance costs for the year ended December 31, 2016 related to COGS, SG&A and D&D were \$437, \$884 and \$116, respectively. Severance costs for the year ended December 31, 2015 related to COGS, SG&A and D&D were \$172, \$117 and \$114, respectively.

(in thousands, except share and per share data, unless otherwise indicated)

(C) Severance costs for the year ended December 31, 2015 related to SG&A were \$309.

There were no significant restructuring or business realignment expenses related to the Control Devices reportable segment during the years ended December 31, 2017, 2016 or 2015.

Business realignment charges classified by statement of operations line item were as follows:

Years ended December 31	2017	2016	2015
Cost of goods sold	\$426	\$437	\$172
Selling, general and administrative	1,385	1,080	528
Design and development	1	1,100	329
Total business realignment charges	\$1,812	\$2,617	\$1,029

13. Segment Reporting

Operating segments are defined as components of an enterprise that are evaluated regularly by the Company's chief operating decision maker in deciding how to allocate resources and in assessing performance. The Company's chief operating decision maker is the chief executive officer.

The Company has three reportable segments, Control Devices, Electronics, and PST, which also represent its operating segments. The Control Devices reportable segment produces sensors, switches, valves and actuators. The Electronics reportable segment produces electronic instrument clusters, electronic control units, driver information systems and camera-based vision systems, monitors and related products. The PST reportable segment designs and manufactures electronic vehicle security alarms, convenience accessories, vehicle tracking devices and monitoring services and in-vehicle audio and video devices.

The accounting policies of the Company's reportable segments are the same as those described in Note 2. The Company's management evaluates the performance of its reportable segments based primarily on revenues from external customers, capital expenditures and operating income. Inter-segment sales are accounted for on terms similar

to those to third parties and are eliminated upon consolidation.

The financial information presented below is for our three reportable operating segments and includes adjustments for unallocated corporate costs and intercompany eliminations, where applicable. Such costs and eliminations do not meet the requirements for being classified as an operating segment. Corporate costs include various support functions, such as corporate accounting/finance, executive administration, human resources, information technology and legal.

(in thousands, except share and per share data, unless otherwise indicated)

A summary of financial information by reportable segment is as follows:

Years ended December 31 Net Sales:	2017	2016	2015
Control Devices	\$447,528	\$408,132	\$333,010
Inter-segment sales	5,044	1,826	2,055
Control Devices net sales	452,572	409,958	335,065
Electronics (D)	282,383	205,256	216,544
Inter-segment sales	39,501	33,361	22,904
Electronics net sales	321,884	238,617	239,448
Electronies net sales	321,004	230,017	237,440
PST	94,533	82,589	95,258
Inter-segment sales	563	-	-
PST net sales	95,096	82,589	95,258
Eliminations	(45,108)	(35,187)	(24,959)
Total net sales	\$824,444	\$695,977	\$644,812
Operating Income (Loss):	Ψ027,777	Ψ0/3,/11	ψ0++,012
Control Devices	\$72,555	\$61,815	\$44,690
Electronics (D)	18,119	14,798	13,784
PST	2,661	(3,462)	•
Unallocated Corporate (A)	(35,965)		(23,117)
Total operating income	\$57,370	\$44,082	\$27,815
Depreciation and Amortization:	Ψο τ ,ο τ ο	Ψ · · ·,σσ -	Ψ=/,010
Control Devices	\$10,887	\$10,276	\$9,260
Electronics (D)	8,143	3,971	3,666
PST	8,316	8,559	9,272
Unallocated Corporate	584	452	211
Total depreciation and amortization (B)	\$27,930	\$23,258	\$22,409
Interest Expense, net:			
Control Devices	\$103	\$226	\$326
Electronics	119	142	161
PST	1,812	3,396	2,957
Unallocated Corporate	3,749	2,513	2,921
Total interest expense, net	\$5,783	\$6,277	\$6,365
Capital Expenditures:			
Control Devices	\$17,484	\$13,261	\$15,094
Electronics (D)	8,158	5,665	6,538

PST	3,831	3,213	5,889
Unallocated Corporate ^(C)	2,697	2,337	1,214
Total capital expenditures	\$32,170	\$24,476	\$28,735

(in thousands, except share and per share data, unless otherwise indicated)

	December 31,	December 31,
	2017	2016
Total Assets:		
Control Devices	\$ 164,632	\$ 150,623
Electronics (D)	252,324	99,964
PST	100,382	107,405
Corporate (C)	377,657	287,031
Eliminations	(335,958)	(250,494)
Total assets	\$ 559,037	\$ 394,529

The following table presents net sales and long-term assets for the geographic areas in which the Company operates:

Years ended December 31	2017	2016	2015
Net Sales:			
North America	\$471,770	\$428,046	\$369,032
South America	94,533	82,589	95,258
Europe and Other (D)	258,141	185,342	180,522
Total net sales	\$824,444	\$695,977	\$644,812

	December 31, 2017	December 31, 2016
Long-term Assets:		
North America	\$ 89,997	\$ 73,835
South America	58,989	63,497
Europe and Other (D)	106,682	16,304
Total long-term assets	\$ 255,668	\$ 153,636
South America Europe and Other ^(D)	58,989 106,682	63,497 16,304

⁽A) Unallocated Corporate expenses include, among other items, accounting/finance, human resources, information technology and legal costs as well as share-based compensation.

⁽B) These amounts represent depreciation and amortization on property, plant and equipment and certain intangible assets.

- (C) Corporate assets consist primarily of cash, intercompany loan receivables, capital expenditures for the headquarter building and information technology assets, equity investments and investments in subsidiaries.
- (D) The amounts for 2017 include the Orlaco business which was acquired on January 31, 2017 as disclosed in Note 2.

(in thousands, except share and per share data, unless otherwise indicated)

14. Unaudited Quarterly Financial Data

The following is a summary of quarterly results of operations:

				Quarter ended	
2017	December 31	September 30	June 30	March 31	
Net sales	\$ 207,440	\$ 203,582	\$209,111	\$ 204,311	
Gross profit	61,026	62,549	63,414	61,151	
Operating income	13,234	13,296	15,676	15,164	
Income tax (benefit) expense (B)	(6,036	3,809	5,189	4,571	
Net income	18,908	8,049	8,919	9,173	
Net loss attributable to noncontrolling interests	-	-	(100)	(30)	
Net income attributable to Stoneridge, Inc.	18,908	8,049	9,019	9,203	
Earnings per share attributable to Stoneridge, Inc.:					
Basic (A)	\$ 0.67	\$ 0.29	\$0.32	\$ 0.33	
Diluted (A)	\$ 0.65	\$ 0.28	\$0.32	\$ 0.32	

				Quarter ended
2016	December 31	September 30	June 30	March 31
Net sales	\$ 172,612	\$ 173,846	\$186,903	\$ 162,616
Gross profit	47,779	49,748	52,751	45,161
Operating income	10,170	11,780	13,626	8,506
Income tax (benefit) expense (C)	(39,503	919	1,350	845
Net income	48,489	9,981	10,995	6,109
Net income (loss) attributable to noncontrolling interests	122	(303	(576)	(1,130)
Net income attributable to Stoneridge, Inc.	48,367	10,284	11,571	7,239
Earnings per share attributable to Stoneridge, Inc.:				
Basic (A)	\$ 1.74	\$ 0.37	\$0.42	\$ 0.26
Diluted (A)	\$ 1.70	\$ 0.36	\$0.41	\$ 0.26

⁽A) Earnings per share for the year may not equal the sum of the four historical quarters earnings per share due to changes in weighted-average basic and diluted shares outstanding.

The impact of the Tax Legislation was an increase in tax expense of \$6.2 million due to the one-time deemed repatriation tax, offset by the favorable impacts of the reduced tax rate on the Company's net deferred tax liabilities and other deferred tax adjustments of \$(15.3) million related to certain earnings included in the one-time transition tax.

(C) The Company recorded the release of a valuation allowance associated with its U.S. federal, certain state and foreign deferred tax assets for the year ended December 31, 2016.

(in thousands, except share and per share data, unless otherwise indicated)

SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS

(in thousands)

The following schedules provide the activity for accounts receivable reserves and valuation allowance for deferred tax assets for the years ended December 31, 2017, 2016 and 2015:

	Balance at	Charged to			
	beginning o	f costs and	Bala	ance at	
	period	expenses	Write-offs end	of period	
Accounts receivable reserves:		_			
Year ended December 31, 2015	\$ 2,017	\$ 395	\$ (1,346) \$ 1	,066	
Year ended December 31, 2016	1,066	1,604	(1,040) 1	,630	
Year ended December 31, 2017	1,630	2,173	(2,694) 1	,109	
				Exchange	
			Net additions	rate	
		Balance at	charged to	fluctuations	
		beginning of	expense	and other	Balance at
		period	(benefit)	items	end of period
Valuation allowance for deferred	l tax assets:				
Year ended December 31, 2015		\$ 67,907	\$ (7,957)	\$ (559) \$ 59,391
Year ended December 31, 2016		59,391	$(47,659)^{(A)}$	(607) 11,125
Year ended December 31, 2017		11,125	874	(13) 11,986

⁽A) The Company recorded the release of a valuation allowance associated with its U.S. federal, certain state and foreign deferred tax assets of \$49.6 million.

Item 9. Changes In and Disagreements With Accountants On Accounting and Financial Disclosure.

There have been no disagreements between the management of the Company and its Independent Registered Public Accounting Firm on any matter of accounting principles or practices of financial statement disclosures, or auditing scope or procedure.

Item 9A. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

As of December 31, 2017, an evaluation was performed under the supervision and with the participation of the Company's management, including the principal executive officer ("PEO") and principal financial officer ("PFO"), of the effectiveness of the design and operation of the Company's disclosure controls and procedures as defined in Rule 13a-15(e) and Rule 15d-15(e) of the Securities Exchange Act of 1934, as amended. Based on that evaluation, the Company's PEO and PFO, concluded that the Company's disclosure controls and procedures were effective as of December 31, 2017.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). In evaluating the Company's internal control over financial reporting, management has adopted the framework in *Internal* Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 Framework). On January 31, 2017, the Company acquired Exploitatiemaatschappij Berghaaf B.V. ("Orlaco") and is currently integrating Orlaco into its compliance programs and internal control processes. As permitted by SEC rules and regulations, the Company has excluded Orlaco from management's evaluation of internal control over financial reporting as of December 31, 2017. Orlaco constituted approximately 22.9% of the Company's total assets as of December 31, 2017, and approximately 7.9% of the Company's net sales for the year then ended. Under the supervision and with the participation of our management, including the PEO and PFO, we conducted an evaluation of the effectiveness of our internal control over financial reporting, as of December 31, 2017. Based on our evaluation under the framework in *Internal Control-Integrated Framework* (2013 Framework), our management has concluded that our internal control over financial reporting was effective as of December 31, 2017.

Because of inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2017 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report which appears herein.

Changes in Internal Control Over Financial Reporting