

TENNECO INC  
Form 10-K  
February 27, 2009

**Table of Contents**

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

**FORM 10-K**

(Mark One)

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

**For the fiscal year ended December 31, 2008**

**OR**

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

**Commission file number 1-12387**

**TENNECO INC.**

(Exact name of registrant as specified in its charter)

**Delaware**

(State or other jurisdiction of  
incorporation or organization)

**500 North Field Drive**

**Lake Forest, IL**

(Address of principal executive offices)

**76-0515284**

(I.R.S. Employer  
Identification No.)

**60045**

(Zip Code)

Registrant's telephone number, including area code: (847) 482-5000

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

<b>Title of each class</b>	<b>Name of each Exchange on which registered</b>
7.45% Debentures due 2025;	New York Stock Exchange
8.125% Debentures due 2015;	New York Stock Exchange
9.20% Debentures due 2012;	New York Stock Exchange
Common Stock, par value \$.01 per share	New York and Chicago Stock Exchanges

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

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

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

*Note* Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Exchange Act from their obligations under those Sections.

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was

Edgar Filing: TENNECO INC - Form 10-K

required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

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

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

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

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

State the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant's most recently completed second fiscal quarter.

**Class of Common Equity and Number of Shares  
held by Non-affiliates at June 30, 2008**

**Market Value held by Non-affiliates\***

Common Stock, 45,001,634 shares

\$608,600,599

\* Based upon the closing sale price on the New York Stock Exchange Composite Tape for the Common Stock on June 30, 2008.

INDICATE THE NUMBER OF SHARES OUTSTANDING OF EACH OF THE REGISTRANT'S CLASSES OF COMMON STOCK, AS OF THE LATEST PRACTICABLE DATE. Common Stock, par value \$.01 per share, 46,905,261 shares outstanding as of February 23, 2009.

**Documents Incorporated by Reference:**

<b>Document</b>	<b>Part of the Form 10-K into which incorporated</b>
Portions of Tenneco Inc.'s Definitive Proxy Statement for the Annual Meeting of Stockholders to be held May 13, 2009	Part III

**Table of Contents**

**CAUTIONARY STATEMENT FOR PURPOSES OF THE SAFE HARBOR PROVISIONS OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995**

This Annual Report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 concerning, among other things, our prospects and business strategies. These forward-looking statements are included in various sections of this report, including the section entitled Outlook appearing in Item 7 of this report. The words may, will, believe, should, could, plan, expect, anticipate, estimate, and similar (and variations thereof), identify these forward-looking statements. Although we believe that the expectations reflected in these forward-looking statements are based on reasonable assumptions, these expectations may not prove to be correct. Because these forward-looking statements are also subject to risks and uncertainties, actual results may differ materially from the expectations expressed in the forward-looking statements. Important factors that could cause actual results to differ materially from the expectations reflected in the forward-looking statements include:

general economic, business and market conditions, including without limitation the severe financial difficulties facing a number of companies in the automotive industry as a result of the current global economic crisis and the potential impact thereof on labor unrest, supply chain disruptions, weakness in demand and the collectibility of any accounts receivable due to us from such companies;

our ability to access the capital or credit markets and the costs of capital, including the recent global financial and liquidity crisis, changes in interest rates, market perceptions of the industries in which we operate or ratings of securities;

the recent volatility in the credit markets, the losses which may be sustained by our lenders due to their lending and other financial relationships and the general instability of financial institutions due to a weakened economy;

changes in consumer demand, prices and our ability to have our products included on top selling vehicles, such as the recent significant shift in consumer preferences from light trucks, which tend to be higher margin products for our customers and us, to other vehicles in light of higher fuel cost and the impact of the current global economic crisis, and other factors impacting the cyclical nature of automotive production and sales of automobiles which include our products, and the potential negative impact on our revenues and margins from such products;

changes in automotive manufacturers' production rates and their actual and forecasted requirements for our products, such as the recent and significant production cuts by automotive manufacturers in response to difficult economic conditions;

the overall highly competitive nature of the automotive parts industry, and our resultant inability to realize the sales represented by our awarded book of business (which is based on anticipated pricing for the applicable program over its life, and is subject to increases or decreases due to changes in customer requirements, customer and consumer preferences, and the number of vehicles actually produced by customers);

the loss of any of our large original equipment manufacturer (OEM) customers (on whom we depend for a substantial portion of our revenues), or the loss of market shares by these customers if we are unable to achieve increased sales to other OEMs;

labor disruptions at our facilities or any labor or other economic disruptions at any of our significant customers or suppliers or any of our customers' other suppliers (such as the 2008 strike at American Axle, which disrupted

our supply of products for significant General Motors platforms);

increases in the costs of raw materials, including our ability to successfully reduce the impact of any such cost increases through materials substitutions, cost reduction initiatives, low cost country sourcing, and price recovery efforts with aftermarket and OE customers;

the cyclical nature of the global vehicle industry, including the performance of the global aftermarket sector and the longer product lives of automobile parts;

**Table of Contents**

our continued success in cost reduction and cash management programs and our ability to execute restructuring and other cost reduction plans and to realize anticipated benefits from these plans;

costs related to product warranties;

the impact of consolidation among automotive parts suppliers and customers on our ability to compete;

operating hazards associated with our business;

changes in distribution channels or competitive conditions in the markets and countries where we operate, including the impact of changes in distribution channels for aftermarket products on our ability to increase or maintain aftermarket sales;

the negative impact of higher fuel prices such as during the first half of 2008 and overall market weakness on discretionary purchases of aftermarket products by consumers;

the cost and outcome of existing and any future legal proceedings;

economic, exchange rate and political conditions in the foreign countries where we operate or sell our products;

customer acceptance of new products;

new technologies that reduce the demand for certain of our products or otherwise render them obsolete;

our ability to realize our business strategy of improving operating performance;

our inability to successfully integrate any acquisitions that we complete;

changes by the Financial Accounting Standards Board or the Securities and Exchange Commission of authoritative generally accepted accounting principles or policies;

potential legislation, regulatory changes and other governmental actions, including the ability to receive regulatory approvals and the timing of such approvals;

the impact of changes in and compliance with laws and regulations, including environmental laws and regulations, environmental liabilities in excess of the amount reserved and the adoption of the current mandated timelines for worldwide emission regulation;

acts of war and/or terrorism, including, but not limited to, the events taking place in the Middle East, the current military action in Iraq and Afghanistan, the current situation in North Korea and the continuing war on terrorism, as well as actions taken or to be taken by the United States and other governments as a result of further acts or threats of terrorism, and the impact of these acts on economic, financial and social conditions in the countries where we operate; and

the timing and occurrence (or non-occurrence) of other transactions, events and circumstances which may be beyond our control.

The risks included here are not exhaustive. Refer to Part I, Item 1A Risk Factors of this report for further discussion regarding our exposure to risks. Additionally, new risk factors emerge from time to time and it is not possible for us to predict all such risk factors, nor to assess the impact such risk factors might have on our business or the extent to which any factor or combination of factors may cause actual results to differ materially from those contained in any forward-looking statements. Given these risks and uncertainties, investors should not place undue reliance on forward-looking statements as a prediction of actual results.

**TABLE OF CONTENTS**

**PART I**

<u>Item 1.</u>	<u>Business</u>	1
	<u>Tenneco Inc.</u>	1
	<u>Contributions of Major Businesses</u>	4
	<u>Description of Our Business</u>	5
<u>Item 1A.</u>	<u>Risk Factors</u>	22
<u>Item 1B.</u>	<u>Unresolved Staff Comments</u>	31
<u>Item 2.</u>	<u>Properties</u>	31
<u>Item 3.</u>	<u>Legal Proceedings</u>	31
<u>Item 4.</u>	<u>Submission of Matters to a Vote of Security Holders</u>	33
<u>Item 4.1.</u>	<u>Executive Officers of the Registrant</u>	33

**PART II**

<u>Item 5.</u>	<u>Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	35
<u>Item 6.</u>	<u>Selected Financial Data</u>	38
<u>Item 7.</u>	<u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	40
<u>Item 7A.</u>	<u>Quantitative and Qualitative Disclosures About Market Risk</u>	68
<u>Item 8.</u>	<u>Financial Statements and Supplementary Data</u>	69
<u>Item 9.</u>	<u>Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>	132
<u>Item 9A.</u>	<u>Controls and Procedures</u>	132
<u>Item 9B.</u>	<u>Other Information</u>	132

**PART III**

<u>Item 10.</u>	<u>Directors, Executive Officers and Corporate Governance</u>	133
<u>Item 11.</u>	<u>Executive Compensation</u>	133
<u>Item 12.</u>	<u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	133
<u>Item 13.</u>	<u>Certain Relationships and Related Transactions, and Director Independence</u>	134
<u>Item 14.</u>	<u>Principal Accountant Fees and Services</u>	134

**PART IV**

<u>Item 15.</u>	<u>Exhibits and Financial Statement Schedules</u>	135
<u>EX-10.61</u>		
<u>EX-10.65</u>		
<u>EX-10.66</u>		
<u>EX-10.67</u>		
<u>EX-10.68</u>		
<u>EX-10.69</u>		
<u>EX-10.70</u>		
<u>EX-10.71</u>		
<u>EX-10.72</u>		
<u>EX-10.73</u>		
<u>EX-10.74</u>		
<u>EX-10.75</u>		
<u>EX-10.76</u>		



EX-10.77

EX-12

EX-21

EX-23

EX-24

EX-31.1

EX-31.2

EX-32.1

**Table of Contents**

**PART I**

**ITEM 1. BUSINESS.**

**TENNECO INC.**

**General**

Our company, Tenneco Inc., is one of the world's largest producers of automotive emission control and ride control products and systems. Our company serves both original equipment vehicle manufacturers (OEMs) and the repair and replacement markets, or aftermarket, worldwide. As used herein, the term "Tenneco," "we," "us," "our," or the "Company" refers to Tenneco Inc. and its consolidated subsidiaries.

Tenneco was incorporated in Delaware in 1996. In 2005, we changed our name from Tenneco Automotive Inc. back to Tenneco Inc. The name Tenneco better represents the expanding number of markets we serve through our commercial and specialty vehicle businesses. Building a stronger presence in these markets complements our core businesses of supplying ride control and emission control products and systems for light vehicles to automotive original equipment and aftermarket customers worldwide. Our common stock is traded on the New York Stock Exchange under the symbol "TEN".

**Corporate Governance and Available Information**

We have established a comprehensive corporate governance plan for the purpose of defining responsibilities, setting high standards of professional and personal conduct and assuring compliance with such responsibilities and standards. As part of its annual review process, the Board of Directors monitors developments in the area of corporate governance. Listed below are some of the key elements of our corporate governance plan.

For more information about these matters, see our definitive Proxy Statement for the Annual Meeting of Stockholders to be held May 13, 2009.

**Independence of Directors**

Eight of our nine directors are independent under the New York Stock Exchange (NYSE) listing standards.

Independent directors are scheduled to meet separately in executive session after every regularly scheduled Board of Directors meeting.

We have a lead independent director, Mr. Paul T. Stecko.

**Audit Committee**

All members meet the independence standards for audit committee membership under the NYSE listing standards and applicable Securities and Exchange Commission (SEC) rules.

Two members of the Audit Committee, Messrs. Charles Cramb and Dennis Letham, have been designated by the Board as audit committee financial experts, as defined in the SEC rules, and the remaining members of the Audit Committee satisfy the NYSE's financial literacy requirements.

The Audit Committee operates under a written charter which governs its duties and responsibilities, including its sole authority to appoint, review, evaluate and replace our independent auditors.

The Audit Committee has adopted policies and procedures governing the pre-approval of all audit, audit-related, tax and other services provided by our independent auditors.

**Compensation/Nominating/Governance Committee**

All members meet the independence standards for compensation and nominating committee membership under the NYSE listing standards.

## **Table of Contents**

The Compensation/Nominating/Governance Committee operates under a written charter that governs its duties and responsibilities, including the responsibility for executive compensation.

In December 2005, an Executive Compensation Subcommittee was formed which has the responsibility to consider and approve equity based compensation for our executive officers which is intended to qualify as performance based compensation under Section 162(m) of the Internal Revenue Code.

## **Corporate Governance Principles**

We have adopted Corporate Governance Principles, including qualification and independence standards for directors.

## **Stock Ownership Guidelines**

We have adopted Stock Ownership Guidelines to align the interests of our executives with the interests of stockholders and promote our commitment to sound corporate governance.

The Stock Ownership Guidelines apply to the independent directors, the Chairman and Chief Executive Officer, all Executive Vice Presidents and all Senior Vice Presidents.

## **Communication with Directors**

The Audit Committee has established a process for confidential and anonymous submission by our employees, as well as submissions by other interested parties, regarding questionable accounting or auditing matters.

Additionally, the Board of Directors has established a process for stockholders to communicate with the Board of Directors, as a whole, or any independent director.

## **Codes of Business Conduct and Ethics**

We have adopted a Code of Ethical Conduct for Financial Managers, which applies to our Chief Executive Officer, Chief Financial Officer, Controller and other key financial managers. This code is filed as Exhibit 14 to this report.

We also operate under a Statement of Business Principles that applies to all directors, officers and employees and includes provisions ranging from restrictions on gifts to conflicts of interests. All salaried employees are required to affirm annually in writing their acceptance of, and compliance with, these principles.

## **Related Party Transactions Policy**

We have adopted a Policy and Procedure for Transactions With Related Persons, under which our Audit Committee must generally pre-approve transactions involving more than \$120,000 with our directors, executive officers, five percent or greater stockholders and their immediate family members.

## **Equity Award Policy**

We have adopted a written policy to be followed for all issuances by our company of compensatory awards in the form of our common stock or any derivative of the common stock.

**Personal Loans to Executive Officers and Directors**

We comply with and operate in a manner consistent with the legislation outlawing extensions of credit in the form of a personal loan to or for our directors or executive officers.

Our Internet address is *www.tenneco.com*. We make our proxy statements, annual report to stockholders, annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports, as filed with or furnished to the SEC, available free of charge on our Internet website as soon as

**Table of Contents**

reasonably practicable after submission to the SEC. Securities ownership reports on Forms 3, 4 and 5 are also available free of charge on our website as soon as reasonably practicable after submission to the SEC. The contents of our website are not, however, a part of this report.

Our Audit Committee, Compensation/Nominating/Governance Committee and Executive Compensation Subcommittee Charters, Corporate Governance Principles, Stock Ownership Guidelines, Audit Committee policy regarding accounting complaints, Code of Ethical Conduct for Financial Managers, Statement of Business Principles, Policy and Procedures for Transactions with Related Persons, Equity Award Policy, policy for communicating with the Board of Directors and Audit Committee policy regarding the pre-approval of audit, non-audit, tax and other services are available free of charge on our website at [www.tenneco.com](http://www.tenneco.com). In addition, we will make a copy of any of these documents available to any person, without charge, upon written request to Tenneco Inc., 500 North Field Drive, Lake Forest, Illinois 60045, Attn: General Counsel. We intend to satisfy the disclosure requirements under Item 5.05 of Form 8-K and applicable NYSE rules regarding amendments to, or waivers of, our Code of Ethical Conduct for Financial Managers and Statement of Business Principles by posting this information on our website at [www.tenneco.com](http://www.tenneco.com).

**CEO and CFO Certifications**

In 2008, our Chief Executive Officer provided to the NYSE and the Chicago Stock Exchange the annual CEO certification regarding our compliance with the corporate governance listing standards of those exchanges. In addition, our Chief Executive Officer and Chief Financial Officer filed with the Securities and Exchange Commission all required certifications regarding the quality of our disclosures in our fiscal 2008 SEC reports. There were no qualifications to these certifications.

**Table of Contents****CONTRIBUTIONS OF MAJOR BUSINESSES**

For information concerning our operating segments, geographic areas and major products or groups of products, see Note 12 to the consolidated financial statements of Tenneco Inc. included in Item 8. The following tables summarize for each of our operating segments for the periods indicated: (i) net sales and operating revenues; (ii) earnings before interest expense, income taxes and minority interest ( EBIT ); and (iii) expenditures for plant, property and equipment. You should also read Management's Discussion and Analysis of Financial Condition and Results of Operations included in Item 7 for information about certain costs and charges included in our results.

**Net Sales and Operating Revenues:**

	2008		2007		2006	
	(Dollar Amounts in Millions)					
North America	\$ 2,641	45%	\$ 2,910	47%	\$ 1,963	42%
Europe, South America and India	2,983	50	3,135	51	2,387	51
Asia Pacific	543	9	560	9	436	9
Intergroup sales	(251)	(4)	(421)	(7)	(104)	(2)
Total	\$ 5,916	100%	\$ 6,184	100%	\$ 4,682	100%

**EBIT:**

	2008		2007		2006	
	(Dollar Amounts in Millions)					
North America	\$ (107)	NM	\$ 120	48%	\$ 103	53%
Europe, South America and India	85	NM	99	39	81	41
Asia Pacific	19	NM	33	13	12	6
Total	\$ (3)		\$ 252	100%	\$ 196	100%

**Expenditures for plant, property and equipment:**

	2008		2007		2006	
	(Dollar Amounts in Millions)					
North America	\$ 108	49%	\$ 106	54%	\$ 100	59%
Europe, South America and India	89	40	74	37	51	30
Asia Pacific	24	11	18	9	19	11
Total	\$ 221	100%	\$ 198	100%	\$ 170	100%

Interest expense, income taxes, and minority interest that were not allocated to our operating segments are:

	<b>2008</b>	<b>2007</b>	<b>2006</b>
		<b>(Millions)</b>	
Interest expense (net of interest capitalized)	\$ 113	\$ 164	\$ 136
Income tax expense	289	83	5
Minority interest	10	10	6



**Table of Contents**

**DESCRIPTION OF OUR BUSINESS**

We design, manufacture and sell automotive emission control and ride control systems and products, with 2008 revenues of \$5.9 billion. We serve both original equipment manufacturers (OEMs) and replacement markets worldwide through leading brands, including Monroe®, Rancho®, Clevite® Elastomers, and Fric Rot™ ride control products and Walker®, Fonos™, and Gillet™ emission control products.

As a parts supplier, we produce individual component parts for vehicles as well as groups of components that are combined as modules or systems within vehicles. These parts, modules and systems are sold globally to most leading OEMs and throughout all aftermarket distribution channels.

**Overview of Automotive Parts Industry and Adjacent Markets**

The automotive parts industry is generally separated into two categories: (1) original equipment or OE sales, in which parts are sold in large quantities directly for use by OEMs; and (2) aftermarket sales, in which parts are sold as replacement parts in varying quantities to a wide range of wholesalers, retailers and installers. In the OE market, parts suppliers are generally divided into tiers Tier 1 suppliers, that provide their products directly to OEMs, and Tier 2 or Tier 3 suppliers, that sell their products principally to other suppliers for combination into the other suppliers own product offerings.

Demand for automotive parts in the OE market is generally a function of the number of new vehicles produced, which in turn is a function of prevailing economic conditions and consumer preferences. In 2008, the number of light vehicles produced was 12.7 million in North America, 28.8 million in Europe, South America and India and 26.6 million in Asia Pacific. The term light vehicles is comprised of two groups: (1) passenger cars and (2) light trucks. When we refer to light trucks, we are including sport-utility vehicles (SUV), crossover vehicles (CUV), pick-up trucks, vans and multi-purpose passenger vehicles. Worldwide new light vehicle production is forecasted to decrease to 59.8 million units in 2009 from approximately 68.1 million units in 2008. Although OE demand is tied to planned vehicle production, parts suppliers also have the opportunity to grow through increasing their product content per vehicle, by further penetrating business with existing customers and by gaining new customers and markets. Companies with global presence and advanced technology, engineering, manufacturing and support capabilities, such as our company, are, we believe, better positioned to take advantage of these opportunities.

These same competitive advantages have enabled suppliers such as us to serve customers beyond the light vehicle market. Certain automotive parts suppliers now find themselves being asked to develop and produce components and integrated systems for the commercial market of medium- and heavy-duty trucks, buses, and non-road equipment as well as the recreational segment for two-wheelers and all-terrain vehicles. Tenneco foresees this market diversification as a source of future growth.

Demand for aftermarket products is driven by general economic conditions, the quality of OE parts, the number of vehicles in operation, the age of the vehicle fleet, vehicle usage and the average useful life of vehicle parts. Although more vehicles are on the road than ever before, the aftermarket has experienced longer replacement cycles due to the improved quality of OE parts and increases in average useful lives of automotive parts as a result of technological innovation. In addition, the current global economic crisis has negatively impacted aftermarket sales. Suppliers are increasingly being required to deliver innovative aftermarket products that upgrade the performance or safety of a vehicle s original components to drive aftermarket demand.

**Industry Trends**

Currently, we believe several significant existing and emerging trends are dramatically impacting the automotive industry and the other markets we serve. As the dynamics of the automotive industry and our other

## **Table of Contents**

markets change, so do the roles, responsibilities and relationships of its participants. Key trends that we believe are affecting parts suppliers include:

### ***General Economic Factors and Production Levels***

The current global financial crisis has materially and negatively impacted our business and our customers' businesses in the U.S. and globally. These disruptions in financial markets and recent restrictions on liquidity are adversely impacting the availability and cost of incremental credit for many companies.

Overall negative economic conditions, including the deterioration of global financial markets, downturns in the real estate and mortgage markets and a weakening job market, have led to slowed economic growth in the U.S., and more recently Europe and the rest of the world. Such conditions have negatively impacted consumer confidence, resulting in delayed purchases of durable consumer goods such as automobiles. Purchases of our customers' products have been further limited by their customers' inability to obtain adequate financing for such purchases. There has also been a shift in the North American market away from light trucks, which tend to be higher margin products for our customers and us, to more fuel-efficient passenger cars. These changes have negatively impacted our product sales and profitability.

A number of companies in the automotive industry are, and over the last several years have been, facing severe financial difficulties. General Motors, Ford and Chrysler have all announced significant restructuring actions in an effort to improve profitability and remain solvent. The North American automotive manufacturers are burdened with substantial structural and embedded costs, such as facility overhead as well as pension and healthcare costs, that have caused them to seek government financing and even risk bankruptcy. Automakers in other markets in the world are also experiencing financial difficulties from a weakened economy, tightening credit markets, and reduced demand for their products. The automotive supply base in turn has also been faced with severe cash flow problems as a result of the significantly lower production levels of light vehicles, increases in certain raw material, commodity and energy costs and restricted access to additional liquidity through the capital markets.

### ***Increasing Environmental Standards***

OE manufacturers and their parts suppliers are designing products and developing materials to respond to increasingly stringent environmental requirements, a growing diesel market and the demand for better fuel economy. Government regulations adopted over the past decade require substantial reductions in vehicle tailpipe emissions, longer warranties on parts of a vehicle's pollution control equipment and additional equipment to control fuel vapor emissions. Some of these regulations also mandate more frequent emission inspections for the existing fleet of vehicles. Manufacturers have responded by focusing their efforts towards technological development to minimize pollution. As a leading supplier of emission control systems with strong technical capabilities, we believe we are well positioned operationally to benefit from more rigorous environmental standards. For example, we developed the diesel particulate filter to meet stricter air quality regulations in Europe. Our diesel particulate filters are produced in both Europe on the Mercedes Benz Sprinter and E-class and North America on the GM Duramax, Ford Super Duty, Dodge Ram and International Truck and Engine Corporation (Navistar) medium duty. Our particulate filter and De-NOx converter can reduce particulate emissions by up to 90 percent and nitrogen oxide emissions by up to 85 percent. We also have numerous development contracts with North American, European and Asian light and medium-duty truck manufacturers for our selective catalytic reduction (SCR) systems. In addition, we are actively working on development of a non-road emission aftertreatment system for multiple manufacturers, in order to meet Tier 4 environmental regulations. In China, we have development contracts for complete turnkey SCR systems, including the ELIM-NOx<sup>™</sup> urea dosing technology which we acquired in 2007. Several customers have also purchased prototypes of our hydrocarbon injector, acquired with the ELIM-NOx<sup>™</sup> technology, for the purpose of actively regenerating diesel particulate filters and Lean NOx Traps through hydrocarbon injection directly into the exhaust system.



## **Table of Contents**

### ***Increasing Technologically Sophisticated Content***

As consumers continue to demand competitively priced vehicles with increased performance and functionality, the number of sophisticated components utilized in vehicles is increasing. By replacing mechanical functions with electronics and by integrating mechanical and electronic functions within a vehicle, OE manufacturers are achieving improved emission control, improved safety and more sophisticated features at lower costs.

OEMs are increasingly demanding technological innovation from suppliers to address more stringent emission and other regulatory standards and to improve vehicle performance. To develop innovative products, systems and modules, we have invested \$127 million for 2008, \$114 million for 2007 and \$88 million for 2006, net of customer reimbursements, into engineering, research and development and we continuously seek to take advantage of our technology investments and brand strength by extending our products into new markets and categories. For example, we were the first supplier to develop and commercialize a diesel particulate filter that can virtually eliminate carbon and hydrocarbon emissions with minimal impact on engine performance.

We have expanded our competence in diesel particulate filters in Europe and are winning business in North America on these same applications. In addition, we supply Volvo, Audi, Ford and Mercedes Benz with a computerized electronic suspension system that we co-developed with öhlins Racing AB. As other examples, we are sponsoring funded University Research for advanced technologies for both emission control and ride control, and we are participating in the HyTRAN consortium in Europe for the development of practical fuel cell reformers and auxiliary power units.

Our customers reimburse us for engineering, research, and development costs on some platforms when we prepare prototypes and incur costs before platform awards. Our engineering, research and development expense for 2008, 2007, and 2006 has been reduced by \$120 million, \$72 million, and \$61 million, respectively, for these reimbursements.

### ***Enhanced Vehicle Safety***

Vehicle safety continues to gain increased industry attention and play a critical role in consumer purchasing decisions. As such, OEMs are seeking out suppliers with new technologies, capabilities and products that have the ability to advance vehicle safety. Continued research and development by select automotive suppliers in roll-over protection systems, smart airbag systems, braking electronics and safer, more durable materials has dramatically advanced the market for safety products and its evolving functional demands. Those suppliers that are able to enhance vehicle safety through innovative products and technologies have a distinct competitive advantage with the consumer, and thus their OEM customers. In the Aftermarket, Tenneco has promoted the Safety Triangle of Steering-Stopping-Stability to educate consumers of the detrimental effect of worn shock absorbers on vehicle steering and stopping distances. We further strengthened this message with the introduction of Monroe® branded brakes as an Aftermarket product offering during 2007. Also during 2007, the new Federal Motor Vehicle Safety Standard (FMVSS) 126 was introduced for electronic stability control (ESC) systems, making those systems mandatory by 2012. We believe that this legislation will encourage more vehicle manufacturers to specify products like Continuously Controlled Electronic Suspension (CES) and Kinetic.

### ***Outsourcing and Demand for Systems and Modules***

OEMs have been steadily moving towards outsourcing automotive parts and systems to simplify the vehicle assembly process, lower costs and reduce vehicle development time. Outsourcing allows OEMs to take advantage of the lower cost structure of the parts suppliers and to benefit from multiple suppliers engaging in simultaneous development efforts. Furthermore, development of advanced electronics has enabled formerly independent vehicle components to

become interactive, leading to a shift in demand from individual parts to

## **Table of Contents**

fully integrated systems. As a result, automotive parts suppliers offer OEMs component products individually, as well as in a variety of integrated forms such as modules and systems:

**Modules** are groups of component parts arranged in close physical proximity to each other within a vehicle. Modules are often assembled by the supplier and shipped to the OEM for installation in a vehicle as a unit. Integrated shock and spring units, seats, instrument panels, axles and door panels are examples.

**Systems** are groups of component parts located throughout a vehicle which operate together to provide a specific vehicle functionality. Emission control systems, anti-lock braking systems, safety restraint systems, roll control systems and powertrain systems are examples.

This shift in demand towards fully integrated systems has created the role of the Tier 1 systems integrator. These systems integrators increasingly have the responsibility to execute a number of activities, such as design, product development, engineering, testing of component systems and purchasing from Tier 2 suppliers. We are an established Tier 1 supplier with many years of product integration experience. We have modules or systems for various vehicle platforms in production worldwide and modules or systems for additional platforms under development. For example, we supply ride control modules for the GM Chevy Silverado, GM Sierra and the VW Transporter and emission control systems for the Ford Super Duty, Toyota Tundra, Chrysler Dodge Ram, Ford Focus, and the GM Acadia, Enclave and Outlook.

### ***Global Reach of OE Customers***

OEMs are increasingly requesting suppliers to provide parts on a global basis to support global vehicle platforms. Also, as the customer base of OEMs has consolidated and emerging markets have become more important to achieving growth, suppliers must be prepared to provide products any place in the world.

*Growing Importance of Emerging Markets:* Because the North American and Western European automotive markets are relatively mature, OEMs are increasingly focusing on emerging markets for growth opportunities, particularly the so-called BRIC economies of Brazil, Russia, India, and China, and Eastern Europe. This increased OE focus has, in turn, increased the growth opportunities in the aftermarkets in these regions.

*Governmental Tariffs and Local Parts Requirements:* Many governments around the world require vehicles sold within their country to contain specified percentages of locally produced parts. Additionally, some governments place high tariffs on imported parts.

*Location of Production Closer to End Markets:* OEMs and parts suppliers have relocated production globally on an onsite basis that is closer to end markets. This international expansion allows suppliers to pursue sales in developing markets and take advantage of relatively lower labor costs.

With facilities around the world, including the key regions of North America, South America, Europe and Asia, we can supply our customers on a global basis.

### ***Global Rationalization of OE Vehicle Platforms***

OEMs are increasingly designing global platforms. A global platform is a basic mechanical structure of a vehicle that can accommodate different features and is in production and/or development in more than one region. Thus, OEMs can design one platform for a number of similar vehicle models. This allows manufacturers to realize significant economies of scale through limiting variations across items such as steering columns, brake systems, transmissions, axles, exhaust systems, support structures and power window and door lock mechanisms. We believe that this shift

towards standardization will have a large impact on automotive parts suppliers, who should experience a reduction in production costs as OEMs reduce variations in components. We also expect parts suppliers, once the market recovers, to benefit from higher production volumes per platform and greater economies of scale, as well as reduced total investment costs for molds, dies and prototype development. Light vehicle platforms of over one million units are expected to grow from 35 percent to 49 percent of global OE production from 2008 to 2013.



**Table of Contents*****Extended Product Life of Automotive Parts***

The average useful life of automotive parts both OE and replacement has been steadily increasing in recent years due to innovations in products and technologies. The longer product lives allow vehicle owners to replace parts of their vehicles less often. As a result, although more vehicles are on the road than ever before, the global aftermarket has not grown as fast as the number of vehicles on the road. Accordingly, a supplier's future viability in the aftermarket will depend, in part, on its ability to reduce costs and leverage its advanced technology and recognized brand names to maintain or achieve additional sales. As a Tier 1 OE supplier, we believe we are well positioned operationally to leverage our products and technology into the aftermarket.

***Changing Aftermarket Distribution Channels***

From 1998 to 2008, the number of retail automotive parts stores increased significantly while the number of jobber stores declined more than 14 percent in North America. Major automotive aftermarket retailers, such as AutoZone and Advance Auto Parts, are attempting to increase their commercial sales by selling directly to automotive parts installers in addition to individual consumers. These installers have historically purchased from their local warehouse distributors and jobbers, who are our more traditional customers. This enables the retailers to offer the option of a premium brand, which is often preferred by their commercial customers, or a standard product, which is often preferred by their retail customers. We believe we are well positioned to respond to this trend in the aftermarket because of our focus on cost reduction and high-quality, premium brands.

***Contracting Supplier Base***

Over the past few years, automotive suppliers have been consolidating in an effort to become more global, have a broad integrated product and service offering, and gain economies of scale in order to remain competitive amidst growing pricing pressures and increased outsourcing opportunities from the OEMs. One industry consultant projected in 2007 that the number of automotive supplier companies will decrease from 5,600 in 2000 to 2,800 by 2015. We believe that this industry trend will be accelerated by the current economic crisis which is putting additional pressure on automotive suppliers that do not have the size or breadth of operations or the financial profile to survive the severe downturn. A supplier's viability in this market will depend, in part, on its ability to maintain and increase operating efficiencies and provide value-added services.

**Analysis of Revenues**

The table below provides, for each of the years 2008 through 2006, information relating to our net sales and operating revenues, by primary product lines and customer categories.

	<b>Net Sales</b>		
	<b>Year Ended December 31,</b>		
	<b>2008</b>	<b>2007</b>	<b>2006</b>
	<b>(Millions)</b>		
<b>Emission Control Systems &amp; Products</b>			
Aftermarket	\$ 358	\$ 370	\$ 384
Original Equipment market			
OE Value-add	2,128	2,288	1,665
OE Substrate(1)	1,492	1,673	927

	3,620	3,961	2,592
	3,978	4,331	2,976
<b>Ride Control Systems &amp; Products</b>			
Aftermarket	761	734	690
Original Equipment market	1,177	1,119	1,016
	1,938	1,853	1,706
Total Revenues	\$ 5,916	\$ 6,184	\$ 4,682

(1) See Management's Discussion and Analysis of Financial Condition and Results of Operations included in Item 7 for a discussion of substrate sales.

**Table of Contents****Brands**

In each of our operating segments, we manufacture and market leading brand names. Monroe® ride control products and Walker® exhaust products are two of the most recognized brand names in the automotive parts industry. We emphasize product value differentiation with these and other key brands such as Monroe Sensa-Trac® and Reflex® (shock absorbers and struts), Quiet-Flow® (mufflers), DynoMax® (performance exhaust products), Rancho® (ride control products for the high performance light truck market), Clevite® Elastomers (elastomeric vibration control components), Marzocchi™ (forks and suspensions for the two-wheeler market) and Lukey (performance exhaust and filters). In Europe, our Gillet™ brand is recognized as a leader in developing highly engineered exhaust systems for OE customers.

**Customers**

We have developed long-standing business relationships with our customers around the world. In each of our operating segments, we work together with our customers in all stages of production, including design, development, component sourcing, quality assurance, manufacturing and delivery. With a diverse mix of OE and aftermarket products and facilities in major markets worldwide, we believe we are well-positioned to meet customer needs. We believe we have a strong, established reputation with customers for providing high-quality products at competitive prices, as well as for timely delivery and customer service.

Worldwide we serve more than 37 different OEMs, and our products or systems are included on eight of the top 10 passenger car models produced for sale in Europe and eight of the top 10 light truck models produced for sale in North America for 2008. During 2008, our OE customers included:

**North America**

AM General  
CAMI Automotive  
Caterpillar  
Chrysler  
Club Car  
Daimler AG  
E-Z Go Golf Car  
Ford Motor  
General Motors  
Harley-Davidson  
Honda Motor  
John Deere  
Navistar International  
Nissan Motor  
Paccar  
Toyota Motor  
Volkswagen Group  
Volvo Truck

**Europe**

BMW  
Daimler AG  
Fiat  
Ford Motor  
General Motors  
Harley-Davidson  
Mazda Motor  
Nissan Motor  
Paccar  
Porsche  
PSA Peugeot Citroen  
Renault  
Scania  
Suzuki  
Tata Motors  
Toyota Motor  
Volkswagen Group  
Volvo Truck

**Asia**

BMW  
Brilliance JinBei Automobile  
Changan Automobile  
Chrysler LLC  
First Auto Works  
Ford Motor  
General Motors  
Great Wall Motor Co.  
Isuzu Motors  
Jiangling Motors  
Mazda Motor  
Mitsubishi  
Nissan Motor  
PSA Peugeot Citroen  
SAIC Motor Corp.  
Toyota Motor  
Volkswagen Group

**Australia**

Club Car  
Fiat

**South America**

Daimler AG  
Fiat

**India**

Club Car  
E-Z Go Golf Car

Edgar Filing: TENNECO INC - Form 10-K

Ford Motor  
General Motors  
Mazda Motor  
Mitsubishi Motors  
Toyota Motor

Ford Motor  
General Motors  
Navistar (ITEC)  
PSA Peugeot Citroen  
Renault  
Scania  
Toyota Motor  
Volkswagen Group

Ford Motor  
General Motors  
Mahindra & Mahindra  
Suzuki  
Tata Motors  
TVS Motors

**Table of Contents**

The following customers accounted for 10 percent or more of our net sales in any of the last three years.

<b>Customer</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>
General Motors	20%	20%	14%
Ford	11%	13%	10%
Volkswagen Group	8%	9%	10%
DaimlerChrysler(1)			11%

(1) In 2007, DaimlerChrysler sold approximately 80 percent of its interest in its U.S. unit, Chrysler Group, to Cerberus Capital Management L.P. Daimler AG accounted for approximately 7 percent and 8 percent of our 2008 and 2007 net sales, respectively. The Chrysler Group accounted for approximately 2 percent of our net sales in both 2008 and 2007.

As of December 31, 2008, we had net receivables due from General Motors, Ford and Chrysler in North America that totaled \$142 million. Of this amount, \$26 million was sold by our U.S. securitization program.

During 2008, our aftermarket customers were comprised of full-line and specialty warehouse distributors, retailers, jobbers, installer chains and car dealers. These customers included such wholesalers and retailers as National Auto Parts Association (NAPA), Advance Auto Parts, Uni-Select and O Reilly Automotive in North America and Temot, Group Auto Union, Mekonomen Grossist and Auto Distribution International in Europe. We believe we have a balanced mix of aftermarket customers, with our aftermarket sales accounting for 19 percent of our net sales for 2008. During 2008, our top 10 aftermarket customers accounted for 41 percent of our net aftermarket sales.

**Competition**

We operate in highly competitive markets. Customer loyalty is a key element of competition in these markets and is developed through long-standing relationships, customer service, high quality value-added products and timely delivery. Product pricing and services provided are other important competitive factors.

In both the OE market and aftermarket, we compete with the vehicle manufacturers, some of which are also customers of ours, and numerous independent suppliers. In the OE market, we believe that we rank among the top two suppliers in the world for both emission control and ride control products and systems for light vehicles. In the aftermarket, we believe that we are the market share leader in the supply of both emission control and ride control products for light vehicles in the markets we serve throughout the world.

**Seasonality**

Our business is somewhat seasonal. OE manufacturers' production requirements have historically been higher in the first two quarters of the year as compared to the last two quarters. Production requirements tend to decrease in the third quarter due to plant shutdowns for model changeovers. In addition, we believe this seasonality is due, in part, to consumer demand for new vehicles softening during the holiday season and as a result of the winter months in North America and Europe. Also, the major North American OEMs generally close their production facilities for the last two weeks of the year. Our aftermarket business also experiences seasonality. Demand for aftermarket products increases during the Spring as drivers prepare for the Summer driving season. Although seasonality does impact our business, actual results may vary from the above trends due to global and local economic dynamics as well as the timing of platform launches and other production related events.

Traditionally, during recessionary times such as these, OE sales decline due to reduced consumer demand for automobiles and other capital goods; and aftermarket sales increase as consumers forego purchases and choose instead to keep their vehicles longer, spending on repair and maintenance services. By participating in both the OE and aftermarket segments, we are insulated from these cycles to some extent. However, because of the severe economic downturn we are seeing now, the counter-cyclical nature of our aftermarket business is not yielding the same benefits as in the past. More so than in previous recessions, customers have decreased their spending, impacting not just our OE business but also our aftermarket business.

## **Table of Contents**

### **Emission Control Systems**

Vehicle emission control products and systems play a critical role in safely conveying noxious exhaust gases away from the passenger compartment and reducing the level of pollutants and engine exhaust noise to an acceptable level. Precise engineering of the exhaust system from the manifold that connects an engine's exhaust ports to an exhaust pipe, to the catalytic converter that eliminates pollutants from the exhaust, to the muffler leads to a pleasant, tuned engine sound, reduced pollutants and optimized engine performance.

We design, manufacture and distribute a variety of products and systems designed to reduce pollution and optimize engine performance, acoustic tuning and weight, including the following:

Catalytic converters and diesel oxidation catalysts Devices consisting of a substrate coated with precious metals enclosed in a steel casing used to reduce harmful gaseous emissions, such as carbon monoxide;

Diesel Particulate Filters (DPFs) Devices to eliminate particulate matter emitted from diesel engines;

Burner systems Devices which actively combust fuel and air inside the exhaust system to create extra heat for DPF regeneration, or for improved efficiency of SCR systems;

Hydrocarbon vaporizers and injectors Devices to add fuel to a diesel exhaust system in order to regenerate diesel particulate filters or Lean NOx traps;

Lean NOx traps Devices which reduce Nitrogen Oxide (NOx) emissions from diesel powertrains using capture and store technology;

Selective Catalytic Reduction (SCR) systems Devices which reduce NOx emissions from diesel powertrains using injected reductants such as AdBlue™ or Diesel Exhaust Fuel (DEF);

Mufflers and resonators Devices to provide noise elimination and acoustic tuning;

Exhaust manifolds Components that collect gases from individual cylinders of a vehicle's engine and direct them into a single exhaust pipe;

Pipes Utilized to connect various parts of both the hot and cold ends of an exhaust system;

Hydroformed assemblies Forms in various geometric shapes, such as Y-pipes or T-pipes, which provide optimization in both design and installation as compared to conventional pipes; and

Hangers and isolators Used for system installation and noise and vibration elimination.

We entered the emission control product line in 1967 with the acquisition of Walker Manufacturing Company, which was founded in 1888. With the acquisition of Heinrich Gillet GmbH & Co. in 1994, we also became one of Europe's leading OE emission control systems suppliers. When the term Walker is used in this document, it refers to our subsidiaries and affiliates that produce emission control products and systems.

We supply our emission control offerings to over 41 vehicle-makers for use on over 180 vehicle models, including 7 of the top 10 passenger cars produced for sale in Europe and 6 of the top 10 light trucks produced for sale in North America in 2008. We also supply OE EC products to heavy-duty and specialty vehicle manufacturers including Harley-Davidson, BMW Motorcycle, Daimler Trucks, and International Truck and Engine (Navistar).

With respect to catalytic converters, we buy the substrate coated with precious metals, or sometimes the completed catalytic converter, from a third party or directly from the OEM, use them in our manufacturing process and sell them as part of the completed system. This often occurs at the direction of the OEMs. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations for more information on our sales of these products.

In the aftermarket, we manufacture, market and distribute replacement mufflers for virtually all North American, European, and Asian makes of light vehicles under brand names including Quiet-Flow®, TruFit® and Aluminox Pro™, in addition to offering a variety of other related products such as pipes and



**Table of Contents**

catalytic converters (Walker Perfection®). We also serve the specialty exhaust aftermarket, where our key offerings include Mega-Flow™ exhaust products for heavy-duty vehicle applications and DynoMax® high performance exhaust products. We continue to emphasize product value differentiation with other aftermarket brands such as Thrush® and Fonos™.

The following table provides, for each of the years 2008 through 2006, information relating to our sales of emission control products and systems for certain geographic areas:

	<b>Percentage of Net Sales</b>		
	<b>Year Ended December 31,</b>		
	<b>2008</b>	<b>2007</b>	<b>2006</b>
<b>United States</b>			
Aftermarket	12%	10%	19%
OE market	88	90	81
	100%	100%	100%
<b>Foreign Sales</b>			
Aftermarket	8%	8%	10%
OE market	92	92	90
	100%	100%	100%
<b>Total Sales by Geographic Area</b>			
United States	32%	34%	29%
Foreign	68	66	71
	100%	100%	100%

**Ride Control Systems**

Superior ride control is governed by a vehicle's suspension system, including its shock absorbers and struts. Shock absorbers and struts help maintain vertical loads placed on a vehicle's tires to help keep the tires in contact with the road. A vehicle's ability to steer, brake and accelerate depends on the contact between the vehicle's tires and the road. Worn shocks and struts can allow excess weight transfer from side to side, which is called roll, from front to rear, which is called pitch, and up and down, which is called bounce. Variations in tire-to-road contact can affect a vehicle's handling and braking performance and the safe operation of a vehicle. Shock absorbers are designed to control vertical loads placed on tires by providing resistance to vehicle roll, pitch and bounce. Thus, by maintaining the tire to road contact, ride control products are designed to function as safety components of a vehicle, in addition to providing a comfortable ride.

We design, manufacture and distribute a variety of ride control products and systems. Our ride control offerings include:

Shock absorbers A broad range of mechanical shock absorbers and related components for light- and heavy-duty vehicles. We supply both twin-tube and monotube shock absorbers to vehicle manufacturers and

the aftermarket;

**Struts** A complete line of struts and strut assemblies for light vehicles;

**Vibration control components (Clevite® Elastomers)** Generally rubber-to-metal bushings and mountings to reduce vibration between metal parts of a vehicle. Our offerings include a broad range of suspension arms, rods and links for light- and heavy-duty vehicles;

**Kinetic® Suspension Technology** A suite of roll control, near equal wheel loading systems ranging from simple mechanical systems to complex hydraulic systems featuring proprietary and patented technology. The Kinetic® Suspension Technology was incorporated on the Citroen World Rally Car that was featured in the World Rally Championship 2003, 2004 and 2005. Additionally, the Kinetic® Suspension Technology was incorporated on the Lexus GX 470 sport utility vehicle which resulted in our winning the PACE Award;

**Table of Contents**

Advanced suspension systems Electronically adjustable shock absorbers and suspension systems that change performance based on vehicle inputs such as steering and braking; and

Other We also offer other ride control products such as load assist products, springs, steering stabilizers, adjustable suspension systems, suspension kits and modular assemblies.

We supply our ride control offerings to over 38 vehicle-makers for use on over 145 vehicle models, including 6 of the top 10 passenger cars produced for sale in Europe and 7 of the top 10 light truck models produced for sale in North America for 2008. We also supply OE ride control products and systems to a range of heavy-duty and specialty vehicle manufacturers including Volvo Truck, Scania, International Truck and Engine (Navistar), and PACCAR.

In the ride control aftermarket, we manufacture, market and distribute replacement shock absorbers for virtually all North American, European and Asian makes of light vehicles under several brand names including Gas Matic®, Sensa-Trac®, Monroe Reflex® and Monroe Adventure®, as well as Clevite® Elastomers for elastomeric vibration control components. We also sell ride control offerings for the heavy-duty, off-road and specialty aftermarket, such as our Gas-Magnum® shock absorbers for the North American heavy-duty category.

We entered the ride control product line in 1977 with the acquisition of Monroe Auto Equipment Company, which was founded in 1916, and introduced the world's first modern tubular shock absorber in 1930. When the term Monroe is used in this document it refers to our subsidiaries and affiliates that produce ride control products and systems.

The following table provides, for each of the years 2008 through 2006, information relating to our sales of ride control equipment for certain geographic areas:

	<b>Percentage of Net Sales Year Ended December 31,</b>		
	<b>2008</b>	<b>2007</b>	<b>2006</b>
<b>United States</b>			
Aftermarket	53%	58%	53%
OE market	47	42	47
	100%	100%	100%
<b>Foreign Sales</b>			
Aftermarket	32%	31%	33%
OE market	68	69	67
	100%	100%	100%
<b>Total Sales by Geographic Area</b>			
United States	34%	32%	38%
Foreign	66	68	62
	100%	100%	100%

**Financial Information About Geographic Areas**

Refer to Note 12 of the consolidated financial statements of Tenneco Inc. included in Item 8 of this report for financial information about geographic areas.

**Sales, Marketing and Distribution**

We have separate and distinct sales and marketing efforts for our OE and aftermarket businesses.

## **Table of Contents**

For OE sales, our sales and marketing team is an integrated group of professionals, including skilled engineers and program managers, who are organized by customer and product type (e.g., ride control and emission control). Our sales and marketing team provides the appropriate mix of operational and technical expertise needed to interface successfully with the OEMs. Our new business capture process involves working closely with the OEM platform engineering and purchasing teams. Bidding on OE automotive platforms typically encompasses many months of engineering and business development activity. Throughout the process, our sales team, program managers and product engineers assist the OE customer in defining the project's technical and business requirements. A normal part of the process includes our engineering and sales personnel working on customers' integrated product teams, and assisting with the development of component/system specifications and test procedures. Given that the OE business involves long-term production contracts awarded on a platform-by-platform basis, our strategy is to leverage our engineering expertise and strong customer relationships to obtain platform awards and increase operating margins.

For aftermarket sales and marketing, our sales force is generally organized by customer and region and covers multiple product lines. We sell aftermarket products through four primary channels of distribution: (1) the traditional three-step distribution system of full-line warehouse distributors, jobbers and installers; (2) the specialty two-step distribution system of specialty warehouse distributors that carry only specified automotive product groups and installers; (3) direct sales to retailers; and (4) direct sales to installer chains. Our aftermarket sales and marketing representatives cover all levels of the distribution channel, stimulating interest in our products and helping our products move through the distribution system. Also, to generate demand for our products from end-users, we run print and television advertisements and offer pricing promotions. We were one of the first parts manufacturers to offer business-to-business services to customers with TA-Direct, an on-line order entry and customer service tool. In addition, we maintain detailed web sites for each of Walker<sup>®</sup>, Monroe<sup>®</sup>, Rancho<sup>®</sup>, DynoMax<sup>®</sup>, Monroe brake brands and our heavy-duty products.

## **Manufacturing and Engineering**

We focus on achieving superior product quality at the lowest operating costs possible and generally use state-of-the-art manufacturing processes to achieve that goal. Our manufacturing strategy centers on a lean production system designed to reduce overall costs, while maintaining quality standards and reducing manufacturing cycle time. In addition, we have implemented Six Sigma in our processes to minimize product defects and improve operational efficiencies. We deploy new technology to differentiate our products from our competitors and to achieve higher quality and productivity. We continue to adapt our capacity to customer demand, both expanding capabilities in growth areas as well as reallocating capacity away from demand segments in decline.

## ***Emission Control***

Our consolidated businesses operate 11 emission control manufacturing facilities in the U.S. and 41 emission control manufacturing facilities outside of the U.S. We operate 12 of these international manufacturing facilities through joint ventures in which we own a controlling interest. We operate five emission control engineering and technical facilities worldwide and share two other such facilities with our ride control operations. In addition, three joint ventures in which we hold a non-controlling interest operate a total of three manufacturing facilities outside the U.S.

Within each of our emission control manufacturing facilities, operations are organized by component (e.g., muffler, catalytic converter, pipe, resonator and manifold). Our manufacturing systems incorporate cell-based designs, allowing work-in-process to move through the operation with greater speed and flexibility. We continue to invest in plant and equipment to stay competitive in the industry. For instance, in our Smithville, Tennessee, OE manufacturing facility, we have developed a muffler assembly cell that utilizes laser welding. This allows for quicker change-over times in the process as well as less material used and less weight for the product. There is also a reduced cycle time compared to traditional joining and increased manufacturing precision for superior durability and performance. In

2007, we introduced the Measured and Matched Converter technique in North America. This allows us to maintain the optimum GBD (Gap Bulk Density) in our converter manufacturing operations with Tenneco proprietary processing. This process, coupled with cold

## **Table of Contents**

spinning of the converter body, versus traditional cone to can welding, allows for more effective use of material through reduced welding, lower cost, and better performance of the product.

In an effort to further improve our OE customer service and position ourselves as a Tier-1 OE systems supplier, we have been developing some of our emission control manufacturing operations into just-in-time or JIT systems. In this system, a JIT facility located close to our OE customer's manufacturing plant receives product components from both our manufacturing operations and independent suppliers, and then assembles and ships products to the OEMs on an as-needed basis. To manage the JIT functions and material flow, we have advanced computerized material requirements planning systems linked with our customers' and supplier partners' resource management systems. We have three emission control JIT assembly facilities in the United States and 21 throughout the rest of the world.

Our engineering capabilities include advanced predictive design tools, advanced prototyping processes and state-of-the-art testing equipment. These technological capabilities make us a full system integrator to the OEMs, supplying complete emission control systems from the manifold to the tailpipe, to provide full emission and noise control. We have expanded our engineering capabilities with the acquisition of Combustion Component Associates's ELIM-NOx<sup>tm</sup> mobile emission technology that includes urea and hydrocarbon injection, and electronic controls and software for selective catalytic reduction. We have also developed advanced predictive engineering tools, including KBM&E (Knowledge Based Manufacturing & Engineering). The innovation of our KBM&E (which we call TEN-KBM&E) is a modular toolbox set of CAD embedded applications for manufacturing and engineering compliant design. The encapsulated TEN-KBM&E content is driven by an analytical method which continuously captures and updates the knowledge of our main manufacturing and engineering processes.

### ***Ride Control***

Our consolidated businesses operate eight ride control manufacturing facilities in the U.S. and 23 ride control manufacturing facilities outside the U.S. We operate two of these international facilities through joint ventures in which we own a controlling interest. We operate seven engineering and technical facilities worldwide and share two other such facilities with our emission control operations.

Within each of our ride control manufacturing facilities, operations are organized by product (e.g., shocks, struts and vibration control products) and include computer numerically controlled and conventional machine centers; tube milling and drawn-over-mandrel manufacturing equipment; metal inert gas and resistance welding; powdered metal pressing and sintering; chrome plating; stamping; and assembly/test capabilities. Our manufacturing systems incorporate cell-based designs, allowing work-in-process to move through the operation with greater speed and flexibility.

As in the emission control business, in an effort to further improve our OE customer service and position us as a Tier 1 OE module supplier, we have been developing some of our manufacturing operations into JIT systems. We have three JIT ride control facilities outside the U.S.

In designing our shock absorbers and struts, we use advanced engineering and test capabilities to provide product reliability, endurance and performance. Our engineering capabilities feature advanced computer-aided design equipment and testing facilities. Our dedication to innovative solutions has led to such technological advances as:

Adaptive damping systems adapt to the vehicle's motion to better control undesirable vehicle motions;

Electronically adjustable suspensions change suspension performance based on a variety of inputs such as steering, braking, vehicle height, and velocity; and

Air leveling systems manually or automatically adjust the height of the vehicle.

Conventional shock absorbers and struts generally compromise either ride comfort or vehicle control. Our innovative grooved-tube, gas-charged shock absorbers and struts provide both ride comfort and vehicle control, resulting in improved handling, reduced vibration and a wider range of vehicle control. This technology can



## **Table of Contents**

be found in our premium quality Sensa-Trac® shock absorbers. We further enhanced this technology by adding the SafeTech™ fluon banded piston, which improves shock absorber performance and durability. We introduced the Monroe Reflex® shock absorber, which incorporates our Impact Sensor™ device. This technology permits the shock absorber to automatically switch in milliseconds between firm and soft compression damping when the vehicle encounters rough road conditions, thus maintaining better tire-to-road contact and improving handling and safety. We have also developed an innovative computerized electronic suspension system, which features dampers developed by Tenneco and electronic valves designed by öhlins Racing AB. The continuously controlled electronic suspension ( CES ) ride control system is featured on Audi, Volvo, Ford and Mercedes Benz vehicles.

## ***Quality Control***

Quality control is an important part of our production process. Our quality engineers establish performance and reliability standards in the product's design stage, and use prototypes to confirm that the component/system can be manufactured to specifications. Quality control is also integrated into the manufacturing process, with shop operators being responsible for quality control of their specific work product. In addition, our inspectors test work-in-progress at various stages to ensure components are being fabricated to meet customers' requirements.

We believe our commitment to quality control and sound management practices and policies is demonstrated by our successful participation in the International Standards Organization/Technical Specifications certification process ( ISO/TS ). ISO/TS certifications are semi-annual or annual audits that certify that a company's facilities meet stringent quality and business systems requirements. Without ISO or TS certification, we would not be able to supply our products for the aftermarket or the OE market, respectively, either locally or globally. Of those manufacturing facilities where we have determined that TS certification is required to service our customers or would provide us with an advantage in securing additional business, 96 percent have achieved TS 16949:2002 certification. For strategic reasons, we have no immediate plans to certify the remaining plants. Of those manufacturing facilities where we have determined that ISO 9000 certification is required or would provide us with an advantage in securing additional business, all have achieved ISO 9000 certification.

## **Business Strategy**

We strive to strengthen our global market position by designing, manufacturing, delivering and marketing technologically innovative emission control and ride control products and systems for OEMs and the aftermarket. We work toward achieving a balanced mix of products, markets and customers by capitalizing on emerging economic trends, specific regional preferences and changing customer requirements. We target both mature and developing markets for not just light vehicles, but also for commercial and specialty vehicles. We further enhance our operations by focusing on operational excellence in all functional areas.

The key components of our business strategy are described below:

### ***Sharply Reduce Costs to Help Counteract the Current Global Economic Crisis***

We are aggressively responding to the current global economic crisis and the resulting significantly reduced production levels by executing comprehensive global restructuring and cost-reduction initiatives. In the fourth quarter of 2008, we launched a global restructuring program that we estimate will generate annual savings of about \$58 million once fully implemented by the end of 2009. The restructuring program, which has a payback period of less than one year, includes actions to permanently reduce our fixed cost base and actions to flex our costs in the current economic environment, such as:

Permanently eliminating 1,100 jobs worldwide, which is in addition to 1,150 jobs previously eliminated in 2008;

Closing three North American manufacturing plants and an engineering facility in Australia;

Suspending matching contributions to employee 401 (k) programs; and

Cutting spending on information technology, sales and marketing programs.

## **Table of Contents**

We are also flexing our operations to address these market conditions, implementing temporary layoffs of hourly workers at our plants worldwide that are impacted by customers' plant shutdowns. In North America, where customer production cuts have been the greatest, we have also initiated salaried employee furloughs. In Europe, we have eliminated all temporary positions and are working successfully with various works councils to pursue similar cost reduction efforts including reduced work hours. In addition, we have frozen 2009 salaries at 2008 levels, and implemented other salary control actions, and we have cut total compensation for our top 50 executives by more than 60% on average.

In addition, we are strategically reducing capital expenditures and engineering investments where possible without compromising our long-term growth prospects. We are eliminating or deferring regional expansion projects, cutting spending tied to delayed customer launches, redeploying assets where feasible, and eliminating all discretionary capital spending. We are focusing on developing technologies and capabilities tied to business launching within the next two to three years, except in those instances where the customer is paying upfront for engineering and advance technology developments on programs launching in 2012 and beyond. This has allowed us to continue all programs critical to our growth with limited near-term cash impact.

We are also focusing on generating cash flow through working capital improvements, particularly by reducing inventories and strengthening our management of payables and receivables.

### ***Development and Commercialization of Advanced Technologies***

We continue to identify and target new, fast-growing niche markets and commercialize new technologies for these markets as well as our existing markets. We focus on commercializing innovative, value-added products with an emphasis on highly engineered systems and complex assemblies and modules. By anticipating customer needs and preferences, we are continually capturing global market opportunities with our advanced technologies, and increasing our content per vehicle. As a result of increasing emissions standards requiring advanced aftertreatment products and systems, we believe available emission control content per light and commercial vehicles will continue to rise over the next several years. With our ELIM-NO<sub>x</sub><sup>tm</sup> technology, we offer an integrated Selective Catalytic Reduction (SCR) system to meet the increasingly stringent emissions regulations being introduced around the world. We also believe that consumers' greater emphasis on automotive comfort, handling and safety could allow available ride control content per light vehicle to rise. We are selling Continuously Controlled Electronic Suspension (CES) shock absorbers to Volvo, Audi, Mercedes, VW, and Ford, among others, and engineered elastomers to manufacturers with unique needs.

### ***Growth in Adjacent Markets***

One of our goals is to apply our existing design, engineering and manufacturing capabilities to penetrate a variety of adjacent markets and to achieve growth in higher-margin businesses. For example, we are aggressively leveraging our technology and engineering leadership in emission and ride control into adjacent markets, such as the heavy-duty market for trucks, buses, agricultural equipment, construction machinery and other commercial vehicles. As an established leading supplier of heavy-duty ride control and elastomer products, we are already serving customers like Volvo Truck, Navistar (International Truck and Engine), Freightliner and PACCAR. We also see tremendous opportunity to expand our presence with our emission control products and systems in the heavy-duty market beyond North America and Europe into China and elsewhere. Also, we recently added the ride control products and technologies of Gruppo Marzocchi to our existing exhaust systems for two-wheelers obtained from the Gabilan Manufacturing acquisition. With our newly-formed relationship with Caterpillar as its global diesel emission control system integration supplier, we demonstrate our commitment to penetrate the market for off-road equipment.

***Growth in Developing Economies***

We continue to adjust our global footprint to follow our customers into growth regions around the world and capture our fair share of new business. Recently, we built or expanded several facilities in India, opened a second emissions control facility in St. Petersburg, Russia, and opened a new manufacturing plant in Korea. As OEMs have entered the fast-growing economies of Brazil, Russia, India, China, and Thailand, we have

## **Table of Contents**

followed, building the capability to engineer and produce locally cutting-edge technologies and products and thus allowing us to capture new business in these markets.

### ***Leverage Global Engineering and Advanced System Capabilities***

Given the current economic crisis, we are strategically managing engineering investments without compromising our long-term growth prospects, by focusing on developing technologies and capabilities tied to business launching within the next two to three years. An exception to that are those instances where the customer is paying upfront for engineering and advance technology developments on programs launching in 2012 and beyond. This strategy allows us to continue all programs critical to our growth with minimal near-term cash impact. We continue our long tradition of developing highly engineered systems and complex assemblies and modules designed to provide value-added solutions to customers and increase vehicle content generally and thus, generate higher profit margins than individualized components. Integrating electronically many of our engineering and manufacturing facilities globally, we believe, has helped us to maintain our presence on top-selling vehicles. In addition, our just-in-time and in-line sequencing manufacturing and distribution capabilities have enabled us to be more responsive to our customers' needs.

### ***Expand Our Aftermarket Business***

We manufacture and market leading, brand-name products to a diversified global aftermarket customer base. Monroe® ride control products and Walker® emission control products, which have been offered to consumers since the 1930s, are two of the most recognized brand-name products in the automotive parts industry. We believe our brand equity in the aftermarket is a key asset especially as customers consolidate and channels of distribution converge.

Additionally, we seek to strengthen our competitive position with OEMs. Our market knowledge, coupled with our leading aftermarket presence, strengthens our ties with our OE customer base and drives acceptance of our aftermarket products and technologies for use in original equipment vehicle manufacturing.

We continue to emphasize product value differentiation with our brands, including the: Monroe Reflex® and Monroe Sensa-Trac® lines of shock absorbers, Walker's Quiet-Flow® muffler, Rancho® ride control products, DynoMax® exhaust products, Walker Ultra™ catalytic converters, Monroe® Dynamics and Ceramics brakes, and in European markets, Walker™ and Aluminox Pro™ mufflers.

Our plans to grow and gain market share in the aftermarket business call for: adding new products, increasing the coverage to current brands, and offering our brands to, and increasing our aftermarket penetration of, new product segments. To this end, we introduced in North America a ride control line extension, the Quick Strut which is a complete module incorporating the spring and upper mount. This product results in a much easier and quicker installation that even do-it-yourself consumers and body-shop technicians can perform without the special tools and skills required previously. In addition, Monroe® Dynamics and Ceramic Disc brake pads were introduced in the United States in 2006. A number of other opportunities are being explored to extend our existing well-known brands, such as Monroe®, and our product line generally to segments not previously served.

### ***Execute Focused Transactions***

In the past, we have successfully identified and capitalized on strategic acquisitions and alliances to achieve growth. Through these acquisitions and alliances, we have (1) expanded our product portfolio with complementary technologies; (2) realized incremental business from existing customers; (3) gained access to new customers; and (4) achieved leadership positions in geographic markets outside North America.

We signed exclusive licensing agreements for burner systems used in the regeneration of Diesel Particulate Filters (DPFs) with Woodward Governor Company and for vaporizer technologies with another company. These technologies, which complemented our array of existing emissions control products, enabled us to provide integrated aftertreatment systems as demanded by commercial vehicle manufacturers and others.

## **Table of Contents**

We developed a strategic alliance with Futaba, a leading exhaust manufacturer in Japan, and formed a joint venture based in Burnley, England. We also created an alliance with Hitachi (as successor to Tokico Ltd. following its acquisition of Tokico), a leading Japanese ride control manufacturer. These alliances help us grow our business with Japan-based OEMs by leveraging the geographical reach of each partner to serve global vehicle platforms of these OEMs.

We established a presence in Thailand through a joint venture that supplies exhaust components for GM and Isuzu. Our joint venture operations in Dalian and Shanghai positioned us as a leading exhaust supplier in the rapidly growing Chinese market. Also, we increased our China footprint and OEM coverage on emission control products and systems through two joint ventures, partnering with Eberspächer International GmbH to source luxury cars produced by BMW and Audi, and with Chengdu Lingchuan Mechanical Plant to supply various Ford platforms.

Our operations in China are being expanded through investments in both manufacturing and engineering facilities. We opened our first wholly-owned operation in China, an elastomer manufacturing facility in Suzhou. In addition, through an extension of our joint venture with Shanghai Tractor and Engine Company, a subsidiary of Shanghai Automotive Industry Corp., we established a local engineering center to develop automotive exhaust products. Finally, we increased our ownership stake in the Tenneco (Beijing) Ride Control System Company Limited (a joint venture with Beijing Automotive Industry Corp.) from 51 percent to 65 percent in 2006.

In September 2007, we acquired the mobile emissions business of Combustion Components Associates, Inc., a manufacturer of air pollution control technologies. The acquisition augmented Tenneco's system integration capabilities and offerings related to Selective Catalyst Reduction (SCR) technologies designed to meet future, more stringent diesel emissions regulations for passenger cars, trucks, and other vehicles.

In May 2008, we acquired from Delphi Automotive System LLC certain ride control assets at Delphi's Kettering, Ohio facility to allow us to grow our OE ride control business globally. This acquisition should allow us to diversify our ride control business in North America and elsewhere.

In September 2008, we acquired the suspension business of Gruppo Marzocchi, an Italy-based worldwide leading supplier of suspension technology for the two-wheeler market. This acquisition diversifies our business beyond light vehicles and brings us strong brands, leading products and advanced technology capabilities.

In February 2009, we signed a joint agreement with GE Transportation, a unit of General Electric Company, to develop a proprietary SCR and aftertreatment technology designed to reduce and control diesel engine emissions for various transportation and other applications. We will collaborate with GE Transportation on the development and production of GE's Hydrocarbon-Selective Catalytic Reduction catalyst technology (HC-SCR), a diesel aftertreatment innovation aimed at reducing harmful nitrogen oxide (NOx) emissions as effectively as urea-based SCR systems. Additionally, we will work with GE Transportation to further develop and integrate the HC-SCR technology into complete aftertreatment systems for both locomotive and off-highway vehicle markets. Once fully developed, this technology will also be offered to customers in the on-road, marine and stationary power markets.

We intend to continue to pursue strategic alliances, joint ventures, acquisitions and other transactions that complement or enhance our existing products, technology, systems development efforts, customer base and/or global presence. We will align with companies that have proven products, proprietary technology, advanced research capabilities, broad geographic reach, and/or strong market positions to further strengthen our product leadership, technological edge, international reach or customer relationships.

## ***Operational Excellence***

We will continue to strive for operational excellence by optimizing our manufacturing and engineering footprint, enhancing our Six Sigma processes and Lean productivity tools, managing the complexities of our global supply chain to realize purchasing economies of scale while satisfying diverse and global requirements, and supporting our businesses with robust information technology systems. We will make investments in our operations and infrastructure as required to achieve our strategic goals. We will be mindful of the changing



## **Table of Contents**

market conditions that might necessitate adjustments to our resources and manufacturing capacity around the world. We will remain committed to protecting the environment as well as the health and safety of our employees.

### **Environmental Matters**

We estimate that we and our subsidiaries will make expenditures for plant, property and equipment for environmental matters of approximately \$2 million in both 2009 and 2010.

For additional information regarding environmental matters, see Item 3, Legal Proceedings, Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations - Environmental and Other Matters, and Note 13 to the consolidated financial statements of Tenneco Inc. included in Item 8.

### **Employees**

As of December 31, 2008, we had approximately 21,000 employees of which approximately 53 percent were covered by collective bargaining agreements. European works councils cover 22 percent of our total employees, a majority of whom are also included under collective bargaining agreements. Several of our existing labor agreements in the United States and Mexico are scheduled for renegotiation in 2009. In addition, agreements are expiring in 2009 in Europe and South America covering plants in France, Portugal, the United Kingdom and Brazil. We regard our employee relations as satisfactory.

### **Other**

The principal raw material that we use is steel. We obtain steel from a number of sources pursuant to various contractual and other arrangements. We believe that an adequate supply of steel can presently be obtained from a number of different domestic and foreign suppliers. For the past several years, we have experienced higher steel prices which we have addressed by evaluating alternative materials and processes, reviewing material substitution opportunities, increasing component and assembly outsourcing to low cost countries and aggressively negotiating with our customers to allow us to recover these higher costs from them. While the global economic crisis has reduced the pressure on raw material prices, market prices remain volatile.

We hold a number of domestic and foreign patents and trademarks relating to our products and businesses. We manufacture and distribute our products primarily under the Walker® and Monroe® brand names, which are well-recognized in the marketplace and are registered trademarks. The patents, trademarks and other intellectual property owned by or licensed to us are important in the manufacturing, marketing and distribution of our products.

**Table of Contents**

**ITEM 1A. RISK FACTORS.**

*The recent unprecedented deterioration in the global economy, global credit markets and the financial services industry has severely and negatively affected the automotive industry and our business, financial position and liquidity.*

The current economic crisis arising out of the subprime mortgage market collapse and the resulting worldwide financial industry turmoil has resulted in a severe and global tightening of credit and liquidity crisis. As a result, nearly every major economy in the world now faces a widespread reduction of business activity, seized-up credit markets and rising unemployment. These conditions have led to a dramatic decline in the housing markets in the United States and Western Europe and low consumer confidence, which has resulted in delayed and reduced purchases of durable consumer goods such as automobiles. As a result, our OEM customers significantly reduced their production schedules during 2008, particularly in the second half of the year. OE production schedules for 2009 are projected to be at their lowest levels in decades and the outlook for 2009 is uncertain.

We face several additional or increased risks as a result of the current economic crisis and its significant impact on the automotive industry, including the following:

*Disruptions in the financial markets are adversely impacting the availability and cost of credit which could materially and negatively affect our company.* The recent global financial crisis has materially and negatively impacted our business and our customers' businesses in the U.S. and globally. Longer term disruptions in the capital and credit markets could further adversely affect our customers' and our ability to access the liquidity that is necessary to fund our operations. These disruptions are also adversely affecting the U.S. and world economy, further negatively impacting consumer spending patterns in the automotive industry. Purchases of our customers' products may be limited by their customers' inability to obtain adequate financing for such purchases. In addition, as our customers and suppliers respond to rapidly changing consumer preferences, they may require access to additional capital. If that capital is not available or its cost is prohibitively high, their businesses would be negatively impacted which could result in further restructuring or even reorganization under bankruptcy laws. Any such negative impact, in turn, could materially and negatively affect our company either through loss of sales to any of our customers so affected or through inability to meet our commitments (or inability to meet them without excess expense) because of loss of supplies from any of our suppliers so affected. There are no assurances that government responses to these disruptions will restore consumer confidence or improve the liquidity of the financial markets.

In addition, lending institutions, including the lenders under our revolving credit facility, have suffered and may continue to suffer losses due to their lending and other financial relationships, especially because of the general weakening of the global economy and increased financial instability of many borrowers. As a result, lenders may become insolvent, which could affect the actual availability of credit under our revolving credit facility, or our ability to obtain other financing on satisfactory terms and in adequate amounts, if at all. If this were to occur, our sources of liquidity may prove to be insufficient, and our financial condition or results of operations could be materially and adversely affected.

*Financial difficulties facing other automotive companies may have a material and adverse impact on us.* A number of companies in the automotive industry are, and over the last several years have been, facing severe financial difficulties. General Motors, Ford and Chrysler have all announced significant restructuring actions in an effort to improve profitability and remain solvent. The North American automotive manufacturers are burdened with substantial structural and embedded costs, such as facility overhead as well as pension and healthcare costs, that have caused them to seek government financing and even discuss the possibility of bankruptcy. Automakers in other markets in the world are also experiencing difficulties from a weakened economy, tightening credit markets and reduced demand for their products. The automotive supply base in turn has also been faced with severe cash flow

problems as a result of the significantly lower production levels of light vehicles, increases in certain raw material, commodity and energy costs and restricted access to additional liquidity through the credit markets. Several suppliers have filed for bankruptcy protection or ceased operations.

## **Table of Contents**

Severe financial difficulties, including bankruptcy, of any automotive manufacturer or significant automotive supplier would have a significant disruptive effect on the entire automotive industry, leading to supply chain disruptions and labor unrest, among other things. For example, if a parts supplier were to cease operations, it could force the automotive manufacturers to whom the supplier provides parts to shut down their operations. This, in turn, could force other suppliers, including us, to shut down production at plants that are producing products for these automotive manufacturers. Severe financial difficulties at any of our major suppliers could have a material adverse effect on us if we are unable to obtain on a timely basis the quantity and quality of components we require to produce our products.

Financial difficulties at any of our major customers could have a material adverse impact on us if such customer were unable to pay for the products we provide or we experience a loss of, or material reduction in, business from such customer. If any of our major customers cannot fund their operations or file for bankruptcy, we may incur significant write offs of accounts receivable, incur impairment charges or require additional restructuring actions beyond our current global restructuring plans. In addition, a bankruptcy filing by General Motors, Ford or a few of our other large customers could result in a default under our U.S. securitization agreement. Our inability to collect receivables in a timely manner or to sell receivables under our U.S. securitization program may have a material adverse effect on our liquidity.

*Our failure to comply with the covenants contained in our senior credit facility or the indentures for our other debt instruments, including as a result of events beyond our control, could result in an event of default, which could materially and adversely affect our operating results and our financial condition.* Our senior credit facility and receivables securitization program in the U.S. require us to maintain certain financial ratios. Our senior credit facility and our other debt instruments require us to comply with various operational and other covenants. If there were an event of default under any of our debt instruments that was not cured or waived, the holders of the defaulted debt could cause all amounts outstanding with respect to that debt to be due and payable immediately. We cannot assure you that our assets or cash flow would be sufficient to fully repay borrowings under our outstanding debt instruments, either upon maturity or if accelerated, upon an event of default, or that, we would be able to refinance or restructure the payments on those debt securities.

For example, in February 2009, we sought an amendment to our senior credit facility to revise the financial ratios we are required to maintain thereunder. The revised financial ratios were based on a set of projections that we shared with our lenders. If, in the future, we are required to obtain similar amendments as a result of our inability to meet the financial ratios in those projections, there can be no assurance that those amendments will be available on commercially reasonable terms or at all. If, as or when required, we are unable to repay, refinance or restructure our indebtedness under our senior credit facility, or amend the covenants contained therein, the lenders under our senior credit facility could elect to terminate their commitments thereunder, cease making further loans and institute foreclosure proceedings against our assets. Under such circumstances, we could be forced into bankruptcy or liquidation. In addition, any event of default or declaration of acceleration under one of our debt instruments could also result in an event of default under one or more of our other financing agreements, including our other debt instruments and/or the agreements under which we sell certain of our accounts receivable. This would have a material adverse impact on our liquidity, financial position and results of operations.

*Our working capital requirements may negatively affect our liquidity and capital resources.* Our working capital requirements can vary significantly, depending in part on the level, variability and timing of our customers' worldwide vehicle production and the payment terms with our customers and suppliers. Our liquidity could also be adversely impacted if our suppliers were to suspend normal trade credit terms and require payment in advance or payment on delivery of purchases. If our working capital needs exceed our cash flows from operations, we would look to our cash balances and availability for borrowings under our borrowing arrangements to satisfy those needs, as well as potential sources of additional capital, which may not be available on satisfactory terms and in adequate amounts, if at all.

*Any further continuation of the global economic downturn or other factors that reduce consumer demand for our products or reduce prices could materially and adversely impact our financial condition and results of operations.* Demand for and pricing of our products are subject to economic conditions and other factors

**Table of Contents**

present in the various domestic and international markets where the products are sold. Demand for our OE products is subject to the level of consumer demand for new vehicles that are equipped with our parts. The level of new light vehicle purchases is cyclical, affected by such factors as general economic conditions, interest rates, consumer confidence, consumer preferences, patterns of consumer spending, fuel cost and the automobile replacement cycle.

As described above, the recent unprecedented deterioration in the global economy, global credit markets and the financial services industry has negatively impacted our operations, including by leading to a rapid decline in light vehicle purchases. In 2008, North American light vehicle production decreased 16 percent from 2007. European production was particularly impacted by the economic crisis and deteriorating industry conditions during the fourth quarter of 2008, when light vehicle production declined 27 percent as compared to the fourth quarter of 2007. In addition, significant increases in gasoline prices in the United States, particularly during the first half of 2008, accelerated the shift in the North American market away from light trucks, which tend to be higher margin products for OEMs and suppliers, to more fuel-efficient passenger cars. During 2008, SUV and pick-up truck business accounted for 54 percent of our North American OE revenues, down from 72 percent in 2007. A further decline in automotive sales and production would likely cause a decline in our sales to vehicle manufacturers, and could result in a decline in our results of operations and financial condition.

Demand for our aftermarket, or replacement, products varies based upon such factors as general economic conditions, the level of new vehicle purchases, which initially displaces demand for aftermarket products, the severity of winter weather, which increases the demand for certain aftermarket products, and other factors, including the average useful life of parts and number of miles driven.

The highly cyclical nature of the automotive industry presents a risk that is outside our control and that cannot be accurately predicted. For example, many predict that the current global economic crisis will continue well into 2009 and possibly 2010 and we cannot assure you that we would be able to maintain or improve our results of operations in a stagnant or recessionary economic environment. Further decreases in demand for automobiles and automotive products generally, or in the demand for our products in particular, could materially and adversely impact our financial condition and results of operations.

*Our significant amount of debt makes us more sensitive to the effects of the global economic crisis; our level of indebtedness and provisions in our debt agreements could limit our ability to react to changes in the economy or our industry.* Our significant amount of debt makes us more vulnerable to changes in our results of operations because a substantial portion of our cash flow from operations is dedicated to servicing our indebtedness and is not available for other purposes. Our level of indebtedness could have other negative consequences to us, including the following:

- limiting our ability to borrow money or sell stock for our working capital, capital expenditures, debt service requirements or other general corporate purposes;

- limiting our flexibility in planning for, or reacting to, changes in our operations, our business or the industry in which we compete;

- our leverage may place us at a competitive disadvantage by limiting our ability to invest in the business or in further research and development;

- making us more vulnerable to downturns in our business or the economy; and

- there would be a material adverse effect on our business and financial condition if we were unable to service our indebtedness or obtain additional financing, as needed.

Our ability to make payments on our indebtedness depends on our ability to generate cash in the future. If we do not generate sufficient cash flow to meet our debt service and working capital requirements, we may need to seek additional financing or sell assets. This may make it more difficult for us to obtain financing on terms that are acceptable to us, or at all. Without any such financing, we could be forced to sell assets to make up for any shortfall in our payment obligations under unfavorable circumstances.

## **Table of Contents**

As a result of the global credit market crisis, conditions for asset sales have become very difficult as tight global credit conditions have adversely affected the ability of potential buyers to finance such asset purchases. In addition, our senior credit agreement and our other debt agreements contain covenants which limit our ability to sell assets and also restrict the use of proceeds from any asset sale. Moreover, our senior credit facility is secured on a first priority basis by, among other things, substantially all of our and our subsidiary guarantors' tangible and intangible domestic assets. If necessary, we may not be able to sell assets quickly enough or for sufficient amounts to enable us to meet our obligations.

In addition, our senior credit agreement and our other debt agreements contain other restrictive covenants that limit our flexibility in planning for or reacting to changes in our business and our industry, including limitations on incurring additional indebtedness, making investments, granting liens and merging or consolidating with other companies. Our senior credit facility also requires us to maintain certain financial ratios. Complying with these restrictive covenants and financial ratios may impair our ability to finance our future operations or capital needs or to engage in other favorable business activities.

*Declines in the price of our common stock could have an adverse effect on its liquidity.* Our common stock is currently listed on the NYSE. The NYSE maintains continued listing requirements relating to, among other things, market capitalization and minimum stock price (including that the average closing price of common stock be not less than \$1.00 for 30 consecutive trading days). On February 26, 2009, the NYSE notified issuers that it had submitted to the SEC an immediately effective rule that would suspend the \$1.00 minimum price requirement and other capitalization standards on a temporary basis initially through June 30, 2009. Although we are currently in compliance with NYSE listing requirements, our stock price declined severely during 2008. If in the future we are unable to satisfy the NYSE criteria for continued listing, we would be notified by the NYSE and given an opportunity to take corrective action. If we are not brought into compliance after the cure period (generally six months), our stock could be subject to delisting. A delisting of common stock could negatively impact us by reducing the liquidity and market price of our common stock and reducing the number of investors willing to hold or acquire our common stock. This could negatively impact our ability to raise additional funds through equity financing, which in turn could materially and adversely affect our business, financial condition and results of operations.

*We are dependent on large customers for future revenue. The loss of any of these customers or the loss of market share by these customers could have a material adverse impact on us.*

We depend on major vehicle manufacturers for a substantial portion of our net sales. For example, during 2008, General Motors, Ford, Volkswagen, and Daimler AG accounted for 20 percent, 11 percent, 8 percent, and 7 percent of our net sales, respectively. The loss of all or a substantial portion of our sales to any of our large-volume customers could have a material adverse effect on our financial condition and results of operations by reducing cash flows and our ability to spread costs over a larger revenue base. We may make fewer sales to these customers for a variety of reasons, including but not limited to: (1) loss of awarded business; (2) reduced or delayed customer requirements; (3) strikes or other work stoppages affecting production by the customers; or (4) reduced demand for our customers' products.

During the past several years, General Motors and Ford have lost market share particularly in the United States, primarily to Asian competitors. While we are actively targeting Japanese, Chinese and Korean automakers, any further market share loss by these North American-based and European-based automakers could, if we are unable to achieve increased sales to the Asian OE manufacturers, have a material adverse effect on our business.

*We may be unable to realize sales represented by our awarded business, which could materially and adversely impact our financial condition and results of operations.*



The realization of future sales from awarded business is inherently subject to a number of important risks and uncertainties, including the number of vehicles that our OE customers will actually produce, the timing of that production and the mix of options that our OE customers and consumers may choose. Prior to 2008, substantially all of our North American vehicle manufacturing customers had slowed or maintained at

## **Table of Contents**

relatively flat levels new vehicle production for several years. More recently, new vehicle production has decreased dramatically as a result of the global economic crisis. We believe that production volumes for 2009 will decline in most regions of the world due to the global economic crisis, current OE manufacturers' inventory levels and uncertainty regarding the willingness or ability of OEMs to continue to support vehicle sales. In addition, our customers generally have the right to replace us with another supplier at any time for a variety of reasons and have demanded price decreases over the life of awarded business. Accordingly, we cannot assure you that we will in fact realize any or all of the future sales represented by our awarded business. Any failure to realize these sales could have a material adverse effect on our financial condition, results of operations, and liquidity.

In many cases, we must commit substantial resources in preparation for production under awarded OE business well in advance of the customer's production start date. In certain instances, the terms of our OE customer arrangements permit us to recover these pre-production costs if the customer cancels the business through no fault of our company. Although we have been successful in recovering these costs under appropriate circumstances in the past, we can give no assurance that our results of operations will not be materially impacted in the future if we are unable to recover these types of pre-production costs related to OE cancellation of awarded business.

***The hourly workforce in the automotive industry is highly unionized and our business could be adversely affected by labor disruptions.***

Although we consider our current relations with our employees to be satisfactory, if major work disruptions were to occur, our business could be adversely affected by, for instance, a loss of revenues, increased costs or reduced profitability. We have not experienced a material labor disruption in our workforce in the last ten years, but there can be no assurance that we will not experience a material labor disruption at one of our facilities in the future in the course of renegotiation of our labor arrangements or otherwise. In addition, substantially all of the hourly employees of North American vehicle manufacturers and many of their other suppliers are represented by the United Automobile, Aerospace and Agricultural Implement Workers of America under collective bargaining agreements. Vehicle manufacturers and such suppliers and their employees in other countries are also subject to labor agreements. A work stoppage or strike at our production facilities, at those of a significant customer, or at a significant supplier of ours or any of our customers, such as the 2008 strike at American Axle which resulted in 30 General Motors' facilities in North America being idled for several months, could have an adverse impact on us by disrupting demand for our products and/or our ability to manufacture our products.

***We have experienced significant increases in raw materials pricing, and further changes in the prices of raw materials could have a material adverse impact on us.***

Significant increases in the cost of certain raw materials used in our products, to the extent they are not timely reflected in the price we charge our customers or otherwise mitigated, could materially and adversely impact our results. For example, since 2004, we have experienced significant increases in processed metal and steel prices. While the global economic crisis has reduced the pressure on raw material prices, market prices remain volatile. We addressed these increases in 2006, 2007 and 2008 by evaluating alternative materials and processes, reviewing material substitution opportunities, increasing component and assembly outsourcing to low cost countries and aggressively negotiating with our customers to allow us to recover these higher costs from them. In addition to these actions, we continue to pursue productivity initiatives and review opportunities to reduce costs through restructuring activities. We cannot assure you, however, that these actions will be effective in containing margin pressures from any further raw material price increases.

***We may be unable to realize our business strategy of improving operating performance, growing our business and generating savings and improvements.***

We regularly implement strategic and other initiatives designed to improve our operating performance and grow our business. The failure to achieve the goals of these initiatives could have a material adverse effect on our business, particularly since we rely on these initiatives to offset pricing pressures from our suppliers and

## **Table of Contents**

our customers, as described above, as well as to manage the impacts of production cuts such as the significant production decreases we are experiencing as a result of the global economic crisis. Furthermore, the terms of our senior credit agreement may restrict the types of initiatives we undertake, as the agreement restricts our uses of cash, requires us to maintain financial ratios and otherwise prohibits us from undertaking certain activities. In the past we have been successful in obtaining the consent of our senior lenders where appropriate in connection with our initiatives. We cannot assure you, however, that we will be able to pursue, successfully implement or realize the expected benefits of any initiative or that we will be able to sustain improvements made to date.

In addition, we believe that increasingly stringent environmental standards for emissions have presented and will continue to present an important opportunity for us to grow our emissions control business. We cannot assure you, however, that environmental standards for emissions will continue to become more stringent or that the adoption of any new standards will not be delayed beyond our expectations.

***We may incur material costs related to product warranties, environmental and regulatory matters and other claims, which could have a material adverse impact on our financial condition and results of operations.***

From time to time, we receive product warranty claims from our customers, pursuant to which we may be required to bear costs of repair or replacement of certain of our products. Vehicle manufacturers are increasingly requiring their outside suppliers to guarantee or warrant their products and to be responsible for the operation of these component products in new vehicles sold to consumers. Warranty claims may range from individual customer claims to full recalls of all products in the field. We cannot assure you that costs associated with providing product warranties will not be material, or that those costs will not exceed any amounts reserved in our consolidated financial statements. For a description of our accounting policies regarding warranty reserves, see Management's Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies included in Item 7.

Additionally, we are subject to a variety of environmental and pollution control laws and regulations in all jurisdictions in which we operate. Soil and groundwater remediation activities are being conducted at certain of our current and former real properties. We record liabilities for these activities when environmental assessments indicate that the remedial efforts are probable and the costs can be reasonably estimated. On this basis, we have established reserves that we believe are adequate for the remediation activities at our current and former real properties for which we could be held responsible. Although we believe our estimates of remediation costs are reasonable and are based on the latest available information, the cleanup costs are estimates and are subject to revision as more information becomes available about the extent of remediation required. In future periods, we could be subject to cash or non-cash charges to earnings if we are required to undertake material additional remediation efforts based on the results of our ongoing analyses of the environmental status of our properties, as more information becomes available to us.

We also from time to time are involved in legal proceedings, claims or investigations that are incidental to the conduct of our business. Some of these proceedings allege damages against us relating to environmental liabilities, intellectual property matters, personal injury claims, taxes, employment matters or commercial or contractual disputes. For example, we are subject to a number of lawsuits initiated by a significant number of claimants alleging health problems as a result of exposure to asbestos. Many of these cases involve significant numbers of individual claimants. Many of these cases also involve numerous defendants, with the number of defendants in some cases exceeding 200 defendants from a variety of industries. As major asbestos manufacturers or other companies that used asbestos in their manufacturing processes continue to go out of business, we may experience an increased number of these claims.

We vigorously defend ourselves in connection with all of the matters described above. We cannot, however, assure you that the costs, charges and liabilities associated with these matters will not be material, or that those costs, charges and liabilities will not exceed any amounts reserved for them in our consolidated financial statements. In future periods, we could be subject to cash costs or non-cash charges to earnings if any of these matters is resolved

unfavorably to us. See Management's Discussion and Analysis of Financial

**Table of Contents**

Condition and Results of Operations Environmental and Other Matters, included in Item 7 for further description.

***We may have difficulty competing favorably in the highly competitive automotive parts industry.***

The automotive parts industry is highly competitive. Although the overall number of competitors has decreased due to ongoing industry consolidation, we face significant competition within each of our major product areas, including from new competitors entering the markets which we serve. The principal competitive factors include price, quality, service, product performance, design and engineering capabilities, new product innovation, global presence and timely delivery. As a result, many suppliers have established or are establishing themselves in emerging, low-cost markets to reduce their costs of production and be more conveniently located for customers. Although we are also pursuing a low-cost country production strategy and otherwise continue to seek process improvements to reduce costs, we cannot assure you that we will be able to continue to compete favorably in this competitive market or that increased competition will not have a material adverse effect on our business by reducing our ability to increase or maintain sales or profit margins.

***The decreasing number of automotive parts customers and suppliers could make it more difficult for us to compete favorably.***

Our financial condition and results of operations could be adversely affected because the customer base for automotive parts is decreasing in both the original equipment market and aftermarket. As a result, we are competing for business from fewer customers. Due to the cost focus of these major customers, we have been, and expect to continue to be, requested to reduce prices as part of our initial business quotations and over the life of vehicle platforms we have been awarded. We cannot be certain that we will be able to generate cost savings and operational improvements in the future that are sufficient to offset price reductions requested by existing customers and necessary to win additional business.

Furthermore, the trend toward consolidation and bankruptcies among automotive parts suppliers is resulting in fewer, larger suppliers who benefit from purchasing and distribution economies of scale. If we cannot achieve cost savings and operational improvements sufficient to allow us to compete favorably in the future with these larger companies, our financial condition and results of operations could be adversely affected due to a reduction of, or inability to increase, sales.

***We may not be able to successfully respond to the changing distribution channels for aftermarket products.***

Major automotive aftermarket retailers, such as AutoZone and Advance Auto Parts, are attempting to increase their commercial sales by selling directly to automotive parts installers in addition to individual consumers. These installers have historically purchased from their local warehouse distributors and jobbers, who are our more traditional customers. We cannot assure you that we will be able to maintain or increase aftermarket sales through increasing our sales to retailers. Furthermore, because of the cost focus of major retailers, we have occasionally been requested to offer price concessions to them. Our failure to maintain or increase aftermarket sales, or to offset the impact of any reduced sales or pricing through cost improvements, could have an adverse impact on our business and operating results.

***Longer product lives of automotive parts are adversely affecting aftermarket demand for some of our products.***

The average useful life of automotive parts has steadily increased in recent years due to innovations in products and technologies. The longer product lives allow vehicle owners to replace parts of their vehicles less often. As a result, a portion of sales in the aftermarket has been displaced. This has adversely impacted, and could continue to adversely impact, our aftermarket sales. Also, any additional increases in the average useful lives of automotive parts would

further adversely affect the demand for our aftermarket products. Recently, we have experienced relative stabilization in our aftermarket business due to our ability to win new customers and recover steel price increases through selling price increases. However, there can be no assurance that we will

**Table of Contents**

be able to maintain this stabilization. Aftermarket sales represented approximately 19 percent and 18 percent of our net sales in 2008 and 2007, respectively.

***Any acquisitions we make could disrupt our business and seriously harm our financial condition.***

We may, from time to time, consider acquisitions of complementary companies, products or technologies. Acquisitions involve numerous risks, including difficulties in the assimilation of the acquired businesses, the diversion of our management's attention from other business concerns and potential adverse effects on existing business relationships with current customers and suppliers. In addition, any acquisitions could involve the incurrence of substantial additional indebtedness. We cannot assure you that we will be able to successfully integrate any acquisitions that we pursue or that such acquisitions will perform as planned or prove to be beneficial to our operations and cash flow. Any such failure could seriously harm our business, financial condition and results of operations.

***We are subject to risks related to our international operations.***

We have manufacturing and distribution facilities in many regions and countries, including Australia, China, India, North America, Europe and South America, and sell our products worldwide. For 2008, approximately 56 percent of our net sales were derived from operations outside North America. International operations are subject to various risks which could have a material adverse effect on those operations or our business as a whole, including:

exposure to local economic conditions;

exposure to local political conditions, including the risk of seizure of assets by a foreign government;

exposure to local social unrest, including any resultant acts of war, terrorism or similar events;

exposure to local public health issues and the resultant impact on economic and political conditions;

currency exchange rate fluctuations;

hyperinflation in certain foreign countries;

controls on the repatriation of cash, including imposition or increase of withholding and other taxes on remittances and other payments by foreign subsidiaries; and

export and import restrictions.

***Exchange rate fluctuations could cause a decline in our financial condition and results of operations.***

As a result of our international operations, we generate a significant portion of our net sales and incur a significant portion of our expenses in currencies other than the U.S. dollar. To the extent we are unable to match revenues received in foreign currencies with costs paid in the same currency, exchange rate fluctuations in that currency could have a material adverse effect on our business. For example, where we have significantly more costs than revenues generated in a foreign currency, we are subject to risk if the foreign currency in which our costs are paid appreciates against the currency in which we generate revenue because the appreciation effectively increases our cost in that country.



The financial condition and results of operations of some of our operating entities are reported in foreign currencies and then translated into U.S. dollars at the applicable exchange rate for inclusion in our consolidated financial statements. As a result, appreciation of the U.S. dollar against these foreign currencies generally will have a negative impact on our reported revenues and operating profit while depreciation of the U.S. dollar against these foreign currencies will generally have a positive effect on reported revenues and operating profit. For example, our European operations were positively impacted in 2007 and 2006 due to the strengthening of the Euro against the U.S. dollar. However, in 2008, the dollar strengthened against the Euro which had a negative effect on our results of operations. Our South American operations were negatively impacted by the devaluation in 2000 of the Brazilian currency as well as by the devaluation of the Argentine

**Table of Contents**

currency in 2002. We do not generally seek to mitigate this translation effect through the use of derivative financial instruments.

***Entering new markets poses new competitive threats and commercial risks.***

As we have expanded into markets beyond light vehicles, we expect to diversify our product sales by leveraging technologies being developed for the light vehicle segment. Such diversification requires investments and resources which may not be available as needed. We cannot guarantee that we will be successful in leveraging our capabilities into new markets and thus, in meeting the needs of these new customers and competing favorably in these new markets. If those customers experience reduced demand for their products or financial difficulties, our future prospects will be negatively affected as well.

***Impairment in the carrying value of long-lived assets and goodwill could negatively affect our operating results.***

We have a significant amount of long-lived assets and goodwill on our consolidated balance sheet. Under generally accepted accounting principles, long-lived assets, excluding goodwill, are required to be reviewed for impairment whenever adverse events or changes in circumstances indicate a possible impairment. If business conditions or other factors cause profitability and cash flows to decline, we may be required to record non-cash impairment charges. Goodwill must be evaluated for impairment annually or more frequently if events indicate it is warranted. If the carrying value of our reporting units exceeds their current fair value as determined based on the discounted future cash flows of the related business, the goodwill is considered impaired and is reduced to fair value by a non-cash charge to earnings. Events and conditions that could result in impairment in the value of our long-lived assets and goodwill include changes in the industries in which we operate, particularly the impact of the current downturn in the global economy, as well as competition and advances in technology, adverse changes in the regulatory environment, or other factors leading to reduction in expected long-term sales or profitability. For example, during 2008 we were required to record a \$114 million asset impairment charge to write-off the remaining goodwill related to our 1996 acquisition of Clevite Industries.

***The value of our deferred tax assets could become impaired, which could materially and adversely affect our operating results.***

As of December 31, 2008, we had approximately \$45 million in net deferred tax assets. These deferred tax assets include net operating loss carryovers that can be used to offset taxable income in future periods and reduce income taxes payable in those future periods. We periodically determine the probability of the realization of deferred tax assets, using significant judgments and estimates with respect to, among other things, historical operating results, expectations of future earnings and tax planning strategies. For example, we were required to record charges during 2008 for a valuation allowance against our U.S. deferred tax assets. These charges were attributable to the significant decline in production which resulted from the current global economic crisis and the accounting requirement to project that the current negative operating environment will continue through the expiration of the net operating loss carry-forward periods. If we determine in the future that there is not sufficient positive evidence to support the valuation of these assets, due to the risk factors described herein or other factors, we may be required to further adjust the valuation allowance to reduce our deferred tax assets. Such a reduction could result in material non-cash expenses in the period in which the valuation allowance is adjusted and could have a material adverse effect on our results of operations.

***Our expected annual effective tax rate could be volatile and materially change as a result of changes in mix of earnings and other factors.***

Our overall effective tax rate is equal to our total tax expense as a percentage of our total profit or loss before tax. However, tax expenses and benefits are determined separately for each tax paying entity or group of entities that is consolidated for tax purposes in each jurisdiction. Losses in certain jurisdictions may provide no current financial statement tax benefit. As a result, changes in the mix of projected profits and losses between jurisdictions, among other factors, could have a significant impact on our overall effective tax rate.

**Table of Contents**

**ITEM 1B. UNRESOLVED STAFF COMMENTS.**

None.

**ITEM 2. PROPERTIES.**

We lease our principal executive offices, which are located at 500 North Field Drive, Lake Forest, Illinois, 60045.

Walker's consolidated businesses operate 11 manufacturing facilities in the U.S. and 41 manufacturing facilities outside of the U.S., operate five engineering and technical facilities worldwide and share two other such facilities with Monroe. Twenty-one of these manufacturing plants are JIT facilities. In addition, three joint ventures in which we hold a noncontrolling interest operate a total of three manufacturing facilities outside the U.S., two of which are JIT facilities.

Monroe's consolidated businesses operate eight manufacturing facilities in the U.S. and 23 manufacturing facilities outside the U.S., operate seven engineering and technical facilities worldwide and share two other such facilities with Walker. Three of these manufacturing plants are JIT facilities.

The above-described manufacturing locations outside of the U.S. are located in Argentina, Australia, Belgium, Brazil, Canada, China, the Czech Republic, France, Germany, India, Italy, Korea, Mexico, New Zealand, Poland, Portugal, Russia, Spain, South Africa, Sweden, Thailand and the United Kingdom. We also have sales offices located in Algeria, Croatia, Greece, Hungary, Japan, Lithuania, Singapore, Taiwan, Turkey and the Ukraine.

We own approximately one-half of the properties described above and lease the other half. We hold 14 of the above-described international manufacturing facilities through seven joint ventures in which we own a controlling interest. In addition, three joint ventures in which we hold a noncontrolling interest operate a total of three manufacturing facilities outside the U.S. We also have distribution facilities at our manufacturing sites and at a few offsite locations, substantially all of which we lease.

We believe that substantially all of our plants and equipment are, in general, well maintained and in good operating condition. They are considered adequate for present needs and, as supplemented by planned construction, are expected to remain adequate for the near future.

We also believe that we have generally satisfactory title to the properties owned and used in our respective businesses.

**ITEM 3. LEGAL PROCEEDINGS.**

We are subject to a variety of environmental and pollution control laws and regulations in all jurisdictions in which we operate. We expense or capitalize, as appropriate, expenditures for ongoing compliance with environmental regulations that relate to current operations. We expense costs related to an existing condition caused by past operations that do not contribute to current or future revenue generation. We record liabilities when environmental assessments indicate that remedial efforts are probable and the costs can be reasonably estimated. Estimates of the liability are based upon currently available facts, existing technology, and presently enacted laws and regulations taking into consideration the likely effects of inflation and other societal and economic factors. We consider all available evidence including prior experience in remediation of contaminated sites, other companies' cleanup experiences and data released by the United States Environmental Protection Agency or other organizations. These estimated liabilities are subject to revision in future periods based on actual costs or new information. Where future cash flows are fixed or reliably determinable, we have discounted the liabilities. All other environmental liabilities are recorded at their undiscounted amounts. We evaluate recoveries separately from the liability and, when they are

assured, recoveries are recorded and reported separately from the associated liability in our consolidated financial statements.

As of December 31, 2008, we were designated as a potentially responsible party in one Superfund site. Including the Superfund site, we may have the obligation to remediate current or former facilities, and we estimate our share of environmental remediation costs at these facilities to be approximately \$11 million. For

**Table of Contents**

the Superfund site and the current and former facilities, we have established reserves that we believe are adequate for these costs. Although we believe our estimates of remediation costs are reasonable and are based on the latest available information, the cleanup costs are estimates and are subject to revision as more information becomes available about the extent of remediation required. At some sites, we expect that other parties will contribute to the remediation costs. In addition, at the Superfund site, the Comprehensive Environmental Response, Compensation and Liability Act provides that our liability could be joint and several, meaning that we could be required to pay in excess of our share of remediation costs. Our understanding of the financial strength of other potentially responsible parties at the Superfund site, and of other liable parties at our current and former facilities, has been considered, where appropriate, in our determination of our estimated liability. We believe that any potential costs associated with our current status as a potentially responsible party in the Superfund site, or as a liable party at our current or former facilities, will not be material to our consolidated results of operations, financial position or cash flows.

From time to time we are subject to product warranty claims whereby we are required to bear costs of repair or replacement of certain of our products. Warranty claims may range from individual customer claims to full recalls of all products in the field. We believe that our warranty reserve is appropriate; however, actual claims incurred could differ from the original estimates requiring adjustments to the reserve. The reserve is included in current and long-term liabilities on the balance sheet. See Note 13 to the consolidated financial statements of Tenneco Inc. and Consolidated Subsidiaries included in Item 8 for information regarding our warranty reserves.

We also from time to time are involved in legal proceedings, claims or investigations that are incidental to the conduct of our business. Some of these proceedings allege damages against us relating to environmental liabilities (including toxic tort, property damage and remediation), intellectual property matters (including patent, trademark and copyright infringement, and licensing disputes), personal injury claims (including injuries due to product failure, design or warnings issues, and other product liability related matters), taxes, employment matters, and commercial or contractual disputes, sometimes related to acquisitions or divestitures. For example, one of our Argentina subsidiaries is currently defending against a criminal complaint alleging the failure to comply with laws requiring the proceeds of export transactions to be collected, reported and/or converted to local currency within specified time periods. We vigorously defend ourselves against all of these claims. In future periods, we could be subjected to cash costs or non-cash charges to earnings if any of these matters is resolved on unfavorable terms. However, although the ultimate outcome of any legal matter cannot be predicted with certainty, based on current information, including our assessment of the merits of the particular claim, we do not expect that these legal proceedings or claims will have any material adverse impact on our future consolidated financial position, results of operations or cash flows.

In addition, we are subject to a number of lawsuits initiated by a significant number of claimants alleging health problems as a result of exposure to asbestos. A small percentage of claims have been asserted by railroad workers alleging exposure to asbestos products in railroad cars manufactured by The Pullman Company, one of our subsidiaries. Nearly all of the claims are related to alleged exposure to asbestos in our automotive emission control products. Only a small percentage of these claimants allege that they were automobile mechanics and a significant number appear to involve workers in other industries or otherwise do not include sufficient information to determine whether there is any basis for a claim against us. We believe, based on scientific and other evidence, it is unlikely that mechanics were exposed to asbestos by our former muffler products and that, in any event, they would not be at increased risk of asbestos-related disease based on their work with these products. Further, many of these cases involve numerous defendants, with the number of each in some cases exceeding 200 defendants from a variety of industries. Additionally, the plaintiffs either do not specify any, or specify the jurisdictional minimum, dollar amount for damages. As major asbestos manufacturers continue to go out of business or file for bankruptcy, we may experience an increased number of these claims. We vigorously defend ourselves against these claims as part of our ordinary course of business. In future periods, we could be subject to cash costs or non-cash charges to earnings if any of these matters is resolved unfavorably to us. To date, with respect to claims that have proceeded sufficiently through the judicial process, we have regularly achieved favorable resolution. During 2008, voluntary dismissals were initiated

on behalf of 635 plaintiffs and are in process; we were dismissed from an additional 74 cases.

**Table of Contents**

Accordingly, we presently believe that these asbestos-related claims will not have a material adverse impact on our future consolidated financial condition, results of operations or cash flows.

**ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS.**

No matters were submitted to the vote of security holders during the fourth quarter of 2008.

**ITEM 4.1. EXECUTIVE OFFICERS OF THE REGISTRANT.**

The following provides information concerning the persons who serve as our executive officers as of February 28, 2009.

<b>Name (and Age at December 31, 2008)</b>	<b>Offices Held</b>
Gregg M. Sherrill (55)	Chairman and Chief Executive Officer
Hari N. Nair (48)	Executive Vice President and President International
Kenneth R. Trammell (48)	Executive Vice President and Chief Financial Officer
Neal A. Yanos (46)	Executive Vice President, North America
Brent J. Bauer (53)	Senior Vice President and General Manager North American Original Equipment Emission Control
Timothy E. Jackson (51)	Senior Vice President and Chief Technology Officer
Richard P. Schneider (61)	Senior Vice President Global Administration
David A. Wardell (54)	Senior Vice President, General Counsel and Corporate Secretary
Michael J. Charlton (50)	Vice President, Global Supply Chain Management and Manufacturing
Paul D. Novas (50)	Vice President and Controller

**Gregg M. Sherrill** Mr. Sherrill was named the Chairman and Chief Executive Officer of Tenneco in January 2007. Mr. Sherrill joined us from Johnson Controls Inc., where he served since 1998, most recently as President, Power Solutions. From 2002 to 2003, Mr. Sherrill served as the Vice President and Managing Director of Europe, South Africa and South America for Johnson Controls Automotive Systems Group. Prior to joining Johnson Controls, Mr. Sherrill held various engineering and manufacturing assignments over a 22-year span at Ford Motor Company, including Plant Manager of Ford's Dearborn, Michigan engine plant and Director of Supplier Technical Assistance. Mr. Sherrill became a director of our company in January 2007.

**Hari N. Nair** Mr. Nair was named our Executive Vice President and President International effective March 2007. Previously, Mr. Nair served as Executive Vice President and Managing Director of our business in Europe, South America and India. Before that, he was Senior Vice President and Managing Director International. Prior to December 2000, Mr. Nair was the Vice President and Managing Director Emerging Markets. Previously, Mr. Nair was the Managing Director for Tenneco Automotive Asia, based in Singapore and responsible for all operations and development projects in Asia. He began his career with the former Tenneco Inc. in 1987, holding various positions in strategic planning, marketing, business development, quality and finance. Prior to joining Tenneco, Mr. Nair was a senior financial analyst at General Motors Corporation focusing on European operations.

**Kenneth R. Trammell** Mr. Trammell has served as our Executive Vice President and Chief Financial Officer since January 2006. Mr. Trammell was named our Senior Vice President and Chief Financial Officer in September 2003, having served as our Vice President and Controller since September 1999. From April 1997 to November 1999, he



served as Corporate Controller of Tenneco Inc. He joined Tenneco Inc. in May 1996 as Assistant Controller. Before joining Tenneco Inc., Mr. Trammell spent 12 years with the international public accounting firm of Arthur Andersen LLP, last serving as a senior manager.

**Neal A. Yanos** Mr. Yanos was named Executive Vice President, North America in July 2008. Prior to that, he served as our Senior Vice President and General Manager North American Original Equipment

**Table of Contents**

Ride Control and North American Aftermarket since May 2003. He joined our Monroe ride control division as a process engineer in 1988 and since that time has served in a broad range of assignments including product engineering, strategic planning, business development, finance, program management and marketing, including Director of our North American original equipment GM/VW business unit and most recently as our Vice President and General Manager North American Original Equipment Ride Control from December 2000. Before joining our company, Mr. Yanos was employed in various engineering positions by Sheller Globe Inc. from 1985 to 1988.

**Brent J. Bauer** Mr. Bauer joined Tenneco Automotive in August 1996 as a Plant Manager and was named Vice President and General Manager European Original Equipment Emission Control in September 1999. Mr. Bauer was named Vice President and General Manager European and North American Original Equipment Emission Control in July 2001. Currently, Mr. Bauer serves as the Senior Vice President and General Manager North American Original Equipment Emission Control. Prior to joining Tenneco, he was employed at AeroquipVickers Corporation for 20 years in positions of increasing responsibility serving most recently as Director of Operations.

**Timothy E. Jackson** Mr. Jackson joined us as Senior Vice President and General Manager North American Original Equipment and Worldwide Program Management in June 1999. He served in this position until August 2000, at which time he was named Senior Vice President Global Technology. From 2002 to 2005, Mr. Jackson served as Senior Vice President Manufacturing, Engineering and Global Technology. In July 2005, Mr. Jackson was named Senior Vice President Global Technology and General Manager, Asia Pacific. In March 2007, he was named our Chief Technology Officer. Mr. Jackson joined us from ITT Industries where he was President of that company's Fluid Handling Systems Division. With over 20 years of management experience, 14 within the automotive industry, he was also Chief Executive Officer for HiSAN, a joint venture between ITT Industries and Sanoh Industrial Company. Mr. Jackson has also served in senior management positions at BF Goodrich Aerospace and General Motors Corporation.

**Richard P. Schneider** Mr. Schneider was named as our Senior Vice President Global Administration in 1999 and is responsible for the development and implementation of human resources programs and policies and employee communications activities for our worldwide operations. Prior to 1999, Mr. Schneider served as our Vice President Human Resources. He joined us in 1994 from International Paper Company where, during his 20 year tenure, he held key positions in labor relations, management development, personnel administration and equal employment opportunity.

**David A. Wardell** Mr. Wardell joined Tenneco in May 2007 as Senior Vice President, General Counsel and Corporate Secretary. He is responsible for managing the company's worldwide legal affairs including corporate governance. Prior to joining Tenneco, Mr. Wardell was associated with Abbott Laboratories where he held several positions of increasing responsibility, most recently being named Associate General Counsel, Pharmaceutical Products Group Legal Operations in 2005. Before joining Abbott Laboratories, Mr. Wardell spent over ten years in the legal department of Bristol-Myers Squibb Company, where he spent six years living and working in London, England providing legal support to various business units in Europe, the Middle East and Africa. Mr. Wardell started his legal career as a New York County Assistant District Attorney.

**Michael J. Charlton** Mr. Charlton was named our Vice President, Global Supply Chain Management and Manufacturing in November 2008. Mr. Charlton served as Tenneco's Managing Director for India from January 2008 until November 2008. Prior to that, he served as the operations director for the Company's emission control business in Europe since 2005. Prior to joining Tenneco in 2005, Mr. Charlton held a variety of positions of increasing responsibility at TRW Automotive, the most recent being Lead Director, European Purchasing and Operations for the United Kingdom.

**Paul D. Novas** Mr. Novas was named our Vice President and Controller in July 2006. Mr. Novas served as Vice President, Finance and Administration for Tenneco Europe from January 2004 until July 2006 and as Vice President and Treasurer of Tenneco from November 1999 until January 2004. Mr. Novas joined Tenneco in 1996 as assistant treasurer responsible for corporate finance and North American treasury

**Table of Contents**

operations. Prior to joining Tenneco, Mr. Novas worked in the treasurer's office of General Motors Corporation for ten years.

**PART II****ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS, AND ISSUER PURCHASES OF EQUITY SECURITIES.**

Our outstanding shares of common stock, par value \$.01 per share, are listed on the New York and Chicago Stock Exchanges. The following table sets forth, for the periods indicated, the high and low sales prices of our common stock on the New York Stock Exchange Composite Transactions Tape.

Quarter	Sales Prices	
	High	Low
2008		
1st	\$ 29.41	\$ 20.18
2nd	30.41	13.52
3rd	16.92	9.58
4th	10.63	1.31
2007		
1st	\$ 27.34	\$ 23.04
2nd	35.81	25.49
3rd	37.73	28.11
4th	33.46	24.16

As of February 23, 2009, there were approximately 21,403 holders of record of our common stock, including brokers and other nominees.

The declaration of dividends on our common stock is at the discretion of our Board of Directors. The Board has not adopted a dividend policy as such; subject to legal and contractual restrictions, its decisions regarding dividends are based on all considerations that in its business judgment are relevant at the time. These considerations may include past and projected earnings, cash flows, economic, business and securities market conditions and anticipated developments concerning our business and operations.

We are highly leveraged and restricted with respect to the payment of dividends under the terms of our financing arrangements. On January 10, 2001, we announced that our Board of Directors eliminated the regular quarterly dividend on the Company's common stock. The Board took this action in response to then-current industry conditions, primarily greater than anticipated production volume reductions by OEMs in North America and continued softness in the global aftermarket. We have not paid dividends on our common stock since the fourth quarter of 2000. There are no current plans to reinstate a dividend on our common stock, as the Board of Directors intends to retain any earnings for use in our business for the foreseeable future. For additional information concerning our payment of dividends, see Management's Discussion and Analysis of Financial Condition and Results of Operations included in Item 7.

See Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters included in Item 12 for information regarding securities authorized for issuance under our equity compensation plans.



**Table of Contents*****Purchase of equity securities by the issuer and affiliated purchasers***

The following table provides information relating to our purchase of shares of our common stock in the fourth quarter of 2008. All of these purchases reflect shares withheld upon vesting of restricted stock to satisfy minimum tax withholding obligations.

<b>Period</b>	<b>Total Number of Shares Purchased</b>	<b>Average Price Paid</b>
October 2008	1,506	\$ 3.18
November 2008		
December 2008	983	2.91
Total	2,489	\$ 3.07

We presently have no publicly announced repurchase plan or program, but intend to continue to satisfy statutory minimum tax withholding obligations in connection with the vesting of outstanding restricted stock through the withholding of shares.

***Recent Sales of Unregistered Securities***

None.

**Table of Contents*****Share Performance***

The following graph shows a five year comparison of the cumulative total stockholder return on Tenneco's common stock as compared to the cumulative total return of two other indexes: a custom composite index ( Peer Group ) and the Standard & Poor's 500 Composite Stock Price Index. The companies included in the Peer Group are: ArvinMeritor Inc., American Axle & Manufacturing Co., Borg Warner Inc., Cummins Inc., Johnson Controls Inc., Lear Corp., Magna International Inc. and TRW Automotive Holdings Corp. (beginning in the second quarter of 2004). These comparisons assume an initial investment of \$100 and the reinvestment of dividends.

**COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN\***

Among Tenneco, Inc., The S&P 500 Index  
And A Peer Group

\* \$100 invested on 12/31/03 in stock or index, including reinvestment of dividends.

Fiscal year ending December 31.

Copyright© 2009 S&P, a division of The McGraw-Hill Companies Inc. All rights reserved.

	<b>12/31/03</b>	<b>12/31/04</b>	<b>12/31/05</b>	<b>12/31/06</b>	<b>12/31/07</b>	<b>12/31/08</b>
Tenneco Inc.	100.00	257.70	293.12	369.51	389.69	44.10
S&P 500	100.00	110.88	116.33	134.70	142.10	89.53
Peer Group	100.00	110.56	108.17	125.10	164.30	69.61

The graph and other information furnished in the section titled *Share Performance* under this Part II, Item 5 of this Form 10-K shall not be deemed to be soliciting material or to be filed with the Securities and Exchange Commission or subject to Regulation 14A or 14C, or to the liabilities of Section 18 of the Securities Exchange Act of 1934, as amended.

**Table of Contents****ITEM 6. SELECTED FINANCIAL DATA.****TENNECO INC. AND CONSOLIDATED SUBSIDIARIES  
SELECTED CONSOLIDATED FINANCIAL DATA**

	<b>Year Ended December 31,</b>									
	<b>2008</b>		<b>2007</b>		<b>2006</b>		<b>2005</b>		<b>2004(a)(b)</b>	
	<b>(Millions Except Share and Per Share Amounts)</b>									
<b>Statements of Income (Loss)</b>										
<b>Data:</b>										
Net sales and operating revenues										
North America	\$	2,641	\$	2,910	\$	1,963	\$	2,033	\$	1,966
Europe, South America and India		2,983		3,135		2,387		2,110		1,940
Asia Pacific		543		560		436		371		380
Intergroup sales		(251)		(421)		(104)		(74)		(73)
	\$	5,916	\$	6,184	\$	4,682	\$	4,440	\$	4,213
Income (loss) before interest expense, income taxes, and minority interest										
North America	\$	(107)	\$	120	\$	103	\$	148	\$	131
Europe, South America and India		85		99		81		53		19
Asia Pacific		19		33		12		16		20
Total		(3)		252		196		217		170
Interest expense (net of interest capitalized)		113		164		136		133		178
Income tax expense (benefit)		289		83		5		26		(21)
Minority interest		10		10		6		2		4
Net income (loss)	\$	(415)	\$	(5)	\$	49	\$	56	\$	9
Average number of shares of common stock outstanding										
Basic		46,406,095		45,809,730		44,625,220		43,088,558		41,534,810
Diluted		46,406,095		45,809,730		46,755,573		45,321,225		44,180,460
Basic earnings (loss) per share of common stock	\$	(8.95)	\$	(0.11)	\$	1.11	\$	1.30	\$	0.22
Diluted earnings (loss) per share of common stock	\$	(8.95)	\$	(0.11)	\$	1.05	\$	1.24	\$	0.21

**Years Ended December 31,**



**2008      2007      2006      2005      2004(a)(b)**  
**(Millions Except Ratio and Percent Amounts)**

**Balance Sheet Data:**

Total assets	\$ 2,828	\$ 3,590	\$ 3,274	\$ 2,945	\$ 3,134
Short-term debt	49	46	28	22	19
Long-term debt	1,402	1,328	1,357	1,361	1,402
Minority interest	31	31	28	24	24
Shareholders' equity	(251)	400	226	137	170

**Statement of Cash Flows Data:**

Net cash provided by operating activities	\$ 160	\$ 158	\$ 203	\$ 123	\$ 218
Net cash used by investing activities	(261)	(202)	(172)	(164)	(131)
Net cash provided (used) by financing activities	58	(10)	12	(28)	(15)
Cash payments for plant, property and equipment	(233)	(177)	(177)	(140)	(132)

**Table of Contents**

	<b>Years Ended December 31,</b>				
	<b>2008</b>	<b>2007</b>	<b>2006</b>	<b>2005</b>	<b>2004(a)(b)</b>
	<b>(Millions Except Ratio and Percent Amounts)</b>				
<b>Other Data:</b>					
EBITDA including minority interest(c)	\$ 219	\$ 457	\$ 380	\$ 394	\$ 347
Ratio of EBITDA including minority interest to interest expense	1.94	2.79	2.79	2.96	1.95
Ratio of total debt to EBITDA including minority interest	6.63	3.01	3.64	3.51	4.10
Ratio of earnings to fixed charges(d)		1.46	1.35	1.55	

NOTE: Our consolidated financial statements for the three years ended December 31, 2008, which are discussed in the following notes, are included in this Form 10-K under Item 8.

- (a) Prior to the first quarter of 2005, inventories in the U.S. based operations (17 percent of our total consolidated inventories at December 31, 2004) were valued using the last-in, first-out ( LIFO ) method and all other inventories were valued using the first-in, first-out ( FIFO ) or average cost methods at the lower of cost or market value. Effective January 1, 2005, we changed our accounting method for valuing inventory for our U.S. based operations from the LIFO method to the FIFO method. As a result, all U.S. inventories are now stated at the lower of cost, determined on a FIFO basis, or market. We elected to change to the FIFO method as we believe it is preferable for the following reasons: 1) the change provides better matching of revenue and expenditures and 2) the change achieves greater consistency in valuing our global inventory. Additionally, we initially adopted LIFO as it provided certain U.S. tax benefits which we no longer realize due to our U.S. net operating losses (when applied for tax purposes, tax laws require that LIFO be applied for accounting principles generally accepted in the United States of America ( GAAP ) as well). In accordance with GAAP, the change in inventory accounting has been applied by restating prior years consolidated financial statements.
- (b) In October 2004 and July 2005, we announced a change in the structure of our organization which changed the components of our reportable segments. The European segment now includes our South American and Indian operations. While this has no impact on our consolidated results, it changes our segment results.
- (c) EBITDA including minority interest is a non-GAAP measure defined as net income before extraordinary items, cumulative effect of changes in accounting principle, interest expense, income taxes, depreciation and amortization and minority interest. We use EBITDA including minority interest, together with GAAP measures, to evaluate and compare our operating performance on a consistent basis between time periods and with other companies that compete in our markets but which may have different capital structures and tax positions, which can have an impact on the comparability of interest expense, minority interest and tax expense. We also believe that using this measure allows us to understand and compare operating performance both with and without depreciation expense, which can vary based on several factors. We believe EBITDA including minority interest is useful to our investors and other parties for these same reasons.

EBITDA including minority interest should not be used as a substitute for net income or for net cash provided by operating activities prepared in accordance with GAAP. It should also be noted that EBITDA including minority interest may not be comparable to similarly titled measures used by other companies and, furthermore, that it excludes expenditures for debt financing, taxes and future capital requirements that are essential to our ongoing business operations. For these reasons, EBITDA including minority interest is of value to management and

investors only as a supplement to, and not in lieu of, GAAP results. EBITDA including minority interest is derived from the statements of income (loss) as follows:

	<b>2008</b>	<b>Year Ended December 31,</b>			<b>2004(a)</b>
		<b>2007</b>	<b>2006</b>	<b>2005</b>	
		<b>(Millions)</b>			
Net income (loss)	\$ (415)	\$ (5)	\$ 49	\$ 56	\$ 9
Minority interest	10	10	6	2	4
Income tax expense (benefit)	289	83	5	26	(21)
Interest expense, net of interest capitalized	113	164	136	133	178
Depreciation and amortization of other intangibles	222	205	184	177	177
Total EBITDA including minority interest	\$ 219	\$ 457	\$ 380	\$ 394	\$ 347

(d) For purposes of computing this ratio, earnings generally consist of income before income taxes and fixed charges excluding capitalized interest. Fixed charges consist of interest expense, the portion of rental expense considered representative of the interest factor and capitalized interest. Earnings were insufficient to cover fixed charges by \$121 million for the year ended December 31, 2008 and by \$9 million for the year ended December 31, 2004. See Exhibit 12 to this Form 10-K for the calculation of this ratio.

**Table of Contents**

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

As you read the following review of our financial condition and results of operations, you should also read our consolidated financial statements and related notes beginning on page 69.

**Executive Summary**

We are one of the world's leading manufacturers of automotive emission control and ride control products and systems. We serve both original equipment (OE) vehicle designers and manufacturers and the repair and replacement markets, or aftermarket, globally through leading brands, including Monroe<sup>®</sup>, Rancho<sup>®</sup>, Clevite<sup>®</sup> Elastomers and Fric Rot<sup>™</sup> ride control products and Walker<sup>®</sup>, Fonos<sup>™</sup>, and Gillet<sup>™</sup> emission control products. Worldwide we serve more than 37 different original equipment manufacturers, and our products or systems are included on eight of the top 10 passenger car models produced for sale in Europe and eight of the top 10 light truck models produced for sale in North America for 2008. Our aftermarket customers are comprised of full-line and specialty warehouse distributors, retailers, jobbers, installer chains and car dealers. We operate 83 manufacturing facilities worldwide and employ approximately 21,000 people to service our customers' demands.

The recent unprecedented deterioration in the global economy and global credit markets has negatively impacted global business activity in general, and specifically the automotive industry in which we operate. The market turmoil and tightening of credit, as well as the recent and dramatic decline in the housing market in the United States and Western Europe, have led to a lack of consumer confidence evidenced by a rapid decline in light vehicle purchases in 2008. Light vehicle production decreased by 16 percent in North America and five percent in Europe in 2008 from 2007 levels. General Motors, Ford and Chrysler in particular are burdened with substantial structural cost, such as pension and healthcare, that have impacted their profitability, and may ultimately result in severe financial difficulty, including bankruptcy.

In response to current economic conditions, some of our customers are expected to eliminate certain light vehicle models in order to remain financially viable. Changes in the models produced by our customers may have an adverse effect on our market share. Additionally, while we expect that light vehicle production volumes will recover in future years, continued declines in consumer demand may have an adverse effect on the financial condition of our OE customers, and on our future results of operations.

General Motors, Ford and Chrysler represented 20%, 11% and 2%, respectively, of our 2008 net sales and operating revenues. As of December 31, 2008, we had net receivables due from General Motors, Ford and Chrysler in North America that totaled \$142 million. Financial difficulties at any of our major customers could have an adverse impact on the level of our future revenues and collection of our receivables if such customers were unable to pay for the products we provide or we experience a loss of, or significant reduction in, business from such customers. In addition, a bankruptcy filing by a significant customer could result in a condition of default under our U.S. accounts receivables securitization agreement, which would have an adverse effect on our liquidity.

Continued deterioration in the industry, or the bankruptcy or one or more of our major customers, may have an impact on our ability to meet future financial covenants which would require us to enter into negotiations with our senior credit lenders to request additional covenant relief. Such conditions and events may also result in incremental charges related to impairment of goodwill, intangible assets and long-lived assets, and in charges to record an additional valuation allowance against our deferred tax assets.

In the event that such financial difficulties or the bankruptcy of one of our major customers diminishes our future revenues or collection of receivables, we would pursue a range of actions to meet our cash flow needs. Such actions

include additional restructuring initiatives and other cost reductions, sales of assets, reductions to working capital and capital spending, issuance of equity and other alternatives to enhance our financial and operating position.

Factors that continue to be critical to our success include winning new business awards, managing our overall global manufacturing footprint to ensure proper placement and workforce levels in line with business

## **Table of Contents**

needs, maintaining competitive wages and benefits, maximizing efficiencies in manufacturing processes, fixing or eliminating unprofitable businesses and reducing overall costs. In addition, our ability to adapt to key industry trends, such as a shift in consumer preferences to other vehicles in response to higher fuel costs and other economic and social factors, increasing technologically sophisticated content, changing aftermarket distribution channels, increasing environmental standards and extended product life of automotive parts, also play a critical role in our success. Other factors that are critical to our success include adjusting to economic challenges such as increases in the cost of raw materials and our ability to successfully reduce the impact of any such cost increases through material substitutions, cost reduction initiatives and other methods.

We have a substantial amount of indebtedness. As such, our ability to generate cash both to fund operations and service our debt is also a significant area of focus for our company. See *Liquidity and Capital Resources* below for further discussion of cash flows and *Risk Factors* included in Item 1A.

Total revenues for 2008 were \$5.9 billion, a four percent decrease compared to 2007. Excluding the impact of currency and substrate sales, revenue was down \$177 million, or four percent, driven primarily by lower OE production in North America, Europe and China and lower European aftermarket sales. Partially offsetting these declines were increased North American aftermarket sales and higher sales in South America and India.

Gross margin for 2008 was 14.4 percent, down 1.4 percentage points from 15.8 percent in 2007. Lower OE production volumes, the vehicle mix shift away from light trucks, manufacturing fixed cost absorption and currency losses negatively impacted overall gross margin. Partially offsetting these declines were the contributions from our new platform launches and lower restructuring charges.

Selling, general and administrative expense was down \$7 million in 2008, at \$392 million, including \$22 million in restructuring and restructuring-related expense and \$7 million in aftermarket changeover costs, compared to \$399 million in 2007 which included \$3 million in restructuring and restructuring-related expense and \$5 million in aftermarket changeover costs. Lower administrative costs and intense efforts to cut discretionary spending drove the improvement. Engineering expense was \$127 million and \$114 million in 2008 and 2007, respectively, as we continued to make strategic investments in preparation for new platform launches and in the technology necessary for capturing future growth opportunities. In total, we reported selling, general, administrative and engineering expenses in 2008 at 8.8 percent of revenues, as compared to 8.3 percent of revenues in 2007.

Earnings before interest expense, taxes and minority interest ( EBIT ) was a loss of \$3 million for 2008 compared to earnings of \$252 million in 2007. Lower OE production, manufacturing fixed cost absorption, higher depreciation, restructuring and aftermarket changeover costs, the impact of the goodwill impairment charge and the negative impact of currency more than accounted for the year-over-year decline. Partially offsetting the decline were the contributions from our new platform launches, lower selling, general and administrative costs, and savings from our restructuring activities.

## **Results from Operations**

### ***Net Sales and Operating Revenues for Years 2008 and 2007***

The following tables reflect our revenues for the years of 2008 and 2007. We present these reconciliations of revenues in order to reflect the trend in our sales in various product lines and geographic regions separately from the effects of doing business in currencies other than the U.S. dollar. We have not reflected any currency impact in the 2007 table since this is the base period for measuring the effects of currency during 2008 on our operations. We believe investors find this information useful in understanding period-to-period comparisons in our revenues.

Additionally, we show the component of our revenue represented by substrate sales in the following table. While we generally have primary design, engineering and manufacturing responsibility for OE emission control systems, we do not manufacture substrates. Substrates are porous ceramic filters coated with a catalyst precious metals such as platinum, palladium and rhodium. These are supplied to us by Tier 2 suppliers and directed by our OE customers. We generally earn a small margin on these components of the

**Table of Contents**

system. As the need for more sophisticated emission control solutions increases to meet more stringent environmental regulations, and as we capture more diesel aftertreatment business, these substrate components have been increasing as a percentage of our revenue. While these substrates dilute our gross margin percentage, they are a necessary component of an emission control system. We view the growth of substrates as a key indicator that our value-add content in an emission control system is moving toward the higher technology hot-end gas and diesel business.

Our value-add content in an emission control system includes designing the system to meet environmental regulations through integration of the substrates into the system, maximizing use of thermal energy to heat up the catalyst quickly, efficiently managing airflow to reduce back pressure as the exhaust stream moves past the catalyst, managing the expansion and contraction of the emission control system components due to temperature extremes experienced by an emission control system, using advanced acoustic engineering tools to design the desired exhaust sound, minimizing the opportunity for the fragile components of the substrate to be damaged when we integrate it into the emission control system and reducing unwanted noise, vibration and harshness transmitted through the emission control system.

We present these substrate sales separately in the following table because we believe investors utilize this information to understand the impact of this portion of our revenues on our overall business and because it removes the impact of potentially volatile precious metals pricing from our revenues. While our original equipment customers generally assume the risk of precious metals pricing volatility, it impacts our reported revenues. Excluding substrate catalytic converter and diesel particulate filter sales removes this impact.

**Year Ended December 31, 2008**

	<b>Revenues</b>	<b>Currency Impact</b>	<b>Revenues Excluding Currency (Millions)</b>	<b>Substrate Sales Excluding Currency</b>	<b>Revenues Excluding Currency and Substrate Sales</b>
North America Original Equipment					
Ride Control	\$ 493	\$ (5)	\$ 498	\$	\$ 498
Emission Control	1,591	(2)	1,593	773	820
Total North America Original Equipment	2,084	(7)	2,091	773	1,318
North America Aftermarket					
Ride Control	390		390		390
Emission Control	156		156		156
Total North America Aftermarket	546		546		546
Total North America	2,630	(7)	2,637	773	1,864
Europe Original Equipment					
Ride Control	479	27	452		452
Emission Control	1,487	54	1,433	498	935
Total Europe Original Equipment	1,966	81	1,885	498	1,387
Europe Aftermarket					
Ride Control	213	10	203		203
Emission Control	190	7	183		183



Edgar Filing: TENNECO INC - Form 10-K

Total Europe Aftermarket	403	17	386		386
South America & India	389	17	372	52	320
Total Europe, South America & India	2,758	115	2,643	550	2,093
Asia	342	29	313	101	212
Australia	186	6	180	15	165
Total Asia Pacific	528	35	493	116	377
Total Tenneco	\$ 5,916	\$ 143	\$ 5,773	\$ 1,439	\$ 4,334

**Table of Contents**

	<b>Year Ended December 31, 2007</b>				
	<b>Revenues</b>	<b>Currency Impact</b>	<b>Revenues Excluding Currency (Millions)</b>	<b>Substrate Sales Excluding Currency</b>	<b>Revenues Excluding Currency and Substrate Sales</b>
North America Original Equipment					
Ride Control	\$ 514	\$	\$ 514	\$	\$ 514
Emission Control	1,850		1,850	924	926
<b>Total North America Original Equipment</b>	<b>2,364</b>		<b>2,364</b>	<b>924</b>	<b>1,440</b>
North America Aftermarket					
Ride Control	385		385		385
Emission Control	152		152		152
<b>Total North America Aftermarket</b>	<b>537</b>		<b>537</b>		<b>537</b>
<b>Total North America</b>	<b>2,901</b>		<b>2,901</b>	<b>924</b>	<b>1,977</b>
Europe Original Equipment					
Ride Control	427		427		427
Emission Control	1,569		1,569	556	1,013
<b>Total Europe Original Equipment</b>	<b>1,996</b>		<b>1,996</b>	<b>556</b>	<b>1,440</b>
Europe Aftermarket					
Ride Control	201		201		201
Emission Control	207		207		207
<b>Total Europe Aftermarket</b>	<b>408</b>		<b>408</b>		<b>408</b>
South America & India	333		333	41	292
<b>Total Europe, South America and India</b>	<b>2,737</b>		<b>2,737</b>	<b>597</b>	<b>2,140</b>
Asia	352		352	125	227
Australia	194		194	27	167
<b>Total Asia Pacific</b>	<b>546</b>		<b>546</b>	<b>152</b>	<b>394</b>
<b>Total Tenneco</b>	<b>\$ 6,184</b>	<b>\$</b>	<b>\$ 6,184</b>	<b>\$ 1,673</b>	<b>\$ 4,511</b>

Revenues from our North American operations decreased \$271 million in 2008 compared to 2007. Higher aftermarket sales were more than offset by lower North American OE revenues. North American OE emission control revenues were down \$259 million in 2008. Excluding substrate sales and currency, revenues were down \$106 million compared to last year. This decrease was primarily due to a 16% year-over-year decline in industry production volumes, including a temporary stop of production on the Toyota Tundra, as well as significant reduction in customer light truck production which included the Ford Super Duty and F150, GMT 900 and the Chevrolet Trailblazer and GMC Envoy. North American OE ride control revenues for 2008 were down \$21 million from the prior year or down \$16 million excluding unfavorable currency. Revenues of \$84 million from our recently acquired Kettering, Ohio

ride-control operations helped offset the significantly lower light truck production. Our total North American OE revenues, excluding substrate sales and currency, decreased nine percent in 2008 compared to 2007. The North American light truck production rate decreased 25 percent while production rates for passenger cars decreased three percent. Aftermarket revenues for North America were \$546 million in 2008, an increase of \$9 million compared to the prior year, driven by higher volumes in both product lines as well as higher pricing to offset material cost increases. Aftermarket ride control revenues increased one percent in 2008 while aftermarket emission control revenues increased three percent in 2008.

Our European, South American and Indian segment's revenues increased \$21 million or one percent in 2008 compared to last year. Total Europe OE revenues were \$1,966 million, down one percent from last year. Excluding favorable currency and substrate sales, total European OE revenue was down four percent while total light vehicle production for Europe was down five percent. Europe OE emission control revenues decreased five percent to \$1,487 million from \$1,569 million in the prior year. Excluding substrate sales and a favorable impact of \$54 million due to currency, Europe OE emission control revenues decreased eight percent from 2007, primarily

**Table of Contents**

due to lower volumes on the Opel Astra and Vectra, the BMW 3 Series and Volvo. Improved volumes on the BMW 1 series, VW Golf, the new Jaguar XF, and the Ford Mondea and C-Max helped partially offset the emission control decrease. Europe OE ride control revenues of \$479 million in 2008 were up 12 percent year-over-year. Excluding currency, revenues increased by six percent in 2008 due to favorable volumes on the Suzuki Splash, VW Passat and Transporter, Ford Focus, the new Mazda 2 and Mercedes C-class. Also benefiting 2008 Europe OE ride control revenues were \$18 million from our recently acquired suspension business of Gruppo Marzocchi. European aftermarket revenues decreased \$5 million in 2008 compared to last year. When adjusted for currency, aftermarket revenues were down \$22 million year-over-year. Excluding the \$10 million favorable impact of currency, ride control aftermarket revenues were \$2 million better when compared to prior year. Emission control aftermarket revenues were down \$24 million, excluding \$7 million in currency benefit, due to overall market declines. South American and Indian revenues were \$389 million during 2008, compared to \$333 million in the prior year. Stronger OE and aftermarket sales and currency appreciation drove this increase.

Revenues from our Asia Pacific segment decreased \$18 million to \$528 million in 2008 compared to \$546 million in 2007. Excluding the impact of substrate sales and currency, revenues decreased to \$377 million from \$394 million in the prior year. Asian revenues for 2008 were \$342 million, down three percent from last year. Although overall China OE production was up slightly, GM, Volkswagen, Ford and Brilliance, our largest customers in this region, all took unplanned downtime during the year. Revenues for Australia were down \$8 million, to \$186 million in 2008 compared to \$194 million in the prior year. Excluding substrate sales and favorable currency of \$6 million, Australian revenue was down \$2 million versus 2007.

**Net Sales and Operating Revenues for Years 2007 and 2006**

The following tables reflect our revenues for the years of 2007 and 2006. See *Net Sales and Operating Revenues for Years 2008 and 2007* for a description of why we present these reconciliations of revenue.

**Year Ended December 31, 2007**

	<b>Revenues</b>	<b>Currency Impact</b>	<b>Revenues Excluding Currency (Millions)</b>	<b>Substrate Sales Excluding Currency</b>	<b>Revenues Excluding Currency and Substrate Sales</b>
North America Original Equipment					
Ride Control	\$ 514	\$	\$ 514	\$	\$ 514
Emission Control	1,850	5	1,845	924	921
<b>Total North America Original Equipment</b>	<b>2,364</b>	<b>5</b>	<b>2,359</b>	<b>924</b>	<b>1,435</b>
North America Aftermarket					
Ride Control	385		385		385
Emission Control	152		152		152
<b>Total North America Aftermarket</b>	<b>537</b>		<b>537</b>		<b>537</b>
<b>Total North America</b>	<b>2,901</b>	<b>5</b>	<b>2,896</b>	<b>924</b>	<b>1,972</b>
Europe Original Equipment					
Ride Control	427	37	390		390

Edgar Filing: TENNECO INC - Form 10-K

Emission Control	1,569	120	1,449	511	938
Total Europe Original Equipment	1,996	157	1,839	511	1,328
Europe Aftermarket					
Ride Control	201	15	186		186
Emission Control	207	16	191		191
Total Europe Aftermarket	408	31	377		377
South America & India	333	24	309	39	270
Total Europe, South America & India	2,737	212	2,525	550	1,975
Asia	352	15	337	123	214
Australia	194	23	171	25	146
Total Asia Pacific	546	38	508	148	360
Total Tenneco	\$ 6,184	\$ 255	\$ 5,929	\$ 1,622	\$ 4,307

**Table of Contents**

	<b>Year Ended December 31, 2006</b>				
	<b>Revenues</b>	<b>Currency Impact</b>	<b>Revenues Excluding Currency (Millions)</b>	<b>Substrate Sales Excluding Currency</b>	<b>Revenues Excluding Currency and Substrate Sales</b>
North America Original Equipment					
Ride Control	\$ 483	\$	\$ 483	\$	\$ 483
Emission Control	928		928	272	656
<b>Total North America Original Equipment</b>	<b>1,411</b>		<b>1,411</b>	<b>272</b>	<b>1,139</b>
North America Aftermarket					
Ride Control	383		383		383
Emission Control	162		162		162
<b>Total North America Aftermarket</b>	<b>545</b>		<b>545</b>		<b>545</b>
<b>Total North America</b>	<b>1,956</b>		<b>1,956</b>	<b>272</b>	<b>1,684</b>
Europe Original Equipment					
Ride Control	380		380		380
Emission Control	1,264		1,264	519	745
<b>Total Europe Original Equipment</b>	<b>1,644</b>		<b>1,644</b>	<b>519</b>	<b>1,125</b>
Europe Aftermarket					
Ride Control	178		178		178
Emission Control	211		211		211
<b>Total Europe Aftermarket</b>	<b>389</b>		<b>389</b>		<b>389</b>
South America & India	272		272	32	240
<b>Total Europe, South America and India</b>	<b>2,305</b>		<b>2,305</b>	<b>551</b>	<b>1,754</b>
Asia	246		246	85	161
Australia	175		175	19	156
<b>Total Asia Pacific</b>	<b>421</b>		<b>421</b>	<b>104</b>	<b>317</b>
<b>Total Tenneco</b>	<b>\$ 4,682</b>	<b>\$</b>	<b>\$ 4,682</b>	<b>\$</b>	<b>\$ 927</b>
				<b>\$</b>	<b>3,755</b>

Revenues from our North American operations increased \$945 million in 2007 compared to 2006. Higher sales from new North American OE platform launches more than offset lower aftermarket revenues. Total North American OE revenues increased 68 percent to \$2,364 million in 2007 from \$1,411 million in 2006. North American OE emission control revenues were up 99 percent to \$1,850 million, from \$928 million in 2006. Substrate emission control sales excluding currency increased 239 percent to \$924 million, from \$272 million in 2006. Excluding substrate sales and currency impact, OE emission control sales increased 41 percent from 2006. This increase was primarily due to significant new OE platform launches which included GM's Lambda crossover, the Ford Super Duty gas and diesel pick-up trucks, GM's light duty pick-up trucks and vans with Duramax diesel engines, Toyota's Tundra gasoline

pick-up truck, the International Truck and Engine medium duty diesel platform, GM's three-quarter ton gasoline powered pick-up trucks, and the Dodge Ram three-quarter ton diesel pick-up truck. North American OE ride control revenues for 2007 increased seven percent from 2006. Expanded ride-control content on the GMT900 platform, the launch of the GMT360 platform, and strong sales of Chrysler's Jeep Wrangler, and Ford Ranger and Superduty, was partially offset by lower ride-control commercial vehicle sales. Total North American light vehicle production fell by two percent in 2007 with a seven percent production decrease in passenger cars being partially offset by a three percent increase in light truck production. Aftermarket revenues for North America were \$537 million in 2007, representing a decrease of \$8 million compared to 2006. Volume decreases on our continuing business were partially offset by new customer wins and price increases to recover steel costs.

**Table of Contents**

Aftermarket ride control revenues were \$385 million in 2007, an increase of \$2 million from 2006. Aftermarket emission control revenues were \$152 million in 2007, down \$10 million from 2006.

Our European, South American and Indian segment's revenues increased \$432 million or 19 percent in 2007 compared to 2006. Total Europe OE revenues were \$1,996 million, up 21 percent from 2006. Excluding favorable currency and substrate sales, total European OE revenue was up 18 percent while total light vehicle production for Europe was up six percent. Europe OE emission control revenues increased 24 percent to \$1,569 million from \$1,264 million in 2006. Excluding the impact of \$120 million of favorable currency and \$511 million in substrate sales, OE emission control revenues increased 26 percent from 2006 due to a growing position on the hot-end of exhaust platforms, new launches and higher OE volumes on the BMW 1 and 3-Series, Daimler's Sprinter, C-Class, and Smart, Volvo's V50 and V70, PSA's Picasso and Ford's Mondeo. Europe OE ride control revenues increased by \$47 million in 2007, up 12 percent from \$380 million in 2006. Excluding currency, revenues increased by three percent in 2007 due to improved volumes on the Ford Focus, Ford Galaxy and Mondeo with electronic shocks, Dacia Logan, VW Transporter, Mazda 2, and Mercedes C-Class with electronic shocks, partially offset with lower volumes on the Audi A4 and a shift in some production for the Audi A6 to our Chinese operations. European aftermarket sales were \$408 million in 2007 compared to \$389 million in 2006. Excluding \$31 million of favorable currency, European aftermarket revenues declined three percent in 2007 compared to 2006. Ride control aftermarket revenues, excluding the impact of currency, were up five percent from 2006, reflecting strong volumes and improved pricing. Emission control aftermarket revenues were down nine percent, excluding \$16 million in currency benefit, due to lower volumes which more than offset improved pricing. South American and Indian revenues were \$333 million in 2007, compared to \$272 million in 2006. Stronger OE and aftermarket sales and currency appreciation drove this increase.

Revenues from our Asia Pacific segment, which includes Asia and Australia, increased \$125 million to \$546 million in 2007, as compared to \$421 million in 2006. Excluding the impact of substrate sales and currency, Asian revenues increased \$53 million in 2007 compared to 2006 driven by higher OE sales in China due to new launches and higher emission control volumes on existing platforms. In Australia, industry OE production declines negatively impacted revenues. Excluding substrate sales and favorable currency of \$23 million, Australian revenue was down \$10 million due to lower volumes.

***Earnings before Interest Expense, Income Taxes and Minority Interest ( EBIT ) for Years 2008 and 2007***

	<b>Year Ended December 31,</b>		
	<b>2008</b>	<b>2007</b>	<b>Change</b>
	<b>(Millions)</b>		
North America	\$ (107)	\$ 120	\$ (227)
Europe, South America and India	85	99	(14)
Asia Pacific	19	33	(14)
	\$ (3)	\$ 252	\$ (255)



**Table of Contents**

The EBIT results shown in the preceding table include the following items, discussed below under **Restructuring and Other Charges** and **Liquidity and Capital Resources - Capitalization**, which have an effect on the comparability of EBIT results between periods:

	<b>Year Ended December 31, 2008      2007 (Millions)</b>	
North America		
Restructuring and restructuring-related expenses	\$ 16	\$ 3
New aftermarket customer changeover costs(1)	7	5
Goodwill impairment charge(2)	114	
Europe, South America and India		
Restructuring and restructuring-related expenses	22	22
Asia Pacific		
Restructuring and restructuring-related expenses	2	

(1) Represents costs associated with changing new aftermarket customers from their prior suppliers to an inventory of our products. Although our aftermarket business regularly incurs changeover costs, we specifically identify in the table above those changeover costs that, based on the size or number of customers involved, we believe are of an unusual nature for the period in which they were incurred.

(2) Non-cash asset impairment charge related to goodwill for Tenneco's 1996 acquisition of Clevite Industries.

EBIT for North American operations was a loss of \$107 million in 2008, a decrease of \$227 million from \$120 million of earnings one year ago. OE industry production volume declines and unfavorable product mix from reduced sales on light trucks negatively impacted EBIT by \$89 million. SUV and pick-up truck business accounted for 54 percent of 2008 revenues compared to 72 percent of 2007 revenues. Lower manufacturing cost absorption driven by significant downward changes to customer production schedules reduced EBIT by an additional \$31 million. Higher depreciation expense related to capital expenditures to support our sizeable 2007 emission control platform launches further reduced EBIT. North America's 2008 EBIT was also negatively impacted by \$16 million in restructuring and restructuring-related costs, goodwill impairment charge of \$114 million, changeover costs for new aftermarket customers of \$7 million and unfavorable currency exchange of \$20 million, related to the Mexican Peso and Canadian dollar. These decreases were partially offset by higher aftermarket volumes and new OE platform launches in both emission and ride control business which combined to impact EBIT favorably by \$29 million as well as focused spending reduction efforts to help counter the eroding North American industry environment, mainly in lower selling, general and administrative costs. Restructuring and restructuring-related costs of \$3 million and changeover costs for new aftermarket customers of \$5 million were included in 2007 EBIT.

Our European, South American and Indian segment's EBIT was \$85 million for 2008, down \$14 million from \$99 million in 2007. OE production volume declines, unfavorable vehicle mix, lower aftermarket sales volumes and related manufacturing fixed cost absorption had a combined \$45 million unfavorable impact on 2008 EBIT. Currency further reduced EBIT by \$6 million. These decreases were partially offset by the impact of our new OE platform launches, improved pricing, restructuring savings, and reduced SG&A spending due to discretionary spending controls and overhead reduction efforts. Restructuring and restructuring-related expenses of \$22 million were included in EBIT for each of 2008 and 2007.

EBIT for our Asia Pacific segment, which includes Asia and Australia, decreased \$14 million to \$19 million in 2008 compared to \$33 million in the prior year. Lower OE production volumes and the related manufacturing fixed cost absorption combined to reduce EBIT by \$12 million. Favorable currency of \$4 million partially offset these declines. Included in Asia Pacific's 2008 EBIT were \$2 million in restructuring and restructuring-related expenses.

Currency had a \$22 million unfavorable impact on overall company EBIT for 2008, as compared to the prior year.

**Table of Contents****EBIT for Years 2007 and 2006**

	<b>Year Ended December 31,</b>		
	<b>2007</b>	<b>2006</b>	<b>Change</b>
	<b>(Millions)</b>		
North America	\$ 120	\$ 103	\$ 17
Europe, South America and India	99	81	18
Asia Pacific	33	12	21
	<b>\$ 252</b>	<b>\$ 196</b>	<b>\$ 56</b>

The EBIT results shown in the preceding table include the following items, discussed below under **Restructuring and Other Charges** and **Liquidity and Capital Resources - Capitalization**, which have an effect on the comparability of EBIT results between periods:

	<b>Year Ended December 31,</b>	
	<b>2007</b>	<b>2006</b>
	<b>(Millions)</b>	
North America		
Restructuring and restructuring-related expenses	\$ 3	\$ 13
New aftermarket customer changeover costs(1)	5	6
Pension replacement(2)		(7)
Reserve for receivable from former affiliate		3
Europe, South America and India		
Restructuring and restructuring-related expenses	22	8
Asia Pacific		
Restructuring and restructuring-related expenses		6

- (1) Represents costs associated with changing new aftermarket customers from their prior suppliers to an inventory of our products. Although our aftermarket business regularly incurs changeover costs, we specifically identify in the table above those changeover costs that, based on the size or number of customers involved, we believe are of an unusual nature for the period in which they were incurred.
- (2) In August 2006, we announced that we were freezing future accruals under our U.S. defined benefit pension plans for substantially all our U.S. salaried and non-union hourly employees effective December 31, 2006. In lieu of those benefits, we are offering additional benefits under our defined contribution plan.

EBIT for North American operations increased to \$120 million from \$103 million in 2006. The improvement was primarily driven by the \$22 million impact of higher OE volumes due to new platform launches, lower selling, general and administrative expenses, manufacturing efficiencies of \$25 million driven by Lean and Six Sigma, lower changeover cost and lower restructuring costs of \$10 million. These increases were partially offset by higher steel

costs of \$38 million, incremental launch costs of \$2 million, increased spending on engineering and a softer aftermarket. Included in North America's 2007 EBIT is \$3 million in restructuring and restructuring-related expenses and \$5 million in customer changeover costs. Included in North America's 2006 EBIT were \$13 million in restructuring and restructuring-related expenses, \$6 million in customer changeover costs, \$3 million of expense in connection with booking a reserve for a receivable from a former affiliate and a \$7 million benefit due to changes to our U.S. retirement plans for salaried and non-union hourly employees described above. Currency had a \$1 million favorable impact on North American EBIT for 2007.

Our European, South American and Indian segment's EBIT was \$99 million for 2007, up \$18 million from \$81 million in 2006. Higher OE volumes on existing business and new platform launches had a combined \$28 million impact, favorable currency of \$10 million, manufacturing efficiencies of \$43 million gained through Lean manufacturing and Six Sigma programs drove the improvement. These increases were

**Table of Contents**

partially offset by material cost increases which included \$26 million of higher steel costs, higher SG&A of \$8 million, net alloy surcharge of \$10 million and increased spending on engineering of \$5 million. Restructuring and restructuring-related expenses of \$22 million were included in EBIT of 2007 compared to \$8 million in 2006.

EBIT for our Asia Pacific segment, which includes Asia and Australia, increased \$21 million to \$33 million in 2007 compared to \$12 million in 2006. Increased volume had an impact of \$10 million driven primarily by OE production and new launches in China, reduced restructuring charges of \$6 million and favorable currency of \$4 million was partially offset by \$5 million of increased steel costs and reduced light vehicle production in Australia. Included in Asia Pacific's 2006 EBIT were \$6 million in restructuring and restructuring-related expenses.

Currency had a \$15 million favorable impact on overall company EBIT for 2007, as compared to 2006.

***EBIT as a Percentage of Revenue for Years 2008, 2007 and 2006***

	<b>Year Ended December 31,</b>		
	<b>2008</b>	<b>2007</b>	<b>2006</b>
North America	(4)%	4%	5%
Europe, South America and India	3%	4%	4%
Asia Pacific	4%	6%	3%
Total Tenneco		4%	4%

In North America, EBIT as a percentage of revenue for 2008 was down eight percentage points from prior year levels. OE industry production volume declines, unfavorable product mix, lower manufacturing cost absorption driven by significant downward changes to customer production schedules, goodwill impairment charge, higher depreciation expense, and unfavorable currency impact drove the decrease. During 2008, North American results included higher restructuring and restructuring-related charges and aftermarket changeover costs. In Europe, South America and India, EBIT margin for 2008 was down one percentage point from prior year. Lower OE production volumes and the related manufacturing fixed cost absorption, aftermarket sales declines, unfavorable currency impact and increased investments in engineering were partially offset by new platform launches. Restructuring and restructuring-related expenses were the same as prior year. EBIT as a percentage of revenue for our Asia Pacific segment decreased two percentage points in 2008 versus the prior year. OE production volume decreases and manufacturing fixed cost absorption, drove the decline. Favorable currency partially offset the decline in EBIT margin. Asia Pacific 2008 results included higher restructuring and restructuring-related expenses over prior year.

In North America, EBIT as a percentage of revenue for 2007 was down one percentage point from 2006 levels. The benefits from our new platform launches, lower selling, general and administrative expenses and manufacturing efficiencies were more than offset by the margin impact from an increase in lower margin substrate sales, lower North American light vehicle production volumes, higher material costs, incremental launch costs, increased investments in engineering and soft aftermarket conditions. During 2007, North American results included lower restructuring and restructuring-related charges and lower aftermarket changeover costs. In Europe, South America and India, EBIT margin for 2007 was flat with 2006. Higher European OE volumes on existing business, new platform launches, favorable currency and manufacturing efficiencies were offset by higher material costs and restructuring charges. Restructuring and restructuring-related expenses were higher than 2006. EBIT as a percentage of revenue for our Asia Pacific segment increased three percentage points in 2007 versus 2006. OE production increases in China, favorable currency and benefits from 2006's restructuring activities drove the improvement. Lower restructuring and restructuring-related expenses also benefited EBIT margin.

***Interest Expense, Net of Interest Capitalized***

We reported interest expense in 2008 of \$113 million net of interest capitalized of \$6 million (\$102 million in our U.S. operations and \$11 million in our foreign operations), down from \$164 million (\$162 million

**Table of Contents**

in our U.S. operations and \$2 million in our foreign operations) a year ago. The requirement to mark to market the interest rate swaps described below decreased interest expense by \$7 million for 2008, versus a decrease to expense of \$6 million in 2007. Included in the 2007 results was \$5 million related to a charge to expense the unamortized portion of debt issuance costs related to our amended and restated senior credit facility in connection with our debt refinancing in the first quarter of 2007 and \$21 million related to a net charge to expense the costs associated with the tender premium and fees, the write-off of deferred debt issuance costs and the write-off of previously recognized debt issuance premium in connection with our November 2007 refinancing transaction. Interest expense decreased in 2008 compared to the prior year as a result of a decrease in our variable and fixed rate debt and lower rates on both our variable rate debt and a portion of our fixed rate debt.

We reported interest expense of \$164 million in 2007 compared to \$136 million (\$134 million in our U.S. operations and \$2 million in our foreign operations) in 2006, net of interest capitalized of \$6 million in each year. Of the increase, \$5 million related to a charge to expense the unamortized portion of debt issuance costs related to our 2003 amended and restated senior credit facility in connection with our debt refinancing in the first quarter of 2007 and \$21 million related to a net charge to expense the costs associated with the tender premium and fees, the write-off of deferred debt issuance costs and the write-off of previously recognized debt issuance premium in connection with our November 2007 refinancing transaction. The requirement to mark the fixed-to-floating interest rate swaps to market reduced interest expense by \$6 million in 2007 and increased interest expense by \$1 million in 2006. The remainder of the change was due to higher borrowing during the year to fund growth.

See more detailed explanations on our debt structure, prepayments and the amendment and restatement of our senior credit facility in March 2007 and our November 2007 refinancing transaction, and their impact on our interest expense, in *Liquidity and Capital Resources* *Capitalization* later in this *Management's Discussion and Analysis*.

In April 2004, we entered into fixed-to-floating interest rate swaps covering \$150 million of our fixed interest rate debt. The change in market value of these swaps is recorded as part of interest expense and other long-term assets or liabilities. On December 16, 2008, we terminated the swaps. In consideration for the termination of these interest rate swaps we received \$6 million in cash. Since entering into these swaps, we have realized a net cumulative benefit of \$8 million through December 16, 2008, in reduced interest payments. On December 31, 2008, we had \$1.010 billion in long-term debt obligations that have fixed interest rates. Of that amount, \$245 million is fixed through July 2013, \$500 million is fixed through November 2014, \$250 million is fixed through November 2015, and the remainder is fixed from 2009 through 2025. We also have \$397 million in long-term debt obligations that are subject to variable interest rates. See Note 6 to the consolidated financial statements of Tenneco Inc. and Consolidated Subsidiaries in Item 8.

***Income Taxes***

We reported income tax expense of \$289 million in 2008 which included \$244 million in tax charges primarily related to recording a valuation allowance against our U.S. deferred tax assets, repatriating cash from Brazil as a result of strong performance in South America over the past several years and changes in foreign tax rates. We reported \$83 million of income tax expense in 2007 which included \$56 million in tax charges primarily related to a \$66 million non-cash tax charge to realign the company's European ownership structure, partially offset by net tax benefits of \$10 million related to a reduction in foreign income tax rates and adjustments for prior year income tax returns. Income tax expense for 2006 was \$5 million which include tax benefits of \$15 million comprised of a FAS 109 adjustment, adjustments for prior year income tax returns, a Czech investment credit and resolution of tax issues with former affiliates.

***Restructuring and Other Charges***

Over the past several years we have adopted plans to restructure portions of our operations. These plans were approved by the Board of Directors and were designed to reduce operational and administrative overhead costs throughout the business. In the fourth quarter of 2001 our Board of Directors approved a restructuring



**Table of Contents**

plan, a project known as Project Genesis, which was designed to lower our fixed costs, relocate capacity, reduce our work force, improve efficiency and utilization, and better optimize our global footprint. We have subsequently engaged in various other restructuring projects related to Project Genesis. We incurred \$27 million in restructuring and restructuring-related costs during 2006, of which \$23 million was recorded in cost of sales and \$4 million was recorded in selling, general and administrative expense. We incurred \$25 million in restructuring and restructuring-related costs during 2007, of which \$22 million was recorded in cost of sales and \$3 million was recorded in selling, general and administrative expense. In 2008, we incurred \$40 million in restructuring and restructuring-related costs, of which \$17 million was recorded in cost of sales and \$23 million was recorded in selling, general, administrative and engineering expense. At December 31, 2008, our restructuring reserve was \$22 million, primarily related to actions announced in October 2008, including European head count reductions and North American facility closures and head count reductions, and the remaining obligations for the Wissembourg, France plant closure. At December 31, 2007, our restructuring reserve was \$16 million, primarily related to obligations for the Wissembourg, France plant closure.

Under the terms of our amended and restated senior credit agreement that took effect on March 16, 2007, we were allowed to exclude \$80 million of cash charges and expenses, before taxes, related to cost reduction initiatives incurred after March 16, 2007 from the calculation of the financial covenant ratios required under our senior credit facility. As of December 31, 2008, we had excluded \$62 million in allowable charges relating to restructuring initiatives against the \$80 million available under the terms of the March 2007 amended and restated senior credit facility.

On January 13, 2009, we announced that we will postpone closing an original equipment ride control plant in the United States as part of our current global restructuring program. We still expect, as announced in October 2008, the elimination of 1,100 positions. We now estimate that we will record up to \$31 million in charges, of which approximately \$25 million represents cash expenditures, in connection with the restructuring program announced in the fourth quarter of 2008. We recorded \$24 million of these charges in 2008 and expect to record the remaining \$7 million in 2009. We now expect to generate approximately \$58 million in annual savings beginning in 2009 related to this restructuring program. Various restructuring projects announced prior to the fourth quarter of 2008 are still being completed, and when complete, will generate an additional \$20 million in annual savings.

The February 2009 amendment resets the exclusion allowing us to exclude \$40 million of cash charges and expenses related to cost reduction initiatives incurred after February 23, 2009.

***Earnings (Loss) Per Share***

We reported a net loss of \$415 million or \$8.95 per diluted common share for 2008, as compared to a net loss of \$5 million or \$0.11 per diluted common share for 2007. Included in the results for 2008 were negative impacts from expenses related to our restructuring activities, new aftermarket customer changeover costs, a goodwill impairment charge and tax adjustments. The net impact of these items decreased earnings per diluted share by \$9.37. Included in the results for 2007 were negative impacts from expenses related to our restructuring activities, new aftermarket customer changeover costs, charges relating to refinancing activities and tax adjustments. The net impact of these items decreased earnings per diluted share by \$1.93.

We reported a net loss of \$5 million or \$0.11 per diluted common share for 2007, as compared to net income of \$49 million or \$1.05 per diluted common share for 2006. Included in the results for 2007 were negative impacts from expenses related to our restructuring activities, new aftermarket customer changeover costs, charges relating to refinancing activities and tax adjustments. The net impact of these items decreased earnings per diluted share by \$1.93. Included in the results for 2006 were negative impacts from expenses related to our restructuring activities, new aftermarket customer changeover costs and expense in connection with booking a reserve for a receivable from a

former affiliate, partially offset by a positive impact from tax adjustments and a benefit from replacing the defined benefit pension plans in the U.S. The net impact of these items decreased earnings per diluted share by \$0.10.

**Table of Contents****Dividends on Common Stock**

On January 10, 2001, our Board of Directors eliminated the quarterly dividend on our common stock. There are no current plans to reinstate a dividend on our common stock.

**Outlook**

In 2009, OE production schedules are projected to be at their lowest point in decades and the outlook for 2009 is uncertain. According to Global Insight, North American light vehicle production levels are expected to decline an estimated 24 percent in 2009 compared to 2008, with passenger car production levels expected to decrease by 26 percent and light trucks projected to decline by 22 percent. Light vehicle production for 2009 in Europe is projected by Global Insight to fall by 12 percent compared to 2008, with estimated production declines of 13 percent in Western Europe and 10 percent in Eastern Europe. Compared to 2008, Global Insight projects production to fall in South America by 15 percent, but will remain flat in India in 2009. Global Insight also projects that China's 2009 light vehicle production will increase by three percent over 2008. We anticipate that the global aftermarket for 2009 will be down as a result of the global economic crisis. We will continue to support our strong brands and aggressively pursue new customers, actions that we hope will help offset some of the softness in the aftermarket.

We will continue to closely watch market conditions, specifically the credit markets, unemployment rates and trends in light vehicle purchases by consumers. To address the impact of the current global economic conditions, we will focus on cost reduction and cash generation activities including aggressive global restructuring initiatives, continued reduced compensation and benefit actions, ongoing discretionary spending cuts and additional cash generating activities from working capital improvements, especially global inventory reductions and capital spending cuts. While we are tightly controlling engineering spending, we continue to support customer programs and technology needed for environmental mandates.

The outlook for the next several quarters and predictions regarding a recovery are uncertain. In the meantime, we will continue to plan conservatively, aggressively manage our cash and stay well-positioned for a recovery. Given these conditions, it is not possible at this time to provide any OE revenue guidance. Future global OE production projections are too unreliable for us to provide guidance regarding our OE revenue growth. However, we will continue to benefit from new stricter emissions regulations. Our highly competitive technology is driving content growth and new business over the next five years in traditional and adjacent markets including on and off-road commercial vehicles and locomotives.

***Cash Flows for 2008 and 2007***

	<b>Year Ended December 31, 2008      2007 (Millions)</b>	
Cash provided (used) by:		
Operating activities	\$ 160	\$ 158
Investing activities	(261)	(202)
Financing activities	58	(10)

***Operating Activities***

For 2008, operating activities provided \$160 million in cash compared to \$158 million in cash from last year. Cash used for working capital during 2008 was \$31 million versus \$83 million in 2007. Receivables provided cash of \$126 million compared to a use of cash of \$116 million in the prior year. The cash provided by receivables reflects an increase of \$22 million in securitized accounts receivable. Inventory cash flow represented a cash inflow of \$19 million during 2008 versus a cash outflow of \$66 million in the prior year. The improvement was primarily due to a significant decrease in cash used for inventories of catalytic converters sourced from South Africa. Accounts payable used cash of \$181 million compared to last year s

**Table of Contents**

cash inflow of \$100 million driven by the rapid decline in global production. Cash taxes were \$62 million for 2008, compared to \$60 million in the prior year.

One of our European subsidiaries receives payment from one of its OE customers whereby the accounts receivable are satisfied through the delivery of negotiable financial instruments. We may collect these financial instruments before their maturity date by either selling them at a discount or using them to satisfy accounts receivable that have previously been sold to a European bank. Any of these financial instruments which are not sold are classified as other current assets as they do not meet our definition of cash equivalents. The amount of these financial instruments that was collected before their maturity date and sold at a discount totaled \$23 million as of December 31, 2008, compared with \$15 million at the same date in 2007. No negotiable financial instruments were held by our European subsidiary as of December 31, 2008 or December 31, 2007.

In certain instances several of our Chinese subsidiaries receive payment from OE customers and satisfy vendor payments through the receipt and delivery of negotiable financial instruments. Financial instruments used to satisfy vendor payables and not redeemed totaled \$6 million and \$23 million at December 31, 2008 and 2007, respectively, and were classified as notes payable. Financial instruments received from OE customers and not redeemed totaled \$6 million and \$8 million at December 31, 2008 and 2007, respectively, and were classified as other current assets. One of our Chinese subsidiaries that issues its own negotiable financial instruments to pay its vendors is required to maintain a cash balance if they exceed certain credit limits with the financial institution that guarantees those financial instruments. A restricted cash balance was not required at that Chinese subsidiary as of December 31, 2008 and 2007.

The negotiable financial instruments received by one of our European subsidiaries and some of our Chinese subsidiaries are checks drawn by our OE customers and guaranteed by their banks that are payable at a future date. The use of these instruments for payment follows local commercial practice. Because negotiable financial instruments are financial obligations of our customers and are guaranteed by our customers' banks, we believe they represent a lower financial risk than the outstanding accounts receivable that they satisfy which are not guaranteed by a bank.

*Investing Activities*

Cash used for investing activities was \$59 million higher in 2008 compared to 2007. Cash payments for plant, property and equipment were \$233 million in 2008 versus payments of \$177 million in 2007. The increase of \$56 million in cash payments for plant, property and equipment was to support new business that has been awarded for 2010 and 2011. Cash of \$19 million was used to acquire ride control assets at Delphi's Kettering, Ohio location during 2008. In September 2008, we acquired Gruppo Marzocchi which resulted in a \$3 million cash inflow (\$4 million cash acquired net of \$1 million cash consideration paid). Cash of \$16 million was used to acquire Combustion Components Associates' ELIM-NO<sup>®</sup> technology during 2007. Cash payments for software-related intangible assets were \$15 million in 2008 compared to \$19 million in 2007.

*Financing Activities*

Cash flow from financing activities was a \$58 million inflow in 2008 compared to an outflow of \$10 million in 2007. The increase was mainly due to higher borrowings under our revolving credit facility.

*Cash Flows for 2007 and 2006*

<b>Year Ended</b>	
<b>December 31,</b>	
<b>2007</b>	<b>2006</b>

(Millions)

Cash provided (used) by:

Operating activities

\$ 158 \$ 203

Investing activities

(202) (172)

Financing activities

(10) 12

**Table of Contents***Operating Activities*

For the year ended December 31, 2007, cash flow provided from operating activities was \$158 million as compared to \$203 million in 2006. For 2007 cash used by working capital was \$83 million compared to cash provided of \$7 million for 2006. Receivables were a cash use of \$116 million for 2007, a \$92 million increase from 2006. Inventory was a use of cash of \$66 million compared to cash use of \$57 million in 2006. Inventory was up year-over-year due to the ramp-up of future platform launches. The year-over-year increase in the use of cash for both accounts receivable and inventory was primarily a result of working capital requirements for our new platform launches in North America. In addition to the higher level of receivables related to the revenue increase, we must carry higher inventory levels for these new platforms, a portion of which relates to higher value substrates sourced from South Africa. This inventory from South Africa increased our cash outflow from operating activities during 2007 by \$33 million. Accounts payable provided cash of \$100 million versus cash inflow of \$91 million in 2006. Cash interest payments of \$177 million in 2007 were higher than 2006 payments of \$137 million as a result of higher interest rates on our variable portion of debt, increased average borrowings, and costs related to our refinancing activities of \$26 million. Cash tax payments were \$60 million in 2007 compared to \$26 million in 2006. We made tax payments in 2007 to resolve audits related to prior years' operations and for separation from the old Tenneco packaging company. In addition, cash collected from former affiliates in 2006 offset other cash tax payments.

One of our European subsidiaries receives payment from one of its OE customers whereby the accounts receivable are satisfied through the delivery of negotiable financial instruments. We may collect these financial instruments before their maturity date by either selling them at a discount or using them to satisfy accounts receivable that have previously been sold to a European bank. Any of these financial instruments which are not sold are classified as other current assets as they do not meet our definition of cash equivalents. The amount of these financial instruments that was collected before their maturity date and sold at a discount totaled \$15 million at December 31, 2007 and \$26 million at December 31, 2006. No negotiable financial instruments were held by our European subsidiary as of December 31, 2007 or December 31, 2006.

In certain instances several of our Chinese subsidiaries receive payment from OE customers and satisfy vendor payments through the receipt and delivery of negotiable financial instruments. Financial instruments used to satisfy vendor payables and not redeemed totaled \$23 million and \$12 million at December 31, 2007 and 2006, respectively, and were classified as notes payable. Financial instruments received from OE customers and not redeemed totaled \$8 million and \$9 million at December 31, 2007 and 2006, respectively, and were classified as other current assets. One of our Chinese subsidiaries that issues its own negotiable financial instruments to pay its vendors is required to maintain a cash balance at a financial institution that guarantees those financial instruments. No financial instruments were outstanding at that Chinese subsidiary as of December 31, 2007. As of December 31, 2006 the required cash balance was less than \$1 million and was classified as cash and cash equivalents.

The negotiable financial instruments received by one of our European subsidiaries and some of our Chinese subsidiaries are checks drawn by our OE customers and guaranteed by their banks that are payable at a future date. The use of these instruments for payment follows local commercial practice. Because negotiable financial instruments are financial obligations of our customers and are guaranteed by our customers' banks, we believe they represent a lower financial risk than the outstanding accounts receivable that they satisfy which are not guaranteed by a bank.

*Investing Activities*

Cash used for investing activities was \$202 million in 2007, \$30 million greater than in 2006. In 2007, we received \$10 million in cash from the sale of assets. Cash payments for plant, property and equipment (PP&E) were \$177 million in 2007, equal to 2006. In 2007, we spent \$16 million to acquire Combustion Components Associates ELIM-NOx<sup>tm</sup> technology. Cash payments for software-related intangible assets were \$19 million in 2007 compared to

\$13 million in 2006.



**Table of Contents***Financing Activities*

Cash flow from financing activities was a \$10 million outflow in 2007 compared to an inflow of \$12 million in 2006. The primary reason for the change is debt issuance costs due to our long-term debt refinancing activities in 2007.

*Liquidity and Capital Resources**Capitalization*

	<b>Year Ended December 31,</b>		<b>% Change</b>
	<b>2008</b>	<b>2007</b>	
		<b>(Millions)</b>	
Short-term debt and maturities classified as current	\$ 49	\$ 46	7%
Long-term debt	1,402	1,328	6
Total debt	1,451	1,374	6
Total minority interest	31	31	
Shareholders' equity	(251)	400	NM
Total capitalization	\$ 1,231	\$ 1,805	(32)%

*General.* Short-term debt, which includes maturities classified as current and borrowings by foreign subsidiaries, was \$49 million and \$46 million as of December 31, 2008 and December 31, 2007, respectively. Borrowings under our revolving credit facilities, which are classified as long-term debt, were approximately \$239 million and \$169 million as of December 31, 2008 and December 31, 2007.

The 2008 decrease in shareholders' equity primarily resulted from \$127 million of translation of foreign balances into U.S. dollars and a net loss of \$415 million, primarily related to tax charges for a valuation allowance on deferred tax assets and an impairment charge for goodwill. While our book equity balance was negative at December 31, 2008, it had no effect on our business operations. We have no debt covenants that are based upon our book equity, and there are no other agreements that are adversely impacted by our negative book equity.

*Overview and Recent Transactions.* Our financing arrangements are primarily provided by a committed senior secured financing arrangement with a syndicate of banks and other financial institutions. The arrangement is secured by substantially all our domestic assets and pledges of up to 66 percent of the stock of certain first-tier foreign subsidiaries, as well as guarantees by our material domestic subsidiaries. As of December 31, 2008, the senior credit facility consisted of a five-year, \$150 million term loan A maturing in March 2012, a five-year, \$550 million revolving credit facility maturing in March 2012, and a seven-year \$130 million tranche B-1 letter of credit/revolving loan facility maturing in March 2014. Our outstanding debt also includes \$245 million of 101/4 percent senior secured notes due July 15, 2013, \$250 million of 81/8 percent senior notes due November 15, 2015, and \$500 million of 85/8 percent senior subordinated notes due November 15, 2014.

On February 23, 2009, in light of the challenging macroeconomic environment and auto production outlook, we amended our senior credit facility to increase the allowable consolidated net leverage ratio (consolidated indebtedness

net of cash divided by consolidated EBITDA as defined in the senior credit facility agreement) and reduce the allowable consolidated interest coverage ratio (consolidated EBITDA divided by consolidated interest expense as defined in the senior credit facility agreement). These changes are detailed in the table below.

Beginning February 23, 2009 and following each fiscal quarter thereafter, the margin we pay on borrowings under our term loan A and revolving credit facility will incur interest at an annual rate equal to, at our option, either (i) the London Interbank Offered Rate plus a margin of 550 basis points or (ii) a rate consisting of the greater of (a) the JPMorgan Chase prime rate plus a margin of 450 basis points, and (b) the Federal Funds rate plus 50 basis points plus a margin of 450 basis points. The margin we pay on these

**Table of Contents**

borrowings will be reduced by 50 basis points following each fiscal quarter for which our consolidated net leverage ratio is less than 5.0, and will be further reduced following each fiscal quarter for which the consolidated net leverage ratio is less than 4.0.

Also beginning February 23, 2009 and following each fiscal quarter thereafter, the margin we pay on borrowings under our tranche B-1 facility will incur interest at an annual rate equal to, at our option, either (i) the London Interbank Offered Rate plus a margin of 550 basis points; or (ii) a rate consisting of the greater of (a) the JPMorgan Chase prime rate plus a margin of 450 basis points, and (b) the Federal Funds rate plus 50 basis points plus a margin of 450 basis points. The margin we pay on these borrowings will be reduced by 50 basis points following each fiscal quarter for which our consolidated net leverage ratio is less than 5.0.

The February 23, 2009 amendment to our senior credit facility also placed further restrictions on our operations including limitations on: (i) debt incurrence, (ii) incremental loan extensions, (iii) liens, (iv) restricted payments, (v) optional prepayments of junior debt, (vi) investments, (vii) acquisitions, and (viii) mandatory prepayments. The definition of EBITDA was amended to allow for \$40 million of cash restructuring charges taken after the date of the amendment and \$4 million annually in aftermarket changeover costs. We agreed to pay each consenting lender a fee. The lender fee plus amendment costs were approximately \$8 million.

On December 23, 2008, we amended a financial covenant effective for the fourth quarter of 2008 in our senior secured credit facility which increased the consolidated net leverage ratio (consolidated indebtedness net of cash divided by consolidated EBITDA as defined in the senior credit facility agreement) by increasing the maximum ratio to 4.25 from 4.0. We agreed to increase the margin we pay on the borrowings under our senior credit facility as outlined in the table below. In addition, we agreed to pay each consenting lender a fee. The lender fee plus amendment costs were approximately \$3 million.

In December 2008, we terminated the fixed-to-floating interest rate swaps we entered into in April 2004. The change in the market value of these swaps was recorded as part of interest expense with an offset to other long-term assets or liabilities. At the termination date, we had recorded a reduction in interest expense and a long-term asset of \$6 million, which the counter-parties to the swaps paid us in cash.

On November 20, 2007, we issued \$250 million of 81/8 percent Senior Notes due November 15, 2015 through a private placement offering. The offering and related transactions were designed to (1) reduce our interest expense and extend the maturity of a portion of our debt (by using the proceeds of the offering to tender for \$230 million of our outstanding \$475 million 101/4 percent senior secured notes due 2013), (2) facilitate the realignment of the ownership structure of some of our foreign subsidiaries and (3) otherwise amend certain of the covenants in the indenture for our 101/4 percent senior secured notes to be consistent with those contained in our 85/8 percent senior subordinated notes, including conforming the limitation on incurrence of indebtedness and the absence of a limitation on issuances or transfers of restricted subsidiary stock, and make other minor modifications.

The ownership structure realignment was designed to allow us to more rapidly use our U.S. net operating losses and reduce our cash tax payments. The realignment involved the creation of a new European holding company which now owns some of our foreign entities. We may further alter the components of the realignment from time to time. If market conditions permit, we may offer debt issued by the new European holding company. This realignment utilized part of our U.S. net operating tax losses. Consequently, we recorded a non-cash charge of \$66 million in the fourth quarter of 2007.

The offering of new notes and related repurchase of our senior secured notes reduced our annual interest expense by approximately \$3 million for 2008 and increased our total debt outstanding to third-parties by approximately \$20 million. In connection with the offering and the related repurchase of our senior secured notes, we also recorded

non-recurring pre-tax charges related to the tender premium and fees, the write-off of deferred debt issuance costs, and the write-off of previously recognized issuance premium totaling \$21 million in the fourth quarter of 2007.

In July 2008, we exchanged \$250 million principal amount of 8 1/8 percent Senior Notes due 2015 which have been registered under the Securities Act of 1933, for and in replacement of all outstanding

**Table of Contents**

81/8 percent Senior Notes due 2015 which we issued on November 20, 2007 in a private placement. The terms of the new notes are substantially identical to the terms of the notes for which they were exchanged, except that the transfer restrictions and registration rights applicable to the original notes generally do not apply to the new notes.

In March 2007, we refinanced our \$831 million senior credit facility. At that time, the transaction reduced the interest rates we paid on all portions of the facility. While the total amount of the new senior credit facility is \$830 million, approximately the same as the previous facility, we changed the components of the facility to enhance our financial flexibility. We increased the amount of commitments under our revolving loan facility from \$320 million to \$550 million, reduced the amount of commitments under our tranche B-1 letter of credit/revolving loan facility from \$155 million to \$130 million and replaced the \$356 million term loan B with a \$150 million term loan A. As of December 31, 2008, the senior credit facility consisted of a five-year, \$150 million term loan A maturing in March 2012, a five-year, \$550 million revolving credit facility maturing in March 2012, and a seven-year \$130 million tranche B-1 letter of credit/revolving loan facility maturing in March 2014.

At that time, the refinancing of the prior facility allowed us to: (i) amend the consolidated net debt to EBITDA ratio, (ii) eliminate the fixed charge coverage ratio, (iii) eliminate the restriction on capital expenditures, (iv) increase the amount of acquisitions permitted, (v) improve the flexibility to repurchase and retire higher cost junior debt, (vi) increase our ability to enter into capital leases, (vii) increase the ability of our foreign subsidiaries to incur debt, (viii) increase our ability to pay dividends and repurchase common stock, (ix) increase our ability to invest in joint ventures, (x) allow for the increase in the existing tranche B-1 facility and/or the term loan A or the addition of a new term loan of up to \$275 million in order to reduce our 101/4 percent senior secured notes, and (xi) make other modifications.

Following the refinancing, the term loan A facility is payable in twelve consecutive quarterly installments, commencing June 30, 2009 as follows: \$6 million due each of June 30, September 30, December 31, 2009 and March 31, 2010, \$15 million due each of June 30, September 30, December 31, 2010 and March 31, 2011, and \$17 million due each of June 30, September 30, December 31, 2011 and March 16, 2012. The revolving credit facility requires that any amounts drawn be repaid by March 2012. Prior to that date, funds may be borrowed, repaid and reborrowed under the revolving credit facility without premium or penalty. Letters of credit may be issued under the revolving credit facility.

The tranche B-1 letter of credit/revolving loan facility requires repayment by March 2014. We can borrow revolving loans and issue letters of credit under the \$130 million tranche B-1 letter of credit/revolving loan facility. The tranche B-1 letter of credit/revolving loan facility is reflected as debt on our balance sheet only if we borrow money under this facility or if we use the facility to make payments for letters of credit. There is no additional cost to us for issuing letters of credit under the tranche B-1 letter of credit/revolving loan facility, however outstanding letters of credit reduce our availability to borrow revolving loans under this portion of the facility. We pay the tranche B-1 lenders interest equal to LIBOR plus a margin, as set forth below, which is offset by the return on the funds deposited with the administrative agent by the lenders which earn interest at an annual rate approximately equal to LIBOR less 25 basis points. Outstanding revolving loans reduce the funds on deposit with the administrative agent which in turn reduce the earnings of those deposits.

**Table of Contents**

*Senior Credit Facility Interest Rates and Fees.* Borrowings and letters of credit issued under the senior credit facility bear interest at an annual rate equal to, at our option, either (i) the London Interbank Offered Rate plus a margin as set forth in the table below; or (ii) a rate consisting of the greater of the JP Morgan Chase prime rate or the Federal Funds rate, plus a margin as set forth in the table below.

	<b>For the Period</b>				
	<b>1/01/2006</b>	<b>4/3/2006</b>	<b>3/16/2007</b>	<b>12/23/2008</b>	
	<b>thru</b>	<b>thru</b>	<b>thru</b>	<b>thru</b>	<b>Beginning</b>
	<b>4/2/2006</b>	<b>3/15/2007</b>	<b>12/22/2008</b>	<b>2/22/2009</b>	<b>2/23/2009</b>
Applicable Margin over LIBOR for Revolving Loans	2.75%	2.75%	1.50%	3.00%	5.50%
Applicable Margin over LIBOR for Term Loan B Loans	2.25%	2.00%	N/A	N/A	N/A
Applicable Margin over LIBOR for Term Loan A Loans	N/A	N/A	1.50%	3.00%	5.50%
Applicable Margin over LIBOR for Tranche B-1 Loans	2.25%	2.00%	1.50%	3.00%	5.50%
Applicable Margin for Prime-based Loans	1.75%	1.75%	0.50%	2.00%	4.50%
Applicable Margin for Federal Funds base Loans	2.125%	2.125%	1.00%	2.50%	5.00%
Commitment Fee	0.375%	0.375%	0.35%	0.50%	0.75%

*Senior Credit Facility Other Terms and Conditions.* As described above, we are highly leveraged. Our senior credit facility requires that we maintain financial ratios equal to or better than the following consolidated net leverage ratio (consolidated indebtedness net of cash divided by consolidated EBITDA, as defined in the senior credit facility agreement), and consolidated interest coverage ratio (consolidated EBITDA divided by consolidated interest expense, as defined under the senior credit facility agreement) at the end of each period indicated. Failure to maintain these ratios will result in a default under our senior credit facility. The financial ratios required under the senior credit facility and, the actual ratios we achieved for four quarters of 2008, are shown in the following tables:

	<b>Quarter Ended</b>							
	<b>March 31,</b>		<b>June 30,</b>		<b>September 30,</b>		<b>December 31,</b>	
	<b>2008</b>		<b>2008</b>		<b>2008</b>		<b>2008</b>	
	<b>Req.</b>	<b>Act.</b>	<b>Req.</b>	<b>Act.</b>	<b>Req.</b>	<b>Act.</b>	<b>Req.</b>	<b>Act.</b>
Leverage Ratio (maximum)	4.00	2.79	4.00	2.92	4.00	3.27	4.25	3.66
Interest Coverage Ratio (minimum)	2.10	4.06	2.10	4.22	2.10	4.08	2.10	3.64

The financial ratios required under the senior credit facility for 2009 and beyond are set forth below.

<b>Period Ending</b>	<b>Leverage Ratio</b>	<b>Interest Coverage Ratio</b>
----------------------	-----------------------	--------------------------------

March 31, 2009	5.50	2.25
June 30, 2009	7.35	1.85
September 30, 2009	7.90	1.55
December 31, 2009	6.60	1.60
March 31, 2010	5.50	2.00
June 30, 2010	5.00	2.25
September 30, 2010	4.75	2.30
December 31, 2010	4.50	2.35
March 31, 2011	4.00	2.55
June 30, 2011	3.75	2.55
September 30, 2011	3.50	2.55
December 31, 2011	3.50	2.55
2012 and 2013	3.50	2.75

**Table of Contents**

The senior credit facility agreement provides the ability to refinance our senior subordinated notes and/or our senior secured notes in an amount equal to the sum of (i) the net cash proceeds of equity issued after March 16, 2007, plus (ii) the portion of annual excess cash flow (as defined in the senior credit facility agreement) that is not required to be applied to the payment of the credit facilities and which is not used for other purposes, provided that the amount of the subordinated notes and the aggregate amount of the senior secured notes and the subordinated notes that may be refinanced is capped based upon the pro forma consolidated leverage ratio after giving effect to such refinancing as shown in the following table:

<b>Proforma Consolidated Leverage Ratio</b>	<b>Subordinated Notes Maximum Amount</b>	<b>Aggregate Senior and Subordinate Note Maximum Amount</b>
Greater than or equal to 3.0x	\$ 0 million	\$ 10 million
Greater than or equal to 2.5x	\$ 100 million	\$ 300 million
Less than 2.5x	\$ 125 million	\$ 375 million

In addition, the senior secured notes may be refinanced with (i) the net cash proceeds of incremental facilities and permitted refinancing indebtedness (as defined in the senior credit facility agreement), (ii) the net cash proceeds of any new senior or subordinated unsecured indebtedness, (iii) proceeds of revolving credit loans (as defined in the senior credit facility agreement), (iv) up to 200 million of unsecured indebtedness of the company's foreign subsidiaries and (v) cash generated by the company's operations provided that the amount of the senior secured notes that may be refinanced is capped based upon the pro forma consolidated leverage ratio after giving effect to such refinancing as shown in the following table:

<b>Proforma Consolidated Leverage Ratio</b>	<b>Aggregate Senior and Subordinate Note Maximum Amount</b>
Greater than or equal to 3.0x	\$ 10 million
Greater than or equal to 2.5x	\$ 300 million
Less than 2.5x	\$ 375 million

The senior credit facility agreement also contains restrictions on our operations that are customary for similar facilities, including limitations on: (i) incurring additional liens; (ii) sale and leaseback transactions (except for the permitted transactions as described in the amended and restated agreement); (iii) liquidations and dissolutions; (iv) incurring additional indebtedness or guarantees; (v) investments and acquisitions; (vi) dividends and share repurchases; (vii) mergers and consolidations; and (viii) refinancing of subordinated and 101/4 percent senior secured notes. Compliance with these requirements and restrictions is a condition for any incremental borrowings under the senior credit facility agreement and failure to meet these requirements enables the lenders to require repayment of any outstanding loans. As of December 31, 2008, we were in compliance with all the financial covenants and operational restrictions of the facility.

Our senior credit facility does not contain any terms that could accelerate payment of the facility or affect pricing under the facility as a result of a credit rating agency downgrade.



*Senior Secured, Senior and Senior Subordinated Notes.* As of December 31, 2008, our outstanding debt also included \$245 million of 10<sup>1</sup>/<sub>4</sub> percent senior secured notes due July 15, 2013, \$250 million of 8<sup>1</sup>/<sub>8</sub> percent senior notes due November 15, 2015, and \$500 million of 8<sup>5</sup>/<sub>8</sub> percent senior subordinated notes due November 15, 2014. We can redeem some or all of the notes at any time after July 15, 2008 in the case of the senior secured notes, November 15, 2009 in the case of the senior subordinated notes and November 15, 2011 in the case of the senior notes. If we sell certain of our assets or experience specified kinds of changes in control, we must offer to repurchase the notes. We are permitted to redeem up to 35 percent of the senior notes with the proceeds of certain equity offerings completed before November 15, 2010.

Our senior secured, senior and senior subordinated notes require that, as a condition precedent to incurring certain types of indebtedness not otherwise permitted, our consolidated fixed charge coverage ratio, as calculated on a proforma basis, be greater than 2.00. We have not incurred any of the types of indebtedness not otherwise permitted by the indentures. The indentures also contain restrictions on our operations, including limitations on: (i) incurring additional indebtedness or liens; (ii) dividends; (iii) distributions and stock

**Table of Contents**

repurchases; (iv) investments; (v) asset sales and (vi) mergers and consolidations. Subject to limited exceptions, all of our existing and future material domestic wholly owned subsidiaries fully and unconditionally guarantee these notes on a joint and several basis. In addition, the senior secured notes and related guarantees are secured by second priority liens, subject to specified exceptions, on all of our and our subsidiary guarantors' assets that secure obligations under our senior credit facility, except that only a portion of the capital stock of our subsidiary guarantor's domestic subsidiaries is provided as collateral and no assets or capital stock of our direct or indirect foreign subsidiaries secure the notes or guarantees. There are no significant restrictions on the ability of the subsidiaries that have guaranteed these notes to make distributions to us. The senior subordinated notes rank junior in right of payment to our senior credit facility and any future senior debt incurred. As of December 31, 2008, we were in compliance with the covenants and restrictions of these indentures.

*Accounts Receivable Securitization.* In addition to our senior credit facility, senior secured notes, senior notes and senior subordinated notes, we also sell some of our accounts receivable on a nonrecourse basis in North America and Europe. In North America, we have an accounts receivable securitization program with two commercial banks. We sell original equipment and aftermarket receivables on a daily basis under this program. We had sold accounts receivable under this program of \$101 million and \$100 million at December 31, 2008 and 2007, respectively. This program is subject to cancellation prior to its maturity date if we (i) fail to pay interest or principal payments on an amount of indebtedness exceeding \$50 million, (ii) default on the financial covenant ratios under the senior credit facility, or (iii) fail to maintain certain financial ratios in connection with the accounts receivable securitization program. In January 2009, the U.S. program was amended and extended to March 2, 2009 at a facility size of \$120 million. These revisions will have the effect of reducing the amount of receivables sold by approximately \$10 million to \$30 million compared to the terms of the previous program. On February 23, 2009 this program was renewed for 364 days to February 22, 2010 at a facility size of \$100 million. As part of the renewal, the margin we pay the banks increased. While the funding costs incurred by the banks are expected to be down in 2009, we estimate that the additional margin would otherwise increase the loss we record on the sale of receivables by approximately \$4 million annually. We also sell some receivables in our European operations to regional banks in Europe. At December 31, 2008, we had sold \$78 million of accounts receivable in Europe up from \$57 million at December 31, 2007. The arrangements to sell receivables in Europe are provided under 10 separate arrangements, by various financial institutions in each of the foreign jurisdictions. The commitments for these arrangements are generally for one year but may be cancelled with 90 day notice prior to renewal. In four instances, the arrangement provides for cancellation by financial institution at any time upon 30 days, or less, notification. If we were not able to sell receivables under either the North American or European securitization programs, our borrowings under our revolving credit agreements may increase. These accounts receivable securitization programs provide us with access to cash at costs that are generally favorable to alternative sources of financing, and allow us to reduce borrowings under our revolving credit agreements.

*Capital Requirements.* We believe that cash flows from operations, combined with available borrowing capacity described above, assuming that we maintain compliance with the financial covenants and other requirements of our loan agreement, will be sufficient to meet our future capital requirements for the following year. Our ability to meet the financial covenants depends upon a number of operational and economic factors, many of which are beyond our control. Factors that could impact our ability to comply with the financial covenants include the rate at which consumers continue to buy new vehicles and the rate at which they continue to repair vehicles already in service, as well as our ability to successfully implement our restructuring plans and offset higher raw material prices. Further deterioration in North American vehicle production levels, weakening in the global aftermarket, or a further reduction in vehicle production levels in Europe, beyond our expectations, could impact our ability to meet our financial covenant ratios. In the event that we are unable to meet these financial covenants, we would consider several options to meet our cash flow needs. These options could include renegotiations with our senior credit lenders, additional cost reduction or restructuring initiatives, sales of assets or common stock, or other alternatives to enhance our financial and operating position. Should we be required to implement any of these actions to meet our cash flow needs, we

believe we can do so in a reasonable time frame.

**Table of Contents***Contractual Obligations.*

Our remaining required debt principal amortization and payment obligations under lease and certain other financial commitments as of December 31, 2008 are shown in the following table:

	<b>Payments due in:</b>					<b>Beyond 2013</b>	<b>Total</b>
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012 (Millions)</b>	<b>2013</b>		
Obligations:							
Revolver borrowings	\$	\$	\$	\$ 109	\$	\$ 130	\$ 239
Senior term loans	17	50	66	17			150
Senior secured notes				1	245		246
Senior subordinated notes						500	500
Senior notes						250	250
Capital leases	4	4					8
Other subsidiary debt	1	1	1	1	1	4	9
Short-term debt	44						44
Debt and capital lease obligations	66	55	67	128	246	884	1,446
Operating leases	16	13	11	6	4	14	64
Interest payments	105	105	105	97	75	78	565
Capital commitments	55						55
<b>Total Payments</b>	<b>\$ 242</b>	<b>\$ 173</b>	<b>\$ 183</b>	<b>\$ 231</b>	<b>\$ 325</b>	<b>\$ 976</b>	<b>\$ 2,130</b>

If we do not maintain compliance with the terms of our senior credit facility, senior secured notes indenture, senior notes indenture and senior subordinated notes indenture described above, all amounts under those arrangements could, automatically or at the option of the lenders or other debt holders, become due. Additionally, each of those facilities contains provisions that certain events of default under one facility will constitute a default under the other facility, allowing the acceleration of all amounts due. We currently expect to maintain compliance with terms of all of our various credit agreements for the foreseeable future.

Included in our contractual obligations is the amount of interest to be paid on our long-term debt. As our debt structure contains both fixed and variable rate interest debt, we have made assumptions in calculating the amount of the future interest payments. Interest on our senior secured notes, senior subordinated notes, and senior notes is calculated using the fixed rates of 101/4 percent, 85/8 percent, and 81/8 percent respectively. Interest on our variable rate debt is calculated as LIBOR plus the applicable margin in effect at December 31, 2008 for the Eurodollar, Term Loan A and Tranche B-1 loans and Prime plus the applicable margin in effect on December 31, 2008 on the prime-based loans. We have assumed that both LIBOR and the Prime rate will remain unchanged for the outlying years. See Capitalization.

We have also included an estimate of expenditures required after December 31, 2008 to complete the projects authorized at December 31, 2008, in which we have made substantial commitments in connection with purchasing plant, property and equipment for our operations. For 2009, we expect our capital expenditure budget to be about \$160 million.

We have not included purchase obligations as part of our contractual obligations as we generally do not enter into long-term agreements with our suppliers. In addition, the agreements we currently have do not specify the volumes we are required to purchase. If any commitment is provided, in many cases the agreements state only the minimum percentage of our purchase requirements we must buy from the supplier. As a result, these purchase obligations fluctuate from year-to-year and we are not able to quantify the amount of our future obligation.

We have not included material cash requirements for unrecognized tax benefits or taxes as we are a taxpayer in certain foreign jurisdictions but not in the U.S. Additionally, it is difficult to estimate taxes to be

## **Table of Contents**

paid as changes in where we generate income can have a significant impact on future tax payments. We have also not included cash requirements for funding pension and postretirement benefit costs. Based upon current estimates, we believe we will be required to make contributions of approximately \$34 million to those plans in 2009. Pension and postretirement contributions beyond 2009 will be required but those amounts will vary based upon many factors, including the performance of our pension fund investments during 2009. In addition, we have not included cash requirements for environmental remediation. Based upon current estimates we believe we will be required to spend approximately \$11 million over the next 20 to 30 years. However, due to possible modifications in remediation processes and other factors, it is difficult to determine the actual timing of the payments. See Environmental and Other Matters.

We occasionally provide guarantees that could require us to make future payments in the event that the third party primary obligor does not make its required payments. We have not recorded a liability for any of these guarantees.

Additionally, we have from time to time issued guarantees for the performance of obligations by some of our subsidiaries, and some of our subsidiaries have guaranteed our debt. All of our existing and future material domestic wholly-owned subsidiaries fully and unconditionally guarantee our senior credit facility, our senior secured notes, our senior notes and our senior subordinated notes on a joint and several basis. The arrangement for the senior credit facility is also secured by first-priority liens on substantially all our domestic assets and pledges of up to 66 percent of the stock of certain first-tier foreign subsidiaries. Our \$245 million senior secured notes are also secured by second-priority liens on substantially all our domestic assets, excluding some of the stock of our domestic subsidiaries. No assets or capital stock of our direct or indirect foreign subsidiaries secure these notes. You should also read Note 14 of the condensed consolidated financial statements of Tenneco Inc., where we present the Supplemental Guarantor Condensed Consolidating Financial Statements.

We have issued guarantees through letters of credit in connection with some obligations of our affiliates. As of December 31, 2008, we have guaranteed \$47 million in letters of credit to support some of our subsidiaries' insurance arrangements, foreign employee benefit programs, environmental remediation activities and cash management and capital requirements.

### ***Critical Accounting Policies***

We prepare our consolidated financial statements in accordance with accounting principles generally accepted in the United States of America. Preparing our consolidated financial statements in accordance with generally accepted accounting principles requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and 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. The following paragraphs include a discussion of some critical areas where estimates are required.

#### ***Revenue Recognition***

We recognize revenue for sales to our original equipment and aftermarket customers when title and risk of loss passes to the customers under the terms of our arrangements with those customers, which is usually at the time of shipment from our plants or distribution centers. In connection with the sale of exhaust systems to certain original equipment manufacturers, we purchase catalytic converters and diesel particulate filters or components thereof including precious metals ( substrates ) on behalf of our customers which are used in the assembled system. These substrates are included in our inventory and passed through to the customer at our cost, plus a small margin, since we take title to the inventory and are responsible for both the delivery and quality of the finished product. Revenues recognized for substrate sales were \$1,492 million, \$1,673 million and \$927 million in 2008, 2007 and 2006, respectively. For our aftermarket customers, we provide for promotional incentives and returns at the time of sale. Estimates are based upon

the terms of the incentives and historical experience with returns. Certain taxes assessed by governmental authorities on revenue producing transactions, such as value added taxes, are excluded from revenue and recorded on a net basis.

**Table of Contents**

Shipping and handling costs billed to customers are included in revenues and the related costs are included in cost of sales in our Statements of Income (Loss).

*Warranty Reserves*

Where we have offered product warranty, we also provide for warranty costs. Those estimates are based upon historical experience and upon specific warranty issues as they arise. While we have not experienced any material differences between these estimates and our actual costs, it is reasonably possible that future warranty issues could arise that could have a significant impact on our consolidated financial statements.

*Pre-production Design and Development and Tooling Assets*

We expense pre-production design and development costs as incurred unless we have a contractual guarantee for reimbursement from the original equipment customer. We had current and long-term receivables of \$12 million and \$20 million on the balance sheet at December 31, 2008 and 2007, respectively, for guaranteed pre-production design and development reimbursement arrangements with our customers. In addition, plant, property and equipment includes \$53 million and \$62 million at December 31, 2008 and 2007, respectively, for original equipment tools and dies that we own, and prepayments and other includes \$22 million and \$33 million at December 31, 2008 and 2007, respectively, for in-process tools and dies that we are building for our original equipment customers.

*Income Taxes*

In accordance with SFAS No. 109 Accounting for Income Taxes (SFAS No. 109), we evaluate our deferred income taxes quarterly to determine if valuation allowances are required or should be adjusted. SFAS No. 109 requires that companies assess whether valuation allowances should be established against their deferred tax assets based on consideration of all available evidence, both positive and negative, using a more likely than not standard. This assessment considers, among other matters, the nature, frequency and amount of recent losses, the duration of statutory carryforward periods, and tax planning strategies. In making such judgments, significant weight is given to evidence that can be objectively verified.

Valuation allowances have been established for deferred tax assets based on a more likely than not threshold. The ability to realize deferred tax assets depends on our ability to generate sufficient taxable income within the carryforward periods provided for in the tax law for each tax jurisdiction. We have considered the following possible sources of taxable income when assessing the realization of our deferred tax assets:

Future reversals of existing taxable temporary differences;

Taxable income or loss, based on recent results, exclusive of reversing temporary differences and carryforwards; and,

Tax-planning strategies.

In 2008, we recorded tax expense of \$289 million primarily related to establishing a valuation allowance against our net deferred tax assets in the U.S. In the U.S. we utilize the results from 2007 and 2008 as a measure of the cumulative losses in recent years. Accounting standards do not permit us to give any consideration to a likely economic recovery in the U.S. or the recent new business we have won particularly in the commercial vehicle segment in evaluating the requirement to record a valuation allowance. Consequently, we concluded that our ability to fully utilize our NOLs was limited due to projecting the current negative economic environment into the future and the impact of the current negative operating environment on our tax planning strategies. As a result of tax planning strategies which have not



yet been implemented but which we plan to implement and which do not depend upon generating future taxable income, we continue to carry deferred tax assets in the U.S. of \$70 million relating to the expected utilization of those NOLs. The federal NOL expires beginning in 2020 through 2028. The state NOL expires in various years through 2028.

If our operating performance improves on a sustained basis, our conclusion regarding the need for a valuation allowance could change, resulting in the reversal of some or all of the valuation allowance in the

## **Table of Contents**

future. The charge to establish the U.S. valuation allowance also includes items related to the losses allocable to certain U.S. state jurisdictions where it was determined that tax attributes related to those jurisdictions were potentially not realizable.

Going forward, we will be required to record a valuation allowance against deferred tax assets generated by taxable losses in each period in the U.S. as well as in other foreign countries. Our future provision for income taxes will include no tax benefit with respect to losses incurred and no tax expense with respect to income generated in these jurisdictions until the respective valuation allowance is eliminated. This will cause variability in our effective tax rate.

Our capital structure impacts the U.S. pretax loss because most of our debt is in the U.S. resulting in a significant amount of our interest expense being incurred in the U.S. In 2008, interest expense was \$102 million in the U.S. and \$11 million outside the U.S. Interest expense in the U.S. was \$162 million and \$134 million in 2007 and 2006, respectively. Interest expense outside the U.S. was \$2 million in each of 2007 and 2006.

### *Stock-Based Compensation*

Effective January 1, 2006, we began accounting for our stock-based compensation plans in accordance with SFAS No. 123(R), *Share-Based Payment*, which requires a fair value method of accounting for compensation costs related to our stock-based compensation plans. Under the fair value method recognition provision of the Statement, a share-based payment is measured at the grant date based upon the value of the award and is recognized as expense over the vesting period. Determining the fair value of share-based awards requires judgment in estimating employee and market behavior. If actual results differ significantly from these estimates, stock-based compensation expense and our results of operations could be materially impacted. As of December 31, 2008, there was approximately \$4 million, net of tax, of total unrecognized compensation costs related to these stock-based awards that is expected to be recognized over a weighted average period of 0.9 years as compared to \$4 million, net of tax, and a weighted average period of 0.8 years as of December 31, 2007.

### *Goodwill and Other Intangible Assets*

As required by SFAS No. 142, *Goodwill and Other Intangible Assets*, we evaluate goodwill for impairment in the fourth quarter of each year, or more frequently if events indicate it is warranted. We compare the estimated fair value of our reporting units with goodwill to the carrying value of the unit's assets and liabilities to determine if impairment exists within the recorded balance of goodwill. We estimate the fair value of each reporting unit using the income approach which is based on the present value of estimated future cash flows. The income approach is dependent on a number of factors, including estimates of market trends, forecasted revenues and expenses, capital expenditures, weighted average cost of capital and other variables. These estimates are based on assumptions that we believe to be reasonable, but which are inherently uncertain.

During the fourth quarter of 2008, all of our reporting units passed this test with the exception of our North American Original Equipment Ride Control reporting unit whose carrying value exceeded the estimated fair value. Under SFAS No. 142, we were required to calculate the implied fair value of goodwill of the North America Original Equipment Ride Control reporting unit by allocating the estimated fair value to the assets and liabilities of this reporting unit as if the reporting unit had been acquired in a business combination and the fair value of the reporting unit was the acquisition price. As a result of this test, we determined that the remaining amount of goodwill related to our elastomer business acquired in 1996 was impaired due to the significant decline in production. Accordingly, we recorded an impairment charge of \$114 million during the fourth quarter of 2008. During the fourth quarter of 2007, all of our reporting units passed the goodwill impairment test.

### *Pension and Other Postretirement Benefits*

We have various defined benefit pension plans that cover some of our employees. We also have postretirement health care and life insurance plans that cover some of our domestic employees. Our pension and postretirement health care and life insurance expenses and valuations are dependent on assumptions used

## **Table of Contents**

by our actuaries in calculating those amounts. These assumptions include discount rates, health care cost trend rates, long-term return on plan assets, retirement rates, mortality rates and other factors. Health care cost trend rate assumptions are developed based on historical cost data and an assessment of likely long-term trends. Retirement rates are based primarily on actual plan experience while mortality rates are based upon the general population experience which is not expected to differ materially from our experience.

Our approach to establishing the discount rate assumption for both our domestic and foreign plans starts with high-quality investment-grade bonds adjusted for an incremental yield based on actual historical performance. This incremental yield adjustment is the result of selecting securities whose yields are higher than the normal bonds that comprise the index. Based on this approach, for 2008 we raised the weighted-average discount rate for all of our pension plans to 6.2 percent from 5.9 percent. The discount rate for postretirement benefits was left unchanged at 6.2 percent for 2008.

Our approach to determining expected return on plan asset assumptions evaluates both historical returns as well as estimates of future returns, and is adjusted for any expected changes in the long-term outlook for the equity and fixed income markets. As a result, our estimate of the weighted-average long-term rate of return on plan assets for all of our pension plans for 2008 was lowered to 7.9 percent from 8.2 percent.

Except in the U.K., our pension plans generally do not require employee contributions. Our policy is to fund our pension plans in accordance with applicable U.S. and foreign government regulations and to make additional payments as funds are available to achieve full funding of the accumulated benefit obligation. At December 31, 2008 and 2007, all legal funding requirements had been met. Other postretirement benefit obligations, such as retiree medical, and certain foreign pension plans are not funded.

Effective December 31, 2006, we froze future accruals under our defined benefit plans for substantially all U.S. salaried and non-union hourly employees and replaced these benefits with additional contributions under defined contribution plans. These changes reduced expense in 2007 by approximately \$11 million from 2006. Additionally, we realized a one-time benefit of \$7 million in the fourth quarter 2006 related to curtailing the defined benefit pension plans.

### ***Recent Accounting Pronouncements***

Footnote 1 to the consolidated financial statements of Tenneco Inc. located in Item 8 Financial Statements and Supplemental Data is incorporated herein by reference.

### **Derivative Financial Instruments**

#### ***Foreign Currency Exchange Rate Risk***

We use derivative financial instruments, principally foreign currency forward purchase and sale contracts with terms of less than one year, to hedge our exposure to changes in foreign currency exchange rates. Our primary exposure to changes in foreign currency rates results from intercompany loans made between affiliates to minimize the need for borrowings from third parties. Additionally, we enter into foreign currency forward purchase and sale contracts to mitigate our exposure to changes in exchange rates on certain intercompany and third-party trade receivables and payables. We manage counter-party credit risk by entering into derivative financial instruments with major financial institutions that can be expected to fully perform under the terms of such agreements. We do not enter into derivative financial instruments for speculative purposes.

In managing our foreign currency exposures, we identify and aggregate existing offsetting positions and then hedge residual exposures through third-party derivative contracts. The following table summarizes by major currency the notional amounts, weighted-average settlement rates, and fair value for foreign currency forward purchase and sale contracts as of December 31, 2008. The fair value of our foreign currency forward contracts is based on an internally developed model which incorporates observable inputs including quoted

**Table of Contents**

spot rates, forward exchange rates and discounted future expected cash flows utilizing market interest rates with similar quality and maturity characteristics. All contracts in the following table mature in 2009.

		<b>Notional Amount in Foreign Currency</b>	<b>December 31, 2008 Weighted Average Settlement Rates (Millions Except Settlement Rates)</b>	<b>Fair Value in U.S. Dollars</b>
Australian dollars	Purchase	32	.711	\$ 23
	Sell	(7)	.711	(5)
British pounds	Purchase	14	1.459	20
	Sell	(12)	1.459	(17)
European euro	Purchase			
	Sell	(9)	1.400	(13)
South African rand	Purchase	285	0.106	30
	Sell	(45)	0.106	(5)
U.S. dollars	Purchase	9	1.002	9
	Sell	(46)	1.002	(46)
Other	Purchase	577	0.011	7
	Sell	(1)	0.822	(1)
				\$ 2

**Interest Rate Risk**

Our financial instruments that are sensitive to market risk for changes in interest rates are primarily our debt securities. We use our revolving credit facilities to finance our short-term and long-term capital requirements. We pay a current market rate of interest on these borrowings. Our long-term capital requirements have been financed with long-term debt with original maturity dates ranging from five to ten years. On December 31, 2008, we had \$1.010 billion in long-term debt obligations that have fixed interest rates. Of that amount, \$245 million is fixed through July 2013, \$500 million is fixed through November 2014, \$250 million is fixed through November 2015, and the remainder is fixed from 2009 through 2025. We also have \$397 million in long-term debt obligations that are subject to variable interest rates. See Note 6 to the consolidated financial statements of Tenneco Inc. and Consolidated Subsidiaries included in Item 8.

We estimate that the fair value of our long-term debt at December 31, 2008 was about 51 percent of its book value. A one percentage point increase or decrease in interest rates would increase or decrease the annual interest expense we recognize in the income statement and the cash we pay for interest expense by about \$4 million.

**Environmental and Other Matters**

We are subject to a variety of environmental and pollution control laws and regulations in all jurisdictions in which we operate. We expense or capitalize, as appropriate, expenditures for ongoing compliance with environmental regulations that relate to current operations. We expense costs related to an existing condition caused by past operations that do not contribute to current or future revenue generation. We record liabilities when environmental

assessments indicate that remedial efforts are probable and the costs can be reasonably estimated. Estimates of the liability are based upon currently available facts, existing technology, and presently enacted laws and regulations taking into consideration the likely effects of inflation and other societal and economic factors. We consider all available evidence including prior experience in remediation of contaminated sites, other companies' cleanup experiences and data released by the United States Environmental Protection Agency or other organizations. These estimated liabilities are subject to revision in future periods based on actual costs or new information. Where future cash flows are fixed or reliably determinable, we have discounted the liabilities. All other environmental liabilities are recorded at their undiscounted amounts. We

**Table of Contents**

evaluate recoveries separately from the liability and, when they are assured, recoveries are recorded and reported separately from the associated liability in our consolidated financial statements.

As of December 31, 2008, we were designated as a potentially responsible party in one Superfund site. Including the Superfund site, we may have the obligation to remediate current or former facilities, and we estimate our share of environmental remediation costs at these facilities to be approximately \$11 million. For the Superfund site and the current and former facilities, we have established reserves that we believe are adequate for these costs. Although we believe our estimates of remediation costs are reasonable and are based on the latest available information, the cleanup costs are estimates and are subject to revision as more information becomes available about the extent of remediation required. At some sites, we expect that other parties will contribute to the remediation costs. In addition, at the Superfund site, the Comprehensive Environmental Response, Compensation and Liability Act provides that our liability could be joint and several, meaning that we could be required to pay in excess of our share of remediation costs. Our understanding of the financial strength of other potentially responsible parties at the Superfund site, and of other liable parties at our current and former facilities, has been considered, where appropriate, in our determination of our estimated liability. We believe that any potential costs associated with our current status as a potentially responsible party in the Superfund site, or as a liable party at our current or former facilities, will not be material to our results of operations, financial position or cash flows.

We also from time to time are involved in legal proceedings, claims or investigations that are incidental to the conduct of our business. Some of these proceedings allege damages against us relating to environmental liabilities (including toxic tort, property damage and remediation), intellectual property matters (including patent, trademark and copyright infringement, and licensing disputes), personal injury claims (including injuries due to product failure, design or warnings issues, and other product liability related matters), taxes, employment matters, and commercial or contractual disputes, sometimes related to acquisitions or divestitures. For example, one of our Argentina subsidiaries is currently defending against a criminal complaint alleging the failure to comply with laws requiring the proceeds of export transactions to be collected, reported and/or converted to local currency within specified time periods. We vigorously defend ourselves against all of these claims. In future periods, we could be subjected to cash costs or non-cash charges to earnings if any of these matters is resolved on unfavorable terms. However, although the ultimate outcome of any legal matter cannot be predicted with certainty, based on current information, including our assessment of the merits of the particular claim, we do not expect that these legal proceedings or claims will have any material adverse impact on our future consolidated financial position, results of operations or cash flows.

In addition, we are subject to a number of lawsuits initiated by a significant number of claimants alleging health problems as a result of exposure to asbestos. A small percentage of claims have been asserted by railroad workers alleging exposure to asbestos products in railroad cars manufactured by The Pullman Company, one of our subsidiaries. Nearly all of the claims are related to alleged exposure to asbestos in our automotive emission control products. Only a small percentage of these claimants allege that they were automobile mechanics and a significant number appear to involve workers in other industries or otherwise do not include sufficient information to determine whether there is any basis for a claim against us. We believe, based on scientific and other evidence, it is unlikely that mechanics were exposed to asbestos by our former muffler products and that, in any event, they would not be at increased risk of asbestos-related disease based on their work with these products. Further, many of these cases involve numerous defendants, with the number of each in some cases exceeding 200 defendants from a variety of industries. Additionally, the plaintiffs either do not specify any, or specify the jurisdictional minimum, dollar amount for damages. As major asbestos manufacturers continue to go out of business or file for bankruptcy, we may experience an increased number of these claims. We vigorously defend ourselves against these claims as part of our ordinary course of business. In future periods, we could be subject to cash costs or non-cash charges to earnings if any of these matters is resolved unfavorably to us. To date, with respect to claims that have proceeded sufficiently through the judicial process, we have regularly achieved favorable resolution. During 2008, voluntary dismissals were initiated on behalf of 635 plaintiffs and are in process; we were dismissed from an additional 74 cases. Accordingly, we



presently believe that these asbestos-related claims will not have a material adverse impact on our future consolidated financial condition, results of operations or cash flows.

**Table of Contents**

**Employee Stock Ownership Plans**

We have established Employee Stock Ownership Plans for the benefit of our employees. Under the plans, subject to limitations in the Internal Revenue Code, participants may elect to defer up to 75 percent of their salary through contributions to the plan, which are invested in selected mutual funds or used to buy our common stock. Prior to January 1, 2009, we matched in cash 50 percent of each employee's contribution up to eight percent of the employee's salary. We have temporarily discontinued these matching contributions to salaried and hourly U.S. employees as a result of the recent global economic downturn. We will continue to reevaluate the Company's ability to restore the matching contribution for the U.S. employees. In connection with freezing the defined benefit pension plans for nearly all U.S. based salaried and non-union hourly employees effective December 31, 2006, and the related replacement of those defined benefit plans with defined contribution plans, we are making additional contributions to the Employee Stock Ownership Plans. These additional contributions are not affected by the temporary disruption of matching contributions discussed above. We recorded expense for these contributions of approximately \$18 million, \$17 million and \$7 million in 2008, 2007 and 2006, respectively, of which \$10 million in each of 2008 and 2007 related to contributions for the defined benefit replacement plans. Matching contributions vest immediately. Defined benefit replacement contributions fully vest on the employee's third anniversary of employment.

**ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.**

The section entitled "Derivative Financial Instruments" in Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" is incorporated herein by reference.

**ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.**

**INDEX TO FINANCIAL STATEMENTS OF TENNECO INC.  
AND CONSOLIDATED SUBSIDIARIES**

	<b>Page</b>
<u>Management's Report on Internal Control Over Financial Reporting</u>	70
<u>Reports of Independent Registered Public Accounting Firm</u>	71
<u>Statements of income (loss) for each of the three years in the period ended December 31, 2008</u>	73
<u>Balance sheets December 31, 2008 and 2007</u>	74
<u>Statements of cash flows for each of the three years in the period ended December 31, 2008</u>	75
<u>Statements of changes in shareholders' equity for each of the three years in the period ended December 31, 2008</u>	76
<u>Statements of comprehensive income (loss) for each of the three years in the period ended December 31, 2008</u>	77
<u>Notes to financial statements</u>	78
<u>Schedule II Valuation and Qualifying Accounts</u>	131

**Table of Contents**

**MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING**

Management of Tenneco Inc. is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rule 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934). Management's internal control system is designed to provide reasonable assurance regarding the preparation and fair presentation of published financial statements. All internal control systems, no matter how well designed, have inherent limitations, including the possibility of human error or circumvention or overriding of controls. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation and may not prevent or detect misstatements in financial reporting. Further, due to changing conditions and adherence to established policies and controls, internal control effectiveness may vary over time.

Management assessed the company's effectiveness of internal controls over financial reporting. In making this assessment, it used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission ( COSO ) in *Internal Control-Integrated Framework*.

During the fiscal year ended December 31, 2008, we designed and implemented remediation steps over our accounting for income taxes material weakness previously reported in our Annual Report on Form 10-K dated February 29, 2008, as described within Item 9A. Based on our assessment we have concluded that the company's internal control over financial reporting was effective as of December 31, 2008.

Our internal control over financial reporting as of December 31, 2008 has been audited by Deloitte & Touche LLP, our independent registered public accounting firm, as stated in their report, which is included herein.

February 27, 2009

**Table of Contents**

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Board of Directors and Shareholders of Tenneco Inc.

We have audited the internal control over financial reporting of Tenneco Inc. and subsidiaries (the Company) as of December 31, 2008, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management Report on Internal Controls Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on that risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed by, or under the supervision of, the company's principal executive and principal financial officers, or persons performing similar functions, and effected by the company's board of directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2008, based on the criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheet of the Company as of December 31, 2008 and the related consolidated statements of income (loss), cash flows, changes in shareholders' equity and comprehensive income (loss) and financial statement schedule for the year ended December 31, 2008, and our report dated February 27, 2009 expressed

an unqualified opinion on those financial statements and financial statement schedule.

Deloitte & Touche LLP  
Chicago, Illinois  
February 27, 2009

**Table of Contents**

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Board of Directors and Shareholders of Tenneco Inc.

We have audited the accompanying consolidated balance sheets of Tenneco Inc. and subsidiaries (the Company) as of December 31, 2008 and 2007, and the related consolidated statements of income (loss), cash flows, changes in shareholders' equity, and comprehensive income (loss) for each of the three years in the period ended December 31, 2008. Our audits also included the financial statement schedule listed in the Index at Item 8. These financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on the financial statements and financial statement schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of the Company and subsidiaries as of December 31, 2008 and 2007, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2008, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, such financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, present fairly, in all material respects, the information set forth therein.

As discussed in Note 11, effective January 1, 2007, the Company adopted the measurement date provisions of Statement of Financial Accounting Standards (SFAS) No. 158, *Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans – an amendment of FASB Statements No. 87, 88, 106, and 132(R)*.

As discussed in Note 1 to the consolidated financial statements, on December 31, 2006, the Company adopted the recognition and disclosure provisions of SFAS No. 158, *Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans – an amendment of FASB Statements No. 87, 88, 106 and 132(R)*.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2008, based on the criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 27, 2009 expressed an unqualified opinion on the Company's internal control over financial reporting.

Deloitte & Touche LLP  
Chicago, Illinois  
February 27, 2009

Table of Contents**TENNECO INC.****CONSOLIDATED STATEMENTS OF INCOME (LOSS)**

**Year Ended December 31,**  
**2008                      2007                      2006**  
**(Millions Except Share and Per Share Amounts)**

**Revenues**

Net sales and operating revenues	\$ 5,916	\$ 6,184	\$ 4,682
----------------------------------	----------	----------	----------

**Costs and expenses**

Cost of sales (exclusive of depreciation and amortization shown below)	5,063	5,210	3,836
Goodwill impairment charge	114		
Engineering, research, and development	127	114	88
Selling, general, and administrative	392	399	373
Depreciation and amortization of intangibles	222	205	184
	5,918	5,928	4,481

**Other income (expense)**

Loss on sale of receivables	(10)	(10)	(9)
Other income	9	6	4
	(1)	(4)	(5)

**Income (loss) before interest expense, income taxes, and minority interest**

	(3)	252	196
Interest expense (net of interest capitalized of \$6 million, \$6 million and \$6 million, respectively)	113	164	136
Income tax expense	289	83	5
Minority interest	10	10	6

<b>Net income (loss)</b>	<b>\$ (415)</b>	<b>\$ (5)</b>	<b>\$ 49</b>
--------------------------	-----------------	---------------	--------------

**Earnings (loss) per share**

Weighted average shares of common stock outstanding			
Basic	46,406,095	45,809,730	44,625,220
Diluted	46,406,095	45,809,730	46,755,573
Basic earnings (loss) per share of common stock	\$ (8.95)	\$ (0.11)	\$ 1.11
Diluted earnings (loss) per share of common stock	\$ (8.95)	\$ (0.11)	\$ 1.05

The accompanying notes to consolidated financial statements are an integral part of these statements of income (loss).





**Table of Contents****TENNECO INC.****CONSOLIDATED BALANCE SHEETS**

	<b>December 31,</b>	
	<b>2008</b>	<b>2007</b>
	<b>(Millions)</b>	
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 126	\$ 188
Receivables		
Customer notes and accounts, net	529	732
Other	45	25
Inventories	513	539
Deferred income taxes	18	36
Prepayments and other	107	121
	1,338	1,641
Other assets:		
Long-term receivables, net	11	19
Goodwill	95	208
Intangibles, net	26	26
Deferred income taxes	88	370
Other	125	141
	345	764
Plant, property, and equipment, at cost	2,960	2,978
Less Accumulated depreciation and amortization	(1,815)	(1,793)
	1,145	1,185
	\$ 2,828	\$ 3,590

**LIABILITIES AND SHAREHOLDERS EQUITY**

Current liabilities:		
Short-term debt (including current maturities of long-term debt)	\$ 49	\$ 46
Trade payables	790	987
Accrued taxes	30	41
Accrued interest	22	22
Accrued liabilities	201	213
Other	65	49

	1,157	1,358
Long-term debt	1,402	1,328
Deferred income taxes	51	114
Postretirement benefits	377	288
Deferred credits and other liabilities	61	71
Commitments and contingencies		
Minority interest	31	31
Shareholders' equity:		
Common stock		
Premium on common stock and other capital surplus	2,809	2,800
Accumulated other comprehensive loss	(318)	(73)
Retained earnings (accumulated deficit)	(2,502)	(2,087)
	(11)	640
Less: Shares held as treasury stock, at cost	240	240
	(251)	400
	\$ 2,828	\$ 3,590

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

**Table of Contents****TENNECO INC.****CONSOLIDATED STATEMENTS OF CASH FLOWS**

	<b>Year Ended December 31,</b>		
	<b>2008</b>	<b>2007</b>	<b>2006</b>
	<b>(Millions)</b>		
<b>Operating Activities</b>			
Net income (loss)	\$ (415)	\$ (5)	\$ 49
Adjustments to reconcile net income (loss) to cash provided by operating activities			
Depreciation and amortization of other intangibles	222	205	184
Goodwill impairment charge	114		
Deferred income taxes	204	25	(41)
Stock-based compensation	10	9	7
Loss on sale of assets	10	8	3
Changes in components of working capital			
(Increase) decrease in receivables	126	(116)	(24)
(Increase) decrease in inventories	19	(66)	(57)
(Increase) decrease in prepayments and other current assets	1	15	(25)
Increase (decrease) in payables	(181)	100	91
Increase (decrease) in accrued taxes	4	(25)	15
Increase (decrease) in accrued interest		(10)	2
Increase (decrease) in other current liabilities		19	5
Change in long-term assets	16	6	3
Change in long-term liabilities	19	(13)	(11)
Other	11	6	2
Net cash provided by operating activities	160	158	203
<b>Investing Activities</b>			
Proceeds from sale of assets	3	10	17
Cash payments for plant, property, and equipment	(233)	(177)	(177)
Cash payments for software related intangible assets	(15)	(19)	(13)
Cash payment for net assets purchased		(16)	
Acquisition of businesses (net of cash acquired)	(16)		
Investments and other			1
Net cash used by investing activities	(261)	(202)	(172)
<b>Financing Activities</b>			
Issuance of common shares	2	8	17
Issuance of long-term debt	1	400	
Debt issuance costs on long-term debt	(2)	(11)	
Increase (decrease) in bank overdrafts	(1)	7	

Edgar Filing: TENNECO INC - Form 10-K

Retirement of long-term debt	(6)	(591)	(4)
Net increase (decrease) in revolver borrowings and short-term debt excluding current maturities of long-term debt	77	183	3
Distribution to minority interest partners	(13)	(6)	(4)
Net cash provided (used) by financing activities	58	(10)	12
Effect of foreign exchange rate changes on cash and cash equivalents	(19)	40	18
Increase (decrease) in cash and cash equivalents	(62)	(14)	61
Cash and cash equivalents, January 1	188	202	141
Cash and cash equivalents, December 31 (Note)	\$ 126	\$ 188	\$ 202
<b>Supplemental Cash Flow Information</b>			
Cash paid during the year for interest	\$ 117	\$ 177	\$ 137
Cash paid during the year for income taxes (net of refunds)	62	60	26
<b>Non-cash Investing and Financing Activities</b>			
Period ended balance of payables for plant, property, and equipment	\$ 28	\$ 40	\$ 18
Assumption of debt from business acquisition	10		

Note: Cash and cash equivalents include highly liquid investments with a maturity of three months or less at the date of purchase.

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

**Table of Contents****TENNECO INC.****CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS EQUITY**

	Year Ended December 31,					
	2008		2007		2006	
	Shares	Amount	Shares	Amount	Shares	Amount
	(Millions Except Share Amounts)					
<b>Common Stock</b>						
Balance January 1	47,892,532	\$	47,085,274	\$	45,544,668	\$
Issued (Reacquired) pursuant to benefit plans	238,982		209,558		(104,240)	
Stock options exercised	182,976		597,700		1,644,846	
Balance December 31	48,314,490		47,892,532		47,085,274	
<b>Premium on Common Stock and Other Capital Surplus</b>						
Balance January 1		2,800		2,790		2,776
Premium on common stock issued pursuant to benefit plans		9		10		14
Balance December 31		2,809		2,800		2,790
<b>Accumulated Other Comprehensive Loss</b>						
Balance January 1		(73)		(252)		(281)
Adoption of recognition provision of Statement of Financial Accounting Standard (SFAS) No. 158, net of tax of \$31 million						(59)
Measurement date implementation of SFAS No. 158, net of tax of \$7 million				14		
Other comprehensive income (loss)		(245)		165		88
Balance December 31		(318)		(73)		(252)
<b>Retained Earnings (Accumulated Deficit)</b>						
Balance January 1		(2,087)		(2,072)		(2,118)

Edgar Filing: TENNECO INC - Form 10-K

Net income (loss)		(415)		(5)		49
Measurement date implementation of SFAS No. 158, net of tax of \$2 million				(8)		
Other				(2)		(3)
Balance December 31		(2,502)		(2,087)		(2,072)
<b>Less Common Stock Held as Treasury Stock, at Cost</b>						
Balance January 1 and December 31	1,294,692	240	1,294,692	240	1,294,692	240
Total		\$ (251)		\$ 400		\$ 226

The accompanying notes to consolidated financial statements are an integral part of these statements of changes in shareholders equity.

**Table of Contents****TENNECO INC.****CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)**

	Year Ended December 31,					
	2008		2007		2006	
	Accumulated Other Comprehensive Income (Loss)	Comprehensive Income (Loss)	Accumulated Other Comprehensive Income (Loss)	Comprehensive Income (Loss)	Accumulated Other Comprehensive Income (Loss)	Comprehensive Income (Loss)
	(Millions)					
<b>Net Income (Loss)</b>	\$	(415)	\$	(5)	\$	49
<b>Accumulated Other Comprehensive Income (Loss) Cumulative Translation Adjustment</b>						
Balance January 1	\$	85	\$	(53)	\$	(149)
Translation of foreign currency statements		(127)		(127)	138	138
					96	96
Balance December 31		(42)		85		(53)
<b>Additional Liability for Pension Benefits</b>						
Balance January 1		(158)		(199)		(132)
Additional liability for pension and postretirement benefits, net of tax of \$9 million in 2008, \$(15) million in 2007, and \$2 million in 2006		(118)		(118)	27	27
Measurement date implementation of SFAS No. 158, net of tax of \$7 million				14		
Deferred tax valuation allowance adjustment					(3)	(3)
Balance December 31		(276)		(158)		(140)
<b>Adoption of recognition provision of SFAS No. 158,</b>					(59)	



**net of tax of \$31 million**

Balance December 31	\$	(318)	\$	(73)	\$	(252)	
Other comprehensive income (loss)		(245)		165		88	
<b>Comprehensive Income (Loss)</b>	\$	(660)	\$	160	\$	137	

The accompanying notes to consolidated financial statements are an integral part of these statements of comprehensive income (loss).

**Table of Contents**

**TENNECO INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**1. Summary of Accounting Policies**

*Consolidation and Presentation*

Our consolidated financial statements include all majority-owned subsidiaries. We carry investments in 20 percent to 50 percent owned companies as an equity method investment, at cost plus equity in undistributed earnings since the date of acquisition and cumulative translation adjustments. We have eliminated intercompany transactions.

Certain reclassifications have been made to the prior period cash flow statements to conform to the current year presentation. We have reclassified \$12 million and \$8 million from the line item other operating activities for the year ended December 31, 2007 and 2006 respectively, into two new line items, change in long-term assets and change in long-term liabilities to provide additional details on our cash flow statement. We have also reclassified \$15 million and \$(1) million respectively, from the line item other operating activities to classify currency movement with the related line items. The \$15 million reclassification from other operating activities decreased the line item increase (decrease) in payables by \$(16) million and increased the line item increase (decrease) in other current liabilities by \$1 million for the year ended December 31, 2007. The \$(1) million reclassification from other operating activities decreased the line item increase (decrease) in payables by \$(1) million and increased the line increase (decrease) in other current liabilities by \$2 million for the year ended December 31, 2006. We have also reclassified several amounts within the operating section of the cash flow statement, none of which were significant, to conform to the current year presentation. Additionally, we have reclassified \$(7) million for the year ended December 31, 2007, from the line item increase (decrease) in payables in the operating section of the cash flow to a new line item increase (decrease) in bank overdrafts in the financing section. The reclassification for bank overdrafts was less than \$1 million for the year ended December 31, 2006.

In September 2006, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards (SFAS) No. 158 Employers Accounting for Defined Benefit and Other Postretirement Plans. Effective January 1, 2007, Tenneco elected to early-adopt the measurement date provisions of SFAS No. 158. We previously presented the transition adjustment as part of other comprehensive income in our statement of comprehensive income and statement of changes in shareholders equity for the year ended December 31, 2007. The transition adjustment should have been reported as a direct adjustment to the balance of accumulated other comprehensive income (loss) as of December 31, 2007. Other comprehensive income for the year ended December 31, 2007 was previously reported as \$179 million. The amount of other comprehensive income for the year ended December 31, 2007 should have been reported as \$165 million. The previously reported amount of comprehensive income for the year ended December 31, 2007 was \$174 million and the amount that should have been reported is \$160 million. We have revised the presentation of comprehensive income and other comprehensive income for 2007 in the accompanying financial statements in this Form 10-K. The statement of income (loss), balance sheet and statement of cash flows were not affected.

*Sales of Accounts Receivable*

We have an agreement to sell an interest in some of our U.S. trade accounts receivable to a third party. Receivables become eligible for the program on a daily basis, at which time the receivables are sold to the third party without recourse, net of a discount, through a wholly-owned subsidiary. Under this agreement, as well as individual

agreements with third parties in Europe, we have sold accounts receivable of \$179 million and \$157 million at December 31, 2008 and 2007, respectively. We recognized a loss of \$10 million, \$10 million and \$9 million during 2008, 2007, and 2006 respectively, representing the discount from book values at which these receivables were sold to the third party. The discount rate varies based on funding cost incurred by the third party, which has averaged approximately five percent during 2008. We retain ownership of the remaining interest in the pool of receivables not sold to the third party. The retained interest represents

**Table of Contents****TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

a credit enhancement for the program. We record the retained interest based upon the amount we expect to collect from our customers, which approximates book value.

In January 2009, the U.S. program was amended and extended to March 2, 2009 at a facility size of \$120 million. These revisions will have the affect of reducing the amount of receivables sold by approximately \$10 million to \$30 million compared to the terms of the previous program. On February 23, 2009 this program was further extended for 364 days to February 22, 2010 at a facility size of \$100 million.

*Inventories*

At December 31, 2008 and 2007, inventory by major classification was as follows:

	<b>2008</b>	<b>2007</b>
	<b>(Millions)</b>	
Finished goods	\$ 211	\$ 212
Work in process	143	175
Raw materials	114	111
Materials and supplies	45	41
	<b>\$ 513</b>	<b>\$ 539</b>

Our inventories are stated at the lower of cost or market value using the first-in, first-out ( FIFO ) or average cost methods.

*Goodwill and Intangibles, net*

As required by SFAS No. 142, Goodwill and Other Intangible Assets, we evaluate goodwill for impairment in the fourth quarter of each year, or more frequently if events indicate it is warranted. We compare the estimated fair value of our reporting units with goodwill to the carrying value of the unit's assets and liabilities to determine if impairment exists within the recorded balance of goodwill. We estimate the fair value of each reporting unit using the income approach which is based on the present value of estimated future cash flows. The income approach is dependent on a number of factors, including estimates of market trends, forecasted revenues and expenses, capital expenditures, weighted average cost of capital and other variables. These estimates are based on assumptions that we believe to be reasonable, but which are inherently uncertain.

During the fourth quarter of 2008, all of our reporting units passed this test with the exception of our North America Original Equipment Ride Control reporting unit whose carrying value exceeded the estimated fair value. Under SFAS No. 142, we were required to calculate the implied fair value of goodwill of the North America Original Equipment Ride Control reporting unit by allocating the estimated fair value to the assets and liabilities of this reporting unit as if the reporting unit had been acquired in a business combination and the fair value of the reporting unit was the acquisition price. As a result of this testing, we determined that the remaining amount of goodwill related

to our elastomer business acquired in 1996 was impaired due to the significant decline in light vehicle production in 2008 and anticipated in future periods. Accordingly, we recorded an impairment charge of \$114 million during the fourth quarter of 2008. During the fourth quarter of 2007, all of our reporting units passed the goodwill impairment test.

Table of Contents**TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

The changes in the net carrying amount of goodwill for the twelve months ended December 31, 2008, were as follows:

	<b>North America</b>	<b>Europe, South America and India</b>	<b>Asia Pacific</b>	<b>Total</b>
	(Millions)			
Balance at December 31, 2007	\$ 138	\$ 60	\$ 10	\$ 208
Acquisition of business		10		10
Goodwill impairment write-off	(114)			(114)
Translation adjustments		(7)	(2)	(9)
Balance at December 31, 2008	\$ 24	\$ 63	\$ 8	\$ 95

During 2008, we acquired the suspension business of Gruppo Marzocchi which resulted in the recognition of \$10 million in goodwill. We have capitalized certain intangible assets, primarily trademarks and patents, based on their estimated fair value at the date we acquired them. We amortize these intangible assets on a straight-line basis over periods ranging from five to 30 years. Amortization of intangibles amounted to \$3 million in 2008, \$1 million in 2007, and less than \$1 million in 2006, and is included in the statements of income caption Depreciation and amortization of intangibles. The carrying amount and accumulated amortization were as follows:

	<b>December 31, 2008</b>		<b>December 31, 2007</b>	
	<b>Gross Carrying Value</b>	<b>Accumulated Amortization</b>	<b>Gross Carrying Value</b>	<b>Accumulated Amortization</b>
	(Millions)		(Millions)	
Amortized Intangible Assets				
Customer contract	\$ 8	\$ (2)	\$ 8	\$ (1)
Patents	3	(3)	3	(2)
Technology rights	23	(3)	20	(2)
Total	\$ 34	\$ (8)	\$ 31	\$ (5)

Estimated amortization of intangible assets over the next five years is expected to be \$2 million in 2009 through 2012 and \$4 million in 2013. During 2007, we spent \$16 million to acquire Combustion Components Associates ELIM-NOx™ technology which we began amortizing in 2008. The weighted-average amortization period for the ELIM-NOx™ acquisition is 10 years.

*Plant, Property, and Equipment, at Cost*

At December 31, 2008 and 2007, plant, property, and equipment, at cost, by major category were as follows:

	<b>2008</b>	<b>2007</b>
	<b>(Millions)</b>	
Land, buildings, and improvements	\$ 490	\$ 496
Machinery and equipment	2,282	2,288
Other, including construction in progress	188	194
	<b>\$ 2,960</b>	<b>\$ 2,978</b>

We depreciate these properties excluding land on a straight-line basis over the estimated useful lives of the assets. Useful lives range from 10 to 50 years for buildings and improvements and from three to 25 years for machinery and equipment.

**Table of Contents**

**TENNECO INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

*Notes and Accounts Receivable and Allowance for Doubtful Accounts*

Short and long-term notes receivable outstanding were \$14 million and \$23 million at December 31, 2008 and 2007, respectively. The allowance for doubtful accounts on short-term and long-term notes receivable was \$3 million at both December 31, 2008 and 2007.

At December 31, 2008 and 2007, the allowance for doubtful accounts on short-term and long-term accounts receivable was \$21 million and \$22 million, respectively.

*Pre-production Design and Development and Tooling Assets*

We expense pre-production design and development costs as incurred unless we have a contractual guarantee for reimbursement from the original equipment customer. We had current and long-term receivables of \$12 million and \$20 million on the balance sheet at December 31, 2008 and 2007, respectively, for guaranteed pre-production design and development reimbursement arrangements with our customers. In addition, plant, property and equipment includes \$53 million and \$62 million at December 31, 2008 and 2007, respectively, for original equipment tools and dies that we own. Prepayments and other includes \$22 million and \$33 million at December 31, 2008 and 2007, respectively, for in-process tools and dies that we are building for our original equipment customers.

*Internal Use Software Assets*

We capitalize certain costs related to the purchase and development of software that we use in our business operations. We amortize the costs attributable to these software systems over their estimated useful lives, ranging from three to 15 years, based on various factors such as the effects of obsolescence, technology, and other economic factors. Capitalized software development costs, net of amortization, were \$74 million and \$86 million at December 31, 2008 and 2007, respectively, and are recorded in other long-term assets. Amortization of software development costs was approximately \$24 million, \$21 million and \$17 million for the years ended December 31, 2008, 2007 and 2006, respectively, and is included in the statements of income (loss) caption Depreciation and amortization of intangibles. Additions to capitalized software development costs, including payroll and payroll-related costs for those employees directly associated with developing and obtaining the internal use software, are classified as investing activities in the statements of cash flows.

*Income Taxes*

In accordance with SFAS No. 109 Accounting for Income Taxes (SFAS No. 109), we evaluate our deferred income taxes quarterly to determine if valuation allowances are required or should be adjusted. SFAS No. 109 requires that companies assess whether valuation allowances should be established against their deferred tax assets based on consideration of all available evidence, both positive and negative, using a more likely than not standard. This assessment considers, among other matters, the nature, frequency and amount of recent losses, the duration of statutory carryforward periods, and tax planning strategies. In making such judgments, significant weight is given to evidence that can be objectively verified.

Valuation allowances have been established for deferred tax assets based on a more likely than not threshold. The ability to realize deferred tax assets depends on our ability to generate sufficient taxable income within the



carryforward periods provided for in the tax law for each tax jurisdiction. We have considered the following possible sources of taxable income when assessing the realization of our deferred tax assets:

Future reversals of existing taxable temporary differences;

Taxable income or loss, based on recent results, exclusive of reversing temporary differences and carryforwards; and,

Tax-planning strategies.

**Table of Contents****TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

In 2008, we recorded tax expense of \$289 million primarily related to establishing a valuation allowance against our net deferred tax assets in the U.S. In the U.S. we utilize the results from 2007 and 2008 as a measure of the cumulative losses in recent years. Accounting standards do not permit us to give any consideration to a likely economic recovery in the U.S. or the recent new business we have won particularly in the commercial vehicle segment in evaluating the requirement to record a valuation allowance. Consequently, we concluded that our ability to fully utilize our NOLs was limited due to projecting the current negative economic environment into the future and the impact of the current negative operating environment on our tax planning strategies. As a result of tax planning strategies which have not yet been implemented but which we plan to implement and which do not depend upon generating future taxable income, we continue to carry deferred tax assets in the U.S. of \$70 million relating to the expected utilization of those NOLs. The federal NOL expires beginning in 2020 through 2028. The state NOL expires in various years through 2028.

If our operating performance improves on a sustained basis, our conclusion regarding the need for a valuation allowance could change, resulting in the reversal of some or all of the valuation allowance in the future. The charge to establish the U.S. valuation allowance also includes items related to the losses allocable to certain U.S. state jurisdictions where it was determined that tax attributes related to those jurisdictions were potentially not realizable.

Going forward, we will be required to record a valuation allowance against deferred tax assets generated by taxable losses in each period in the U.S. as well as in other foreign countries. Our future provision for income taxes will include no tax benefit with respect to losses incurred and no tax expense with respect to income generated in these jurisdictions until the respective valuation allowance is eliminated. This will cause variability in our effective tax rate.

*Revenue Recognition*

We recognize revenue for sales to our original equipment and aftermarket customers when title and risk of loss pass to the customers under the terms of our arrangements with those customers, which is usually at the time of shipment from our plants or distribution centers. In connection with the sale of exhaust systems to certain original equipment manufacturers, we purchase catalytic converters and diesel particulate filters or components thereof including precious metals ( substrates ) on behalf of our customers which are used in the assembled system. These substrates are included in our inventory and passed through to the customer at our cost, plus a small margin, since we take title to the inventory and are responsible for both the delivery and quality of the finished product. Revenues recognized for substrate sales were \$1,492 million, \$1,673 million and \$927 million in 2008, 2007 and 2006, respectively. For our aftermarket customers, we provide for promotional incentives and returns at the time of sale. Estimates are based upon the terms of the incentives and historical experience with returns. Certain taxes assessed by governmental authorities on revenue producing transactions, such as value added taxes, are excluded from revenue and recorded on a net basis. Shipping and handling costs billed to customers are included in revenues and the related costs are included in cost of sales in our Statements of Income (Loss).

*Warranty Reserves*

Where we have offered product warranty, we also provide for warranty costs. Those estimates are based upon historical experience and upon specific warranty issues as they arise. While we have not experienced any material differences between these estimates and our actual costs, it is reasonably possible that future warranty issues could

arise that could have a significant impact on our consolidated financial statements.

*Earnings Per Share*

We compute basic earnings per share by dividing income available to common shareholders by the weighted-average number of common shares outstanding. The computation of diluted earnings per share is

**Table of Contents****TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

similar to the computation of basic earnings per share, except that we adjust the weighted-average number of shares outstanding to include estimates of additional shares that would be issued if potentially dilutive common shares had been issued. In addition, we adjust income available to common shareholders to include any changes in income or loss that would result from the assumed issuance of the dilutive common shares. Due to the net loss for the year ended December 31, 2008, the calculation of diluted earnings per share does not include the dilutive effect from shares of restricted stock and stock options. See Note 3 to the consolidated financial statements of Tenneco Inc.

*Engineering, Research and Development*

We expense engineering, research, and development costs as they are incurred. Engineering, research, and development expenses were \$127 million for 2008, \$114 million for 2007 and \$88 million for 2006, net of reimbursements from our customers. Of these amounts, \$26 million in 2008, \$18 million in 2007 and \$13 million in 2006 relate to research and development, which includes the research, design, and development of a new unproven product or process. Additionally, \$46 million, \$59 million and \$45 million of engineering, research, and development expense for 2008, 2007, and 2006, respectively, relates to improvements and enhancements to existing products and processes. The remainder of the expenses in each year relate to engineering costs we incurred for application of existing products and processes to vehicle platforms. Further, our customers reimburse us for engineering, research, and development costs on some platforms when we prepare prototypes and incur costs before platform awards. Our engineering, research, and development expense for 2008, 2007, and 2006 has been reduced by \$120 million, \$72 million and \$61 million, respectively, for these reimbursements.

*Foreign Currency Translation*

We translate the consolidated financial statements of foreign subsidiaries into U.S. dollars using the exchange rate at each balance sheet date for assets and liabilities and a weighted-average exchange rate for revenues and expenses in each period. We record translation adjustments for those subsidiaries whose local currency is their functional currency as a component of accumulated other comprehensive loss in shareholders' equity. We recognize transaction gains and losses arising from fluctuations in currency exchange rates on transactions denominated in currencies other than the functional currency in earnings as incurred, except for those transactions which hedge purchase commitments and for those intercompany balances which are designated as long-term investments. Our results included foreign currency transaction losses of \$11 million in 2008, gains of \$15 million in 2007, and losses of \$8 million in 2006, respectively.

*Risk Management Activities*

We use derivative financial instruments, principally foreign currency forward purchase and sale contracts with terms of less than one year, to hedge our exposure to changes in foreign currency exchange rates, and interest rate swaps to manage our exposure to changes in interest rates. Our primary exposure to changes in foreign currency rates results from intercompany loans made between affiliates to minimize the need for borrowings from third parties. Net gains or losses on these foreign currency exchange contracts that are designated as hedges are recognized in the income statement to offset the foreign currency gain or loss on the underlying transaction. From time to time we may enter into foreign currency forward purchase and sale contracts to mitigate our exposure to changes in exchange rates on some intercompany and third party trade receivables and payables. Since these anticipated transactions are not firm commitments, we mark these forward contracts to market each period and record any gain or loss in the income statement. We recognize the net gains or losses on these contracts on the accrual basis in the balance sheet caption

Accumulated other comprehensive loss. In the statement of cash flows, cash receipts or payments related to these exchange contracts are classified consistent with the cash flows from the transaction being hedged.

We do not enter into derivative financial instruments for speculative purposes.

**Table of Contents**

**TENNECO INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

*Recent Accounting Pronouncements*

In December 2008, the FASB issued FASB Staff Position (FSP) FAS 132(R)-1 *Employers' Disclosure about Postretirement Benefit Plan Assets*. FSP FAS 132(R)-1 amends SFAS No. 132(R), *Employers' Disclosure about Pensions and Other Postretirement Benefits*, and provides guidance on disclosure for an employer's plan assets of a defined benefit pension or other postretirement plan. FSP FAS 132(R)-1 requires disclosure of plan asset investment policies and strategies, the fair value of each major category of plan assets, information about inputs and valuation techniques used to develop fair value measurements of plan assets, and additional disclosure about significant concentrations of risk in plan assets for an employer's pension and other postretirement plans. FSP FAS 132(R)-1 is effective for fiscal years ending after December 15, 2009. We do not believe the adoption of FSP FAS 132(R)-1 will have a material impact on our consolidated financial statements, however, we will expand our footnote disclosures relating to our pension plan to meet the disclosure requirements of FSP FAS 132(R)-1.

In December 2008, the FASB issued FSP FAS 140-4 and FIN 46(R)-8 *Disclosures by Public Entities (Enterprises) about Transfers of Financial Assets and Interests in Variable Interest Entities*. The objective of this FSP is to provide greater transparency to financial statement users about a transferor's continuing involvement with transferred financial assets and an enterprise's involvement with variable interest entities and qualifying special-purpose entities. This FSP amends SFAS No. 140, *Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities*, to require public entities to provide additional disclosures about transfers of financial assets. Additionally, this FSP amends FASB Interpretation No. 46-R, *Consolidation of Variable Interest Entities*, to require public enterprises to provide additional disclosures about their involvement with variable interest entities. FSP FAS 140-4 and FIN 46(R)-8 is effective for the first reporting period (interim or annual) ending after December 15, 2008. The adoption of FSP FAS 140-4 and FIN 46(R)-8 did not have a material impact on our consolidated financial statements or disclosures.

In October 2008, the FASB issued FSP 157-3, *Determining the Fair Value of a Financial Asset When the Market for That Asset Is Not Active*. FSP 157-3 provides clarification to SFAS No. 157, *Fair Value Measurements* and key considerations in determining the fair value of a financial asset when the market for that financial asset is not active. FSP 157-3 is effective upon issuance, including prior periods for which financial statements have not been issued. We reviewed the illustrative example provided in FSP FAS 157-3 and have concluded that the adoption of FSP 157-3 does not have a material impact on our consolidated financial statements or disclosures.

In September 2008, the Emerging Issues Task Force (EITF) issued EITF Issue No. 08-7 (EITF 08-7), *Accounting for Defensive Intangible Assets*. EITF 08-7 defines a defensive intangible asset as an intangible asset acquired by an entity in a business combination or an asset acquisition that the entity does not intend to actively use but rather intends to "lock up" the asset to prevent competitors from obtaining access to the asset. EITF 08-7 requires a defensive intangible asset to be accounted for as a separate unit of accounting and should be assigned a useful life that reflects the entity's consumption of the expected benefits related to the asset. EITF 08-7 is effective prospectively for intangible assets acquired on or after the beginning of the first annual reporting period beginning on or after December 15, 2008. We do not believe the adoption of EITF 08-7 will have a material impact on our consolidated financial statements or disclosures.

In September 2008, the EITF issued EITF Issue No. 08-06 (EITF 08-6), *Equity Method Investment Accounting Considerations*. EITF 08-6 requires that the initial carrying value of an equity method investment should be based on

the cost accumulation model described in SFAS No. 141(R), Business Combinations. EITF 08-6 also concluded that an equity method investor (1) should not separately test an investee's underlying indefinite-life intangible assets for impairment, (2) should account for an investee's share as if the equity method investor sold a proportionate share of its investment and (3) should continue applying the guidance of APB Opinion No. 18, The Equity Method of Accounting for Investors of Common Stock, upon a change in the investor's accounting from the equity to the cost method. EITF 08-6 is effective on a

**Table of Contents**

**TENNECO INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

prospective basis in fiscal years beginning on or after December 15, 2008 including interim periods within those fiscal years. We do not believe the adoption of EITF 08-6 will have a material impact on our consolidated financial statements or disclosures.

In June 2008, the FASB issued FSP EITF 03-6-1, *Determining Whether Instruments Granted in Share-Based Payment Transactions are Participating Securities*. FSP EITF 03-6-1 requires that unvested share-based payment awards that contain non-forfeitable rights to dividends or dividend equivalents (whether paid or unpaid) are participating and shall be included in the computation of EPS pursuant to the two-class method. FSP EITF 03-6-1 is effective for financial statements issued for fiscal years beginning after December 15, 2008 and interim periods within those years. FSP EITF 03-6-1 will not have any effect on our consolidated financial statements and related disclosures.

In May 2008, the FASB issued SFAS No. 162, *The Hierarchy of Generally Accepted Accounting Principles* (SFAS No. 162). SFAS No. 162 identifies the sources of accounting principles and the framework for selecting principles to be used in the preparation and presentation of financial statements in accordance with generally accepted accounting principles. This statement will be effective 60 days after the Securities and Exchange Commission (SEC) approves the Public Company Accounting Oversight Board's amendments to AU Section 411, *The Meaning of Present Fairly in Conformity with Generally Accepted Accounting Principles*. The adoption of SFAS No. 162 did not have a material impact on our consolidated financial statements.

In April 2008, the FASB issued FSP 142-3, *Determination of Useful Life of Intangible Assets*. FSP 142-3 amends the factors that should be considered in developing renewal or extension assumptions used to determine the useful life of a recognized intangible asset under FASB Statement No. 142, *Goodwill and Other Intangible Assets*, and requires additional disclosure relating to an entity's renewal or extension of recognized intangible assets. FSP 142-3 is effective for financial statements issued for fiscal years beginning after December 15, 2008 and interim periods within those fiscal years. We do not expect the adoption of FSP 142-3 to have a material impact on our consolidated financial statements.

In March 2008, the FASB issued SFAS No. 161, *Disclosures about Derivative Instruments and Hedging Activities*, an amendment of FASB Statement No. 133 (SFAS No. 161). SFAS No. 161 requires enhanced disclosures about an entity's derivative and hedging activities including how and why an entity uses derivative instruments, how an entity accounts for derivatives and hedges and how derivative instruments and related hedged items affect an entity's financial position, financial performance and cash flows. SFAS No. 161 is effective for financial statements issued for fiscal years and interim periods beginning after November 15, 2008. We believe our current financial statement disclosures in this Annual Report meet the disclosure requirements of SFAS No. 161. Accordingly, we do not expect SFAS No. 161 to have a material impact on our consolidated financials.

In February 2008, the FASB issued FSP 140-3, *Accounting for Transfers of Financial Assets and Repurchase Financing Transactions*. FSP 140-3 provides guidance on accounting for a transfer of a financial asset and a repurchase financing which is a repurchase agreement that relates to a previously transferred financial asset between the same counterparties that is entered into contemporaneously with, or in contemplation of, the initial transfer. FSP 140-3 is effective for financial statements issued for fiscal years beginning after November 15, 2008, and interim periods within those fiscal years. We do not expect FSP 140-3 to have a material impact on our consolidated financial statements and related disclosures.



In February 2008, the FASB issued FSP 157-1, Application of FASB Statement No. 157 to FASB Statement No. 13 and Other Accounting Pronouncements That Address Fair Value Measurements for Purposes of Lease Classification or Measurement Under Statement 13. FSP 157-1 provides a scope exception to SFAS No. 157 which does not apply under Statement 13 and other accounting pronouncements that address fair value measurements for purposes of lease classification or measurement under Statement 13. FSP 157-1 is

**Table of Contents**

**TENNECO INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

effective upon the initial adoption of SFAS No. 157. FSP 157-1 did not have a material impact to our consolidated financial statements.

In December 2007, the FASB issued SFAS No. 141 (Revised 2007), Business Combinations (SFAS No. 141(R)). SFAS No. 141(R) requires an acquirer to recognize the assets acquired, the liabilities assumed, contractual contingencies and any noncontrolling interest in the acquiree at the acquisition date at their fair values as of that date. SFAS No. 141(R) provides guidance on the accounting for acquisition-related costs, restructuring costs related to the acquisition and the measurement of goodwill and a bargain purchase. SFAS No. 141(R) applies prospectively to business combinations for which the acquisition date is on or after December 15, 2008. We do not expect the adoption of this statement to have a material impact to our consolidated financial statements.

In December 2007, the FASB issued SFAS No. 160, Noncontrolling Interests in Consolidated Financial Statements-an amendment of ARB No. 51. SFAS No. 160 amends ARB 51 to establish accounting and reporting standards for the noncontrolling (minority) interest in a subsidiary and for the deconsolidation of a subsidiary. It clarified that a noncontrolling interest in a subsidiary is an ownership interest in the consolidated entity that should be reported as equity in the consolidated financial statements, establishes a single method of accounting for changes in a parent's ownership interest in a subsidiary that does not result in deconsolidation and provides for expanded disclosure in the consolidated financial statements relating to the interests of the parent's owners and the interests of the noncontrolling owners of the subsidiary. SFAS No. 160 applies prospectively (except for the presentation and disclosure requirements) for fiscal years and interim periods within those fiscal years beginning on or after December 15, 2008. The presentation and disclosure requirements will be applied retrospectively for all periods presented. The adoption of this statement will change the presentation of our consolidated financial statements based on the new disclosure requirements for noncontrolling interests.

In December 2007, the SEC issued Staff Accounting Bulletin No. 110 (SAB 110). SAB 110 amends and replaces Question 6 of Section D.2 Topic 14, Share-Based Payment. Question 6 of Topic 14:D.2 (as amended) expresses the views of the staff regarding the use of a simplified method in developing an estimate of the expected term of plain vanilla share options in accordance with SFAS No. 123 (revised 2004), Share-Based Payment (SFAS No. 123(R)). SAB 110 was effective January 1, 2008. The adoption of SAB 110 had no impact to our consolidated financial statements.

In September 2006, the FASB issued SFAS No. 157, Fair Value Measurement. This statement defines fair value, establishes a fair value hierarchy for measuring fair value under generally accepted accounting principles and expands disclosures about fair value measurements. SFAS No. 157 is effective for financial statements issued for fiscal years beginning after November 15, 2007. FSP 157-2 issued in February 2008 delays the effective date of SFAS No. 157 for nonfinancial assets and nonfinancial liabilities to fiscal years beginning after November 15, 2008 and interim periods within those fiscal years. We have adopted the measurement and disclosure impact of SFAS No. 157 relating to our financial assets and financial liabilities which are measured on a recurring basis (at least annually) effective January 1, 2008. See Note 2 to the consolidated financial statements of Tenneco Inc. and Consolidated Subsidiaries. We do not expect the adoption of the nonfinancial assets and nonfinancial liabilities portion of SFAS No. 157 to have a material impact to our consolidated financial statements.

In June 2007, the EITF issued EITF 06-11, Accounting for Income Tax Benefits of Dividends on Share-Based Payment Awards. EITF 06-11 provides the final consensus on the application of paragraphs 62 and 63 of

SFAS No. 123(R) on the accounting for income tax benefits relating to the payment of dividends on equity-classified employee share-based payment awards that are charged to retained earnings. EITF 06-11 affirms that the realized income tax benefit from dividends or dividend equivalents that are charged to retained earnings for equity classified nonvested equity shares, nonvested equity share units, and outstanding equity share options should be recognized as an increase in additional paid-in-capital. Additionally, EITF 06-11 provides

**Table of Contents**

**TENNECO INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

guidance on the amount of tax benefits from dividends that are reclassified from additional paid-in-capital to the income statement when an entity's estimate of forfeitures changes. EITF 06-11 is effective prospectively to the income tax benefits that result from dividends on equity-classified employee share-based payment awards that are declared in fiscal years beginning after December 15, 2007. The adoption of EITF 06-11, on January 1, 2008, did not have a material impact on our consolidated financial statements.

In June 2007, the EITF issued EITF 07-3, Accounting for Nonrefundable Advance Payments for Goods or Services Received for Use in Future Research and Development Activities. EITF 07-3 requires the deferral and capitalization of nonrefundable advance payments for goods or services that an entity will use in research and development activities pursuant to an executory contractual agreement. Expenditures which are capitalized under EITF 07-3 should be expensed as the goods are delivered or the related services are performed. EITF 07-3 is effective prospectively for fiscal years beginning after December 15, 2007 and interim periods within those fiscal years. EITF 07-3 is applicable to new contracts entered into after the effective date of this Issue. The adoption of EITF 07-3, on January 1, 2008, did not have a material impact on our consolidated financial statements.

In April 2007, the FASB issued Interpretation No. 39-1, Amendment of FASB Interpretation No. 39 (FIN 39-1). This amendment allows a reporting entity to offset fair value amounts recognized for derivative instruments with fair value amounts recognized for the right to reclaim or realize cash collateral. Additionally, this amendment requires disclosure of the accounting policy on the reporting entity's election to offset or not offset amounts for derivative instruments. FIN 39-1 is effective for fiscal years beginning after November 15, 2007. The adoption of FIN 39-1 did not have a material impact on our consolidated financial statements.

In February 2007, the FASB issued SFAS No. 159, The Fair Value Option for Financial Assets and Financial Liabilities. This statement permits companies to choose to measure at fair value many financial instruments and certain other items that are not currently required to be measured at fair value. SFAS No. 159 is effective for financial statements issued for fiscal years beginning on or after November 15, 2007. As we did not elect the fair value option, the adoption of SFAS 159 did not have a material effect on our consolidated financial statements and related disclosures.

In September 2006, the FASB issued SFAS No. 158, Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans, an amendment of FASB Statements No. 87, 88, 106, and 132(R). Part of this Statement was effective as of December 31, 2006, and requires companies that have defined benefit pension plans and other postretirement benefit plans to recognize the funded status of those plans on the balance sheet on a prospective basis from the effective date. The funded status of these plans is determined as of the plans' measurement dates and represents the difference between the amount of the obligations owed to participants under each plan (including the effects of future salary increases for defined benefit plans) and the fair value of each plan's assets dedicated to paying those obligations. To record the funded status of those plans, unrecognized prior service costs and net actuarial losses experienced by the plans will be recorded in the Accumulated Other Comprehensive Income (Loss) section of shareholders' equity on the balance sheet. The initial adoption as of December 31, 2006 resulted in a reduction of Accumulated Other Comprehensive Income (Loss) in shareholders' equity of \$59 million.

In addition, SFAS No. 158 requires that companies using a measurement date for their defined benefit pension plans and other postretirement benefit plans other than their fiscal year end, change the measurement date effective for fiscal years ending after December 15, 2008. Effective January 1, 2007, we elected to early adopt the measurement date

provision of SFAS No. 158. Adoption of this part of the statement was not material to our financial position and results of operations.

**Table of Contents****TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)***Use of Estimates*

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and 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. These estimates include, among others allowances for doubtful receivables, promotional and product returns, pension and post-retirement benefit plans, income taxes, and contingencies. These items are covered in more detail elsewhere in Note 1, Note 8, Note 11, and Note 13 of the consolidated financial statements of Tenneco Inc. Actual results could differ from those estimates.

**2. Fair Value**

In September 2006, the FASB issued SFAS No. 157 *Fair Value Measurement* which is effective for financial statements issued for fiscal years beginning after November 15, 2007. We adopted SFAS No. 157 on January 1, 2008, with the exception of the application of this statement to non-recurring, nonfinancial assets and liabilities. The adoption of SFAS No. 157 did not have a material impact on our fair value measurements. SFAS No. 157 defines fair value as the price that would be received for an asset or paid to transfer a liability (an exit price) in the principal most advantageous market for the asset or liability in an orderly transaction between market participants. SFAS No. 157 establishes a fair value hierarchy, which prioritizes the inputs used in measuring fair value into the following levels:

Level 1 Quoted prices in active markets for identical assets or liabilities.

Level 2 Inputs, other than quoted prices in active markets, that are observable either directly or indirectly.

Level 3 Unobservable inputs based on our own assumptions.

The fair value of our recurring financial assets and liabilities at December 31, 2008 are as follows:

	<b>Level 1</b>	<b>Level 2 (Millions)</b>	<b>Level 3</b>
<b>Financial Assets:</b>			
Foreign exchange forward contracts	n/a	\$ 2	n/a

*Foreign exchange forward contracts* We use foreign exchange forward purchase and sales contracts with terms of less than one year to hedge our exposure to changes in foreign currency exchange rates. The fair value of our foreign exchange forward contracts is based on a model which incorporates observable inputs including quoted spot rates, forward exchange rates and discounted future expected cash flows utilizing market interest rates with similar quality and maturity characteristics. The change in fair value of these foreign exchange forward contracts is recorded as part of currency gains (losses) and other current liabilities or assets.

*Interest rate swaps* In December 2008, we elected to terminate our fixed-to-floating interest rate swap contracts covering \$150 million of our fixed interest rate debt. In consideration for the termination of the swaps, we received \$6 million.

**Table of Contents****TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****3. Earnings (Loss) Per Share**

Earnings (loss) per share of common stock outstanding were computed as follows:

	<b>Year Ended December 31,</b>		
	<b>2008</b>	<b>2007</b>	<b>2006</b>
	<b>(Millions Except Share and Per Share Amounts)</b>		
Basic earnings (loss) per share			
Net income (loss)	\$ (415)	\$ (5)	\$ 49
Average shares of common stock outstanding	46,406,095	45,809,730	44,625,220
Earnings (loss) per average share of common stock	\$ (8.95)	\$ (0.11)	\$ 1.11
Diluted earnings (loss) per share			
Net income (loss)	\$ (415)	\$ (5)	\$ 49
Average shares of common stock outstanding	46,406,095	45,809,730	44,625,220
Effect of dilutive securities:			
Restricted stock			400,954
Stock options			1,729,399
Average shares of common stock outstanding including dilutive securities	46,406,095	45,809,730	46,755,573
Earnings (loss) per average share of common stock	\$ (8.95)	\$ (0.11)	\$ 1.05

As a result of the net loss in 2008 and 2007, the calculation of diluted earnings per share does not include the dilutive effect of 8,915 and 206,960 shares of restricted stock and 955,072 and 1,509,462 stock options in 2008 and 2007, respectively. In addition, options to purchase 2,194,304, 1,311,427, and 1,344,774 shares of common stock and 426,553, 262,434 and zero shares of restricted stock were outstanding at December 31, 2008, 2007 and 2006, respectively, but were not included in the computation of diluted EPS because the options were anti-dilutive for the years ended December 31, 2008, 2007 and 2006, respectively.

**4. Acquisitions**

On September 1, 2008, we acquired the suspension business of Gruppo Marzocchi, an Italy based worldwide leader in supplying suspension technology in the two wheeler market. The consideration paid for the Marzocchi acquisition included cash of approximately \$1 million, plus the assumption of Marzocchi's net debt (debt less cash acquired) of about \$6 million. The Marzocchi acquisition is accounted for as a purchase business combination with assets acquired and liabilities assumed recorded in our consolidated balance sheet as of September 1, 2008 including \$10 million in



goodwill. The acquisition of the Gruppo Marzocchi suspension business includes a manufacturing facility in Bologna, Italy, associated engineering and intellectual property, the Marzocchi brand name, sales, marketing and customer service operations in the United States and Canada, and purchasing and sales operations in Taiwan. The final allocation of the purchase price is pending the fair value appraisal of the long-lived assets acquired which will be completed by the third quarter of 2009.

On May 30, 2008, we acquired from Delphi Automotive Systems LLC certain ride control assets and inventory at Delphi's Kettering, Ohio facility. We are utilizing the purchased assets in other locations to grow our OE ride control business globally. We paid approximately \$10 million for existing ride control components inventory and approximately \$9 million for certain machinery and equipment. In conjunction with the purchase agreement, we entered into an agreement to lease a portion of the Kettering facility from Delphi and we have entered into a long-term supply agreement with General Motors Corporation to continue supplying passenger

**Table of Contents****TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

car shocks and struts to General Motors from the Kettering facility. The final allocation of the purchase price is pending the fair value appraisal of the fixed assets acquired which will be completed by the second quarter of 2009.

In September 2007, we acquired Combustion Components Associates' ELIM-NO<sub>x</sub> technology for \$16 million. The acquisition included a complete reactant dosing system design and associated intellectual property including granted patents and patent applications yet to be granted for selective catalytic reduction emission control systems that reduce emissions of oxides of nitrogen from diesel powered vehicles. The technology can be used for both urea and hydrocarbon injection. We have recorded the acquisition as part of intangible assets on our balance sheet.

**5. Restructuring and Other Charges**

Over the past several years we have adopted plans to restructure portions of our operations. These plans were approved by the Board of Directors and were designed to reduce operational and administrative overhead costs throughout the business. In the fourth quarter of 2001 our Board of Directors approved a restructuring plan, a project known as Project Genesis, which was designed to lower our fixed costs, relocate capacity, reduce our work force, improve efficiency and utilization, and better optimize our global footprint. We have subsequently engaged in various other restructuring projects related to Project Genesis. We incurred \$27 million in restructuring and restructuring-related costs during 2006, of which \$23 million was recorded in cost of sales and \$4 million was recorded in selling, general and administrative expense. We incurred \$25 million in restructuring and restructuring-related costs during 2007, of which \$22 million was recorded in cost of sales and \$3 million was recorded in selling, general and administrative expense. In 2008, we incurred \$40 million in restructuring and restructuring-related costs, of which \$17 million was recorded in cost of sales and \$23 million was recorded in selling, general, administrative and engineering expense. At December 31, 2008, our restructuring reserve was \$22 million, primarily related to actions announced in October 2008, including European headcount reductions and North American facility closures and headcount reductions, and the remaining obligations for the Wissembourg, France plant closure. At December 31, 2007, our restructuring reserve was \$16 million, primarily related to obligations for the Wissembourg, France plant closure.

Under the terms of our amended and restated senior credit agreement that took effect on March 16, 2007, we were allowed to exclude \$80 million of cash charges and expenses, before taxes, related to cost reduction initiatives incurred after March 16, 2007 from the calculation of the financial covenant ratios required under our senior credit facility. As of December 31, 2008, we have excluded \$62 million in allowable charges relating to restructuring initiatives against the \$80 million available under the terms of the March 2007 amended and restated senior credit facility. The February 2009 amendment resets the exclusion allowing us to exclude \$40 million of cash charges and expenses related to cost reduction initiatives incurred after February 20, 2009.

On January 13, 2009, we announced that we will postpone closing an original equipment ride control plant in the United States as part of our current global restructuring program. We still expect, as announced in October 2008, the elimination of 1,100 positions. We now estimate that we will record up to \$31 million in charges, of which approximately \$25 million represents cash expenditures in connection with the restructuring program announced in the fourth quarter of 2008. We recorded \$24 million of these charges in 2008 and expect to record the remaining \$7 million in 2009.

The February 2009 amendment resets the exclusion allowing us to exclude \$40 million of cash charges and expenses related to cost reduction initiatives incurred after February 23, 2009.

**Table of Contents****TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****6. Long-Term Debt, Short-Term Debt, and Financing Arrangements***Long-Term Debt*

A summary of our long-term debt obligations at December 31, 2008 and 2007, is set forth in the following table:

	<b>2008</b>	<b>2007</b>
	<b>(Millions)</b>	
Tenneco Inc.		
Revolver borrowings due 2012 and 2014, average effective interest rate 4.4% in 2008 and 5.8% in 2007	\$ 239	\$ 169
Senior Term Loans due 2012, average effective interest rate 4.8% in 2008 and 7.2% in 2007	150	150
101/4% Senior Secured Notes due 2013, including unamortized premium	250	250
85/8% Senior Subordinated Notes due 2014	500	500
81/8% Senior Notes due 2015	250	250
Debentures due 2012 through 2025, average effective interest rate 8.4% in 2008 and 9.3% in 2007	1	3
Other subsidiaries		
Notes due 2009 through 2017, average effective interest rate 4.8% in 2008 and 4.6% in 2007	17	12
	1,407	1,334
Less maturities classified as current	5	6
Total long-term debt	\$ 1,402	\$ 1,328

The aggregate maturities and sinking fund requirements applicable to the long-term debt outstanding at December 31, 2008, are \$22 million, \$55 million, \$67 million, \$128 million, and \$246 million for 2009, 2010, 2011, 2012 and 2013, respectively. In 2009, we plan to repay \$17 million of the senior term loan due 2012 by increasing our revolver borrowings which are classified as long-term debt. Accordingly, we have classified the \$17 million repayment as long term debt.

*Short-Term Debt*

Our short-term debt includes the current portion of long-term obligations and borrowing by foreign subsidiaries. Information regarding our short-term debt as of and for the years ended December 31, 2008 and 2007 is as follows:

	<b>2008</b>	<b>2007</b>
	<b>(Millions)</b>	
Maturities classified as current	\$ 5	\$ 6

Notes payable	44	40
Total short-term debt	\$ 49	\$ 46

Table of Contents**TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

	<b>2008 Notes Payable(a) (Dollars in Millions)</b>	<b>2007 Notes Payable(a) (Dollars in Millions)</b>
Outstanding borrowings at end of year	\$ 44	\$ 40
Weighted average interest rate on outstanding borrowings at end of year(b)	10.5%	4.0%
Approximate maximum month-end outstanding borrowings during year	\$ 49	\$ 40
Approximate average month-end outstanding borrowings during year	\$ 43	\$ 28
Weighted average interest rate on approximate average month-end outstanding borrowings during year(b)	7.1%	4.5%

(a) Includes borrowings under both committed credit facilities and uncommitted lines of credit and similar arrangements.

(b) This calculation does not include the commitment fees to be paid on the unused revolving credit facilities balances which are recorded as interest expense for accounting purposes.

*Financing Arrangements***Committed Credit Facilities(a) as of December 31, 2008**

	<b>Term</b>	<b>Commitments</b>	<b>Borrowings</b>	<b>Letters of Credit(b)</b>	<b>Available</b>
		<b>(Millions)</b>	<b>(Millions)</b>		
Tenneco Inc. revolving credit agreement	2012	\$ 550	\$ 109	\$ 47	\$ 394
Tenneco Inc. tranche B letter of credit/revolving loan agreement	2014	130	130		
Tenneco Inc. Senior Term Loans	2012	150	150		
Subsidiaries credit agreements	2009-2017	87	53		34
		\$ 917	\$ 442	\$ 47	\$ 428

(a) We generally are required to pay commitment fees on the unused portion of the total commitment.

(b) Letters of credit reduce the available borrowings under the tranche B letter of credit/revolving loan agreement.

*Overview and Recent Transactions.* Our financing arrangements are primarily provided by a committed senior secured financing arrangement with a syndicate of banks and other financial institutions. The arrangement is secured by substantially all our domestic assets and pledges of up to 66 percent of the stock of certain first-tier foreign subsidiaries, as well as guarantees by our material domestic subsidiaries. As of December 31, 2008, the senior credit facility consisted of a five-year, \$150 million term loan A maturing in March 2012, a five-year, \$550 million revolving credit facility maturing in March 2012, and a seven-year \$130 million tranche B-1 letter of credit/revolving loan facility maturing in March 2014. Our outstanding debt also includes \$245 million of 101/4 percent senior secured notes due July 15, 2013, \$250 million of 81/8 percent senior notes due November 15, 2015, and \$500 million of 85/8 percent senior subordinated notes due November 15, 2014.

On February 23, 2009, in light of the challenging macroeconomic environment and auto production outlook, we amended our senior credit facility to increase the allowable consolidated net leverage ratio (consolidated indebtedness net of cash divided by consolidated EBITDA as defined in the senior credit facility agreement) and reduce the allowable consolidated interest coverage ratio (consolidated EBITDA divided by

**Table of Contents**

**TENNECO INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

consolidated interest expense as defined in the senior credit facility agreement). These changes are detailed in the table below.

Beginning February 23, 2009 and following each fiscal quarter thereafter, the margin we pay on borrowings under our term loan A and revolving credit facility will incur interest at an annual rate equal to, at our option, either (i) the London Interbank Offered Rate plus a margin of 550 basis points, or (ii) a rate consisting of the greater of (a) the JPMorgan Chase prime rate plus a margin of 450 basis points, and (b) the Federal Funds rate plus 50 basis points plus a margin of 450 basis points. The margin we pay on these borrowings will be reduced by 50 basis points following each fiscal quarter for which our consolidated net leverage ratio is less than 5.0, and will be further reduced following each fiscal quarter for which the consolidated net leverage ratio is less than 4.0.

Also beginning February 23, 2009 and following each fiscal quarter thereafter, the margin we pay on borrowings under our tranche B-1 facility will incur interest at an annual rate equal to, at our option, either (i) the London Interbank Offered Rate plus a margin of 550 basis points, or (ii) a rate consisting of the greater of (a) the JPMorgan Chase prime rate plus a margin of 450 basis points, and (b) the Federal Funds rate plus 50 basis points plus a margin of 450 basis points. The margin we pay on these borrowings will be reduced by 50 basis points following each fiscal quarter for which our consolidated net leverage ratio is less than 5.0.

The February 23, 2009 amendment to our senior credit facility also placed further restrictions on our operations including limitations on: (i) debt incurrence, (ii) incremental loan extensions, (iii) liens, (iv) restricted payments, (v) optional prepayments of junior debt, (vi) investments, (vii) acquisitions, and (viii) mandatory prepayments. The definition of EBIDTA was amended to allow for \$40 million of cash restructuring charges taken after the date of the amendment and \$4 million annually in aftermarket changeover costs. We agreed to pay each consenting lender a fee. The lender fee plus amendment costs were approximately \$8 million.

On December 23, 2008, we amended a financial covenant effective for the fourth quarter of 2008 in our senior secured credit facility which increased the consolidated net leverage ratio (consolidated indebtedness net of cash divided by consolidated EBITDA as defined in the senior credit facility agreement) by increasing the maximum ratio to 4.25 from 4.0. We agreed to increase the margin we pay on the borrowings under our senior credit facility as outlined in the table below. In addition, we agreed to pay each consenting lender a fee. The lender fee plus amendment costs were approximately \$3 million.

In December 2008, we terminated the fixed-to-floating interest rate swaps we entered into in April 2004. The change in the market value of these swaps was recorded as part of interest expense with an offset to other long-term assets or liabilities. At the termination date, we had recorded a reduction in interest expense and a long-term asset of \$6 million, which the counterparties to the swaps paid us in cash.

On November 20, 2007, we issued \$250 million of 81/8 percent Senior Notes due November 15, 2015 through a private placement offering. The offering and related transactions were designed to (1) reduce our interest expense and extend the maturity of a portion of our debt (by using the proceeds of the offering to tender for \$230 million of our outstanding \$475 million 101/4 percent senior secured notes due 2013), (2) facilitate the realignment of the ownership structure of some of our foreign subsidiaries and (3) otherwise amend certain of the covenants in the indenture for our 101/4 percent senior secured notes to be consistent with those contained in our 85/8 percent senior subordinated notes, including conforming the limitation on incurrence of indebtedness and the absence of a limitation on issuances or



transfers of restricted subsidiary stock, and make other minor modifications.

The ownership structure realignment was designed to allow us to more rapidly use our U.S. net operating losses and reduce our cash tax payments. The realignment involved the creation of a new European holding company which now owns some of our foreign entities. We may further alter the components of the realignment from time to time. If market conditions permit, we may offer debt issued by the new European

**Table of Contents**

**TENNECO INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

holding company. This realignment utilized part of our U.S. net operating tax losses. Consequently, we recorded a non-cash charge of \$66 million in the fourth quarter of 2007.

The offering of new notes and related repurchase of our senior secured notes reduced our annual interest expense by approximately \$3 million for 2008 and increased our total debt outstanding to third parties by approximately \$20 million. In connection with the offering and the related repurchase of our senior secured notes, we also recorded non-recurring pre-tax charges related to the tender premium and fees, the write-off of deferred debt issuance costs, and the write-off of previously recognized issuance premium totaling \$21 million in the fourth quarter of 2007.

In July 2008, we exchanged \$250 million principal amount of 8 1/8 percent Senior Notes due 2015 which have been registered under the Securities Act of 1933, for and in replacement of all outstanding 8 1/8 percent Senior Notes due 2015 which we issued on November 20, 2007 in a private placement. The terms of the new notes are substantially identical to the terms of the notes for which they were exchanged, except that the transfer restrictions and registration rights applicable to the original notes generally do not apply to the new notes.

In March 2007, we refinanced our \$831 million senior credit facility. At that time, the transaction reduced the interest rates we paid on all portions of the facility. While the total amount of the new senior credit facility is \$830 million, approximately the same as the previous facility, we changed the components of the facility to enhance our financial flexibility. We increased the amount of commitments under our revolving loan facility from \$320 million to \$550 million, reduced the amount of commitments under our tranche B-1 letter of credit/revolving loan facility from \$155 million to \$130 million and replaced the \$356 million term loan B with a \$150 million term loan A. As of December 31, 2008, the senior credit facility consisted of a five-year, \$150 million term loan A maturing in March 2012, a five-year, \$550 million revolving credit facility maturing in March 2012, and a seven-year \$130 million tranche B-1 letter of credit/revolving loan facility maturing in March 2014.

At that time, the refinancing of the prior facility allowed us to: (i) amend the consolidated net debt to EBITDA ratio, (ii) eliminate the fixed charge coverage ratio, (iii) eliminate the restriction on capital expenditures, (iv) increase the amount of acquisitions permitted, (v) improve the flexibility to repurchase and retire higher cost junior debt, (vi) increase our ability to enter into capital leases, (vii) increase the ability of our foreign subsidiaries to incur debt, (viii) increase our ability to pay dividends and repurchase common stock, (ix) increase our ability to invest in joint ventures, (x) allow for the increase in the existing tranche B-1 facility and/or the term loan A or the addition of a new term loan of up to \$275 million in order to reduce our 10 1/4 percent senior secured notes, and (xi) make other modifications.

Following the refinancing, the term loan A facility is payable in twelve consecutive quarterly installments, commencing June 30, 2009 as follows: \$6 million due each of June 30, September 30, December 31, 2009 and March 31, 2010, \$15 million due each of June 30, September 30, December 31, 2010 and March 31, 2011, and \$17 million due each of June 30, September 30, December 31, 2011 and March 16, 2012. The revolving credit facility requires that any amounts drawn be repaid by March 2012. Prior to that date, funds may be borrowed, repaid and reborrowed under the revolving credit facility without premium or penalty. Letters of credit may be issued under the revolving credit facility.

The tranche B-1 letter of credit/revolving loan facility requires repayment by March 2014. We can borrow revolving loans and issue letters of credit under the \$130 million tranche B-1 letter of credit/revolving loan facility. The

tranche B-1 letter of credit/revolving loan facility is reflected as debt on our balance sheet only if we borrow money under this facility or if we use the facility to make payments for letters of credit. There is no additional cost to us for issuing letters of credit under the tranche B-1 letter of credit/revolving loan facility, however outstanding letters of credit reduce our availability to borrow revolving loans under this portion of the facility. We pay the tranche B-1 lenders interest equal to LIBOR plus a margin, as set forth below, which is

**Table of Contents****TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

offset by the return on the funds deposited with the administrative agent by the lenders which earn interest at an annual rate approximately equal to LIBOR less 25 basis points. Outstanding revolving loans reduce the funds on deposit with the administrative agent which in turn reduce the earnings of those deposits.

*Senior Credit Facility Interest Rates and Fees.* Borrowings and letters of credit issued under the senior credit facility bear interest at an annual rate equal to, at our option, either (i) the London Interbank Offered Rate plus a margin as set forth in the table below; or (ii) a rate consisting of the greater of the JP Morgan Chase prime rate or the Federal Funds rate, plus a margin as set forth in the table below.

	<b>For the Period</b>				
	<b>1/01/2006 thru 4/2/2006</b>	<b>4/3/2006 thru 3/15/2007</b>	<b>3/16/2007 thru 12/22/2008</b>	<b>12/23/2008 thru 2/22/2009</b>	<b>Beginning 2/23/2009</b>
Applicable Margin over LIBOR for Revolving Loans	2.75%	2.75%	1.50%	3.00%	5.50%
Applicable Margin over LIBOR for Term Loan B Loans	2.25%	2.00%	N/A	N/A	N/A
Applicable Margin over LIBOR for Term Loan A Loans	N/A	N/A	1.50%	3.00%	5.50%
Applicable Margin over LIBOR for Tranche B-1 Loans	2.25%	2.00%	1.50%	3.00%	5.50%
Applicable Margin for Prime-based Loans	1.75%	1.75%	0.50%	2.00%	4.50%
Applicable Margin for Federal Funds base Loans	2.125%	2.125%	1.00%	2.50%	5.00%
Commitment Fee	0.375%	0.375%	0.35%	0.50%	0.75%

*Senior Credit Facility Other Terms and Conditions.* As described above, we are highly leveraged. Our senior credit facility requires that we maintain financial ratios equal to or better than the following consolidated net leverage ratio (consolidated indebtedness net of cash divided by consolidated EBITDA, as defined in the senior credit facility agreement), and consolidated interest coverage ratio (consolidated EBITDA divided by consolidated interest expense, as defined under the senior credit facility agreement) at the end of each period indicated. Failure to maintain these ratios will result in a default under our senior credit facility. The financial ratios required under the senior credit facility and, the actual ratios we achieved for four quarters of 2008, are shown in the following tables:

	<b>Quarter Ended</b>							
	<b>March 31, 2008</b>		<b>June 30, 2008</b>		<b>September 30, 2008</b>		<b>December 31, 2008</b>	
	<b>Req.</b>	<b>Act.</b>	<b>Req.</b>	<b>Act.</b>	<b>Req.</b>	<b>Act.</b>	<b>Req.</b>	<b>Act.</b>
Leverage Ratio (maximum)	4.00	2.79	4.00	2.92	4.00	3.27	4.25	3.66
	2.10	4.06	2.10	4.22	2.10	4.08	2.10	3.64

Interest Coverage Ratio  
(minimum)

95

---

Table of Contents**TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

The financial ratios required under the senior credit facility for 2009 and beyond are set forth below:

<b>Period Ending</b>	<b>Leverage Ratio</b>	<b>Interest Coverage Ratio</b>
March 31, 2009	5.50	2.25
June 30, 2009	7.35	1.85
September 30, 2009	7.90	1.55
December 31, 2009	6.60	1.60
March 31, 2010	5.50	2.00
June 30, 2010	5.00	2.25
September 30, 2010	4.75	2.30
December 31, 2010	4.50	2.35
March 31, 2011	4.00	2.55
June 30, 2011	3.75	2.55
September 30, 2011	3.50	2.55
December 31, 2011	3.50	2.55
2012 and 2013	3.50	2.75

The senior credit facility agreement provides the ability to refinance our senior subordinated notes and/or our senior secured notes in an amount equal to the sum of (i) the net cash proceeds of equity issued after March 16, 2007, plus (ii) the portion of annual excess cash flow (as defined in the senior credit facility agreement) that is not required to be applied to the payment of the credit facilities and which is not used for other purposes, provided that the amount of the subordinated notes and the aggregate amount of the senior secured notes and the subordinated notes that may be refinanced is capped based upon the pro forma consolidated leverage ratio after giving effect to such refinancing as shown in the following table:

<b>Proforma Consolidated Leverage Ratio</b>	<b>Subordinated Notes Maximum Amount</b>	<b>Aggregate Senior and Subordinate Note Maximum Amount</b>
Greater than or equal to 3.0x	\$ 0 million	\$ 10 million
Greater than or equal to 2.5x	\$ 100 million	\$ 300 million
Less than 2.5x	\$ 125 million	\$ 375 million

In addition, the senior secured notes may be refinanced with (i) the net cash proceeds of incremental facilities and permitted refinancing indebtedness (as defined in the senior credit facility agreement), (ii) the net cash proceeds of any new senior or subordinated unsecured indebtedness, (iii) proceeds of revolving credit loans (as defined in the senior credit facility agreement), (iv) up to 200 million of unsecured indebtedness of the company's foreign subsidiaries and

(v) cash generated by the company's operations provided that the amount of the senior secured notes that may be refinanced is capped based upon the pro forma consolidated leverage ratio after giving effect to such refinancing as shown in the following table:

<b>Proforma Consolidated Leverage Ratio</b>	<b>Aggregate Senior and Subordinate Note Maximum Amount</b>
Greater than or equal to 3.0x	\$ 10 million
Greater than or equal to 2.5x	\$ 300 million
Less than 2.5x	\$ 375 million

The senior credit facility agreement also contains restrictions on our operations that are customary for similar facilities, including limitations on: (i) incurring additional liens; (ii) sale and leaseback transactions

**Table of Contents****TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

(except for the permitted transactions as described in the amended and restated agreement); (iii) liquidations and dissolutions; (iv) incurring additional indebtedness or guarantees; (v) investments and acquisitions; (vi) dividends and share repurchases; (vii) mergers and consolidations; and (viii) refinancing of subordinated and 101/4 percent senior secured notes. Compliance with these requirements and restrictions is a condition for any incremental borrowings under the senior credit facility agreement and failure to meet these requirements enables the lenders to require repayment of any outstanding loans. As of December 31, 2008, we were in compliance with all the financial covenants and operational restrictions of the facility.

Our senior credit facility does not contain any terms that could accelerate payment of the facility or affect pricing under the facility as a result of a credit rating agency downgrade.

*Senior Secured, Senior and Senior Subordinated Notes.* As of December 31, 2008, our outstanding debt also included \$245 million of 101/4 percent senior secured notes due July 15, 2013, \$250 million of 81/8 percent senior notes due November 15, 2015, and \$500 million of 85/8 percent senior subordinated notes due November 15, 2014. We can redeem some or all of the notes at any time after July 15, 2008 in the case of the senior secured notes, November 15, 2009 in the case of the senior subordinated notes and November 15, 2011 in the case of the senior notes. If we sell certain of our assets or experience specified kinds of changes in control, we must offer to repurchase the notes. We are permitted to redeem up to 35 percent of the senior notes with the proceeds of certain equity offerings completed before November 15, 2010.

Our senior secured, senior and senior subordinated notes require that, as a condition precedent to incurring certain types of indebtedness not otherwise permitted, our consolidated fixed charge coverage ratio, as calculated on a proforma basis, be greater than 2.00. We have not incurred any of the types of indebtedness not otherwise permitted by the indentures. The indentures also contain restrictions on our operations, including limitations on: (i) incurring additional indebtedness or liens; (ii) dividends; (iii) distributions and stock repurchases; (iv) investments; (v) asset sales and (vi) mergers and consolidations. Subject to limited exceptions, all of our existing and future material domestic wholly-owned subsidiaries fully and unconditionally guarantee these notes on a joint and several basis. In addition, the senior secured notes and related guarantees are secured by second priority liens, subject to specified exceptions, on all of our and our subsidiary guarantors' assets that secure obligations under our senior credit facility, except that only a portion of the capital stock of our subsidiary guarantors' domestic subsidiaries is provided as collateral and no assets or capital stock of our direct or indirect foreign subsidiaries secure the notes or guarantees. There are no significant restrictions on the ability of the subsidiaries that have guaranteed these notes to make distributions to us. The senior subordinated notes rank junior in right of payment to our senior credit facility and any future senior debt incurred. As of December 31, 2008, we were in compliance with the covenants and restrictions of these indentures.

*Accounts Receivable Securitization.* In addition to our senior credit facility, senior secured notes, senior notes and senior subordinated notes, we also sell some of our accounts receivable on a nonrecourse basis in North America and Europe. In North America, we have an accounts receivable securitization program with two commercial banks. We sell original equipment and aftermarket receivables on a daily basis under this program. We had sold accounts receivable under this program of \$101 million and \$100 million at December 31, 2008 and 2007, respectively. This program is subject to cancellation prior to its maturity date if we (i) fail to pay interest or principal payments on an amount of indebtedness exceeding \$50 million, (ii) default on the financial covenant ratios under the senior credit facility, or (iii) fail to maintain certain financial ratios in connection with the accounts receivable securitization



program. In January 2009, our U.S. program was amended and extended to March 2, 2009 at a facility size of \$120 million. These revisions will have the affect of reducing the amount of receivables sold by approximately \$10 million to \$30 million compared to the terms of the previous program. On February 23, 2009 this program was renewed for 364 days to February 22, 2010 at a facility size of \$100 million. As part of the renewal, the margin we pay the banks increased. While the funding costs incurred by the banks are expected to be down in 2009, we estimate that the additional margin would otherwise increase the loss we record on the sale of receivables by approximately

**Table of Contents****TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

\$4 million annually. We also sell some receivables in our European operations to regional banks in Europe. At December 31, 2008, we had sold \$78 million of accounts receivable in Europe up from \$57 million at December 31, 2007. The arrangements to sell receivables in Europe are provided under 10 separate arrangements, by various financial institutions in each of the foreign jurisdictions. The commitments for these arrangements are generally for one year but may be cancelled with 90 day notice prior to renewal. In four instances, the arrangement provides for cancellation by the financial institution at any time upon 30 days, or less, notification. If we were not able to sell receivables under either the North American or European securitization programs, our borrowings under our revolving credit agreements may increase. These accounts receivable securitization programs provide us with access to cash at costs that are generally favorable to alternative sources of financing, and allow us to reduce borrowings under our revolving credit agreements.

**7. Financial Instruments**

The carrying and estimated fair values of our financial instruments by class at December 31, 2008 and 2007 were as follows:

	<b>2008</b>		<b>2007</b>	
	<b>Carrying Amount</b>	<b>Fair Value</b>	<b>Carrying Amount</b>	<b>Fair Value</b>
	<b>(Millions)</b>			
	<b>Assets (Liabilities)</b>			
Long-term debt (including current maturities)	\$ 1,407	\$ 713	\$ 1,334	\$ 1,324
Instruments with off-balance sheet risk:				
Foreign currency contracts		2		(2)
Financial guarantees				

*Asset and Liability Instruments* The fair value of cash and cash equivalents, short and long-term receivables, accounts payable, and short-term debt was considered to be the same as or was not determined to be materially different from the carrying amount.

*Long-term Debt* The fair value of our fixed rate subordinated notes is based on quoted market prices. The fair value of our borrowings under our senior credit facility and other long-term debt instruments is based on the market value of debt with similar maturities, interest rates and risk characteristics.

*Instruments With Off-Balance Sheet Risk*

*Foreign Currency Contracts* Note 1 of the consolidated financial statements of Tenneco Inc. and Consolidated Subsidiaries, Summary of Accounting Policies Risk Management Activities describes our

Table of Contents

## TENNECO INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

use of and accounting for foreign currency exchange contracts. The following table summarizes by major currency the contractual amounts of foreign currency contracts we utilize:

	Notional Amount			
	December 31, 2008		December 31, 2007	
	Purchase	Sell	Purchase	Sell
	(Millions)			
Foreign currency contracts (in U.S.\$):				
Australian dollars	\$ 23	\$ 5	\$ 11	\$ 2
British pounds	20	17	8	2
Canadian dollars		1		
European euro		13	1	143
South Africa rand	30	5	60	13
U.S. dollars	9	46	136	62
Other	7		4	
	\$ 89	\$ 87	\$ 220	\$ 222

We manage our foreign currency risk by entering into derivative financial instruments with major financial institutions that can be expected to fully perform under the terms of such agreements. Based on exchange rates at December 31, 2008 and 2007, the cost of replacing these contracts in the event of non-performance by the counterparties would not have been material. The face value of these instruments is recorded in other current assets or liabilities.

*Financial Guarantees* We have from time to time issued guarantees for the performance of obligations by some of our subsidiaries, and some of our subsidiaries have guaranteed our debt. All of our existing and future material domestic wholly-owned subsidiaries fully and unconditionally guarantee our senior credit facility, our senior secured notes, our senior notes and our senior subordinated notes on a joint and several basis. The arrangement for the senior credit facility is also secured by first-priority liens on substantially all our domestic assets and pledges of up to 66 percent of the stock of certain first-tier foreign subsidiaries. Our \$245 million senior secured notes are also secured by second-priority liens on substantially all our domestic assets, excluding some of the stock of our domestic subsidiaries. No assets or capital stock of our direct or indirect foreign subsidiaries secure these notes. You should also read Note 14 of these consolidated financial statements of Tenneco Inc., where we present the Supplemental Guarantor Condensed Consolidating Financial Statements.

We have issued guarantees through letters of credit in connection with some obligations of our affiliates. As of December 31, 2008, we have guaranteed \$47 million in letters of credit to support some of our subsidiaries' insurance arrangements, foreign employee benefit programs, environmental remediation activities and cash management and capital requirements.

*Interest Rate Swaps* In December 2008, we elected to terminate our fixed-to-floating interest rate swap contracts covering \$150 million of our fixed interest rate debt. The change in market value of these swaps was recorded as part of interest expense and other long-term assets or liabilities prior to their termination. We received \$6 million in consideration with respect to the termination of the interest rate swaps.

*Negotiable Financial Instruments* One of our European subsidiaries receives payment from one of its OE customers whereby the accounts receivable are satisfied through the delivery of negotiable financial instruments. We may collect these financial instruments before their maturity date by either selling them at a discount or using them to satisfy accounts receivable that have previously been sold to a European bank. Any of these financial instruments which are not sold are classified as other current assets as they do not meet our definition of cash equivalents. The amount of these financial instruments that was collected before their maturity date and sold at a discount totaled \$23 million as of December 31, 2008, compared with \$15 million at the same date in 2007. No negotiable financial instruments were held by our European subsidiary as of December 31, 2008 or December 31, 2007.

Table of Contents**TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

In certain instances several of our Chinese subsidiaries receive payment from OE customers and satisfy vendor payments through the receipt and delivery of negotiable financial instruments. Financial instruments used to satisfy vendor payables and not redeemed totaled \$6 million and \$23 million at December 31, 2008 and 2007, respectively, and were classified as notes payable. Financial instruments received from OE customers and not redeemed totaled \$6 million and \$8 million at December 31, 2008 and 2007, respectively, and were classified as other current assets. One of our Chinese subsidiaries that issues its own negotiable financial instruments to pay its vendors is required to maintain a cash balance if they exceed certain credit limits with the financial institution that guarantees those financial instruments. A restricted cash balance was not required at that Chinese subsidiary as of December 31, 2008 and 2007.

The negotiable financial instruments received by one of our European subsidiaries and some of our Chinese subsidiaries are checks drawn by our OE customers and guaranteed by their banks that are payable at a future date. The use of these instruments for payment follows local commercial practice. Because negotiable financial instruments are financial obligations of our customers and are guaranteed by our customers' banks, we believe they represent a lower financial risk than the outstanding accounts receivable that they satisfy which are not guaranteed by a bank.

**8. Income Taxes**

The domestic and foreign components of our income before income taxes and minority interest are as follows:

	<b>Year Ended December 31,</b>		
	<b>2008</b>	<b>2007</b>	<b>2006</b>
	<b>(Millions)</b>		
U.S. loss before income taxes	\$ (257)	\$ (99)	\$ (66)
Foreign income before income taxes	141	187	126
Income (loss) before income taxes and minority interest	\$ (116)	\$ 88	\$ 60

Following is a comparative analysis of the components of income tax expense:

	<b>Year Ended December 31,</b>		
	<b>2008</b>	<b>2007</b>	<b>2006</b>
	<b>(Millions)</b>		
Current			
U.S.	\$ 42	\$	\$
State and local			
Foreign	12	58	46
	54	58	46

Deferred			
U.S.	190	38	(28)
State and local	45	5	(1)
Foreign		(18)	(12)
	235	25	(41)
Income tax expense	\$ 289	\$ 83	\$ 5

**Table of Contents****TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

Following is a reconciliation of income taxes computed at the statutory U.S. federal income tax rate (35 percent for all years presented) to the income tax expense reflected in the statements of income (loss):

	<b>Year Ended December 31,</b>		
	<b>2008</b>	<b>2007</b>	<b>2006</b>
	<b>(Millions)</b>		
Income tax expense (benefit) computed at the statutory U.S. federal income tax rate	\$ (41)	\$ 31	\$ 21
Increases (reductions) in income tax expense resulting from:			
Foreign income taxed at different rates and foreign losses with no tax benefit	(6)	(3)	(4)
Taxes on repatriation of dividends	15	1	2
State and local taxes on income, net of U.S. federal income tax benefit	2	(1)	(1)
Changes in valuation allowance for tax loss carryforwards and credits	233	6	3
Amortization of tax goodwill	(6)	(2)	(2)
Income exempt from tax due to tax holidays		(5)	(3)
Investment tax credit earned	(1)	(1)	(8)
European ownership structure realignment		66	
Foreign earnings subject to U.S. federal income tax	3	4	3
Adjustment of prior years taxes	(2)	(9)	3
Impact of foreign tax law changes	10	(7)	(1)
Tax contingencies	40	6	(10)
Goodwill impairment	40		
Other	2	(3)	2
Income tax expense	\$ 289	\$ 83	\$ 5

The components of our net deferred tax asset were as follows:

	<b>December 31,</b>	
	<b>2008</b>	<b>2007</b>
	<b>(Millions)</b>	
Deferred tax assets		
Tax loss carryforwards:		
U.S.	\$ 165	\$ 181
State	56	57
Foreign	44	61
Investment tax credit benefits	46	54
Postretirement benefits other than pensions	48	56
Pensions	81	45
Bad debts	2	1

Sales allowances	5	5
Other	107	87
Valuation allowance	(336)	(89)
Total deferred tax assets	218	458
Deferred tax liabilities		
Tax over book depreciation	92	101
Other	81	70
Total deferred tax liabilities	173	171
Net deferred tax assets	\$ 45	\$ 287



**Table of Contents****TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

Following is a reconciliation of deferred taxes to the deferred taxes shown in the balance sheet:

	<b>December 31,</b>	
	<b>2008</b>	<b>2007</b>
	<b>(Millions)</b>	
Balance Sheet:		
Current portion deferred tax asset	\$ 18	\$ 36
Non-current portion deferred tax asset	88	370
Current portion deferred tax liability shown in other current liabilities	(10)	(5)
Non-current portion deferred tax liability	(51)	(114)
Net deferred tax assets	\$ 45	\$ 287

We had potential tax assets of \$336 million and \$89 million at December 31, 2008 and 2007, respectively, that were not recognized on our balance sheet as a result of the valuation allowance recorded. These unrecognized tax assets resulted primarily from U.S. tax loss carryforwards, foreign tax loss carryforwards, foreign investment tax credits and U.S. state net operating losses that are available to reduce future U.S., U.S. state and foreign tax liabilities.

In accordance with SFAS No. 109 Accounting for Income Taxes, we evaluate our deferred income taxes quarterly to determine if valuation allowances are required or should be adjusted. SFAS No. 109 requires that companies assess whether valuation allowances should be established against their deferred tax assets based on consideration of all available evidence, both positive and negative, using a more likely than not standard. This assessment considers, among other matters, the nature, frequency and amount of recent losses, the duration of statutory carryforward periods, and tax planning strategies. In making such judgments, significant weight is given to evidence that can be objectively verified.

Valuation allowances have been established for deferred tax assets based on a more likely than not threshold. The ability to realize deferred tax assets depends on our ability to generate sufficient taxable income within the carryforward periods provided for in the tax law for each tax jurisdiction. We have considered the following possible sources of taxable income when assessing the realization of our deferred tax assets:

Future reversals of existing taxable temporary differences;

Taxable income or loss, based on recent results, exclusive of reversing temporary differences and carryforwards; and,

Tax-planning strategies.

In 2008, we recorded tax expense of \$289 million primarily related to establishing a valuation allowance against our net deferred tax assets in the U.S. In the U.S. we utilize the results from 2007 and 2008 as a measure of the cumulative losses in recent years. Accounting standards do not permit us to give any consideration to a likely economic recovery

in the U.S. or the recent new business we have won particularly in the commercial vehicle segment in evaluating the requirement to record a valuation allowance. Consequently, we concluded that our ability to fully utilize our NOLs was limited due to projecting the current negative economic environment into the future and the impact of the current negative operating environment on our tax planning strategies. As a result of tax planning strategies which have not yet been implemented but which we plan to implement and which do not depend upon generating future taxable income, we continue to carry deferred tax assets in the U.S. of \$70 million relating to the expected utilization of those NOLs. The federal NOL expires beginning in 2020 through 2028. The state NOL expires in various years through 2028.

If our operating performance improves on a sustained basis, our conclusion regarding the need for a valuation allowance could change, resulting in the reversal of some or all of the valuation allowance in the future. The charge to establish the U.S. valuation allowance also includes items related to the losses allocable

**Table of Contents****TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

to certain state jurisdictions where it was determined that tax attributes related to those jurisdictions were potentially not realizable.

Going forward, we will be required to record a valuation allowance against deferred tax assets generated by taxable losses in each period in the U.S. as well as in other foreign countries. Our future provision for income taxes will include no tax benefit with respect to losses incurred and no tax expense with respect to income generated in these jurisdictions until the respective valuation allowance is eliminated. This will cause variability in our effective tax rate.

We do not provide for U.S. income taxes on unremitted earnings of foreign subsidiaries, except for the earnings of our Brazilian operations and certain of our China operations, as our present intention is to reinvest the unremitted earnings in our foreign operations. Unremitted earnings of foreign subsidiaries were approximately \$546 million at December 31, 2008. We estimated that the amount of U.S. and foreign income taxes that would be accrued or paid upon remittance of the assets that represent those unremitted earnings was \$212 million.

We have tax sharing agreements with our former affiliates that allocate tax liabilities for prior periods and establish indemnity rights on certain tax issues.

In July 2006, the FASB issued Financial Interpretation No. 48 (FIN 48), Accounting for Uncertainty in Income Taxes, which clarifies the accounting for uncertainty in income taxes recognized in the financial statements in accordance with SFAS No. 109, Accounting for Income Taxes. FIN 48 provides that a tax benefit from an uncertain tax position may be recognized when it is more likely than not that the position will be sustained upon examination, including resolutions of any related appeals or litigation processes, based on the technical merits. Income tax positions must meet a more-likely-than-not recognition threshold at the effective date to be recognized upon the adoption of FIN 48 and in subsequent periods. This interpretation also provides guidance on measurement, derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. FIN 48 is effective for fiscal years beginning after December 15, 2006.

We adopted the provisions of FIN 48 on January 1, 2007. As a result of the implementation, the Company recognized approximately a \$1 million decrease in the liability for unrecognized tax benefits, which was accounted for as an increase to the January 1, 2007, balance of retained earnings. A reconciliation of our uncertain tax positions is as follows:

	<b>2008</b>	<b>2007</b>
Uncertain tax positions		
Balance January 1	\$ 44	\$ 42
Gross increases in tax positions in current period	16	3
Gross increases in tax positions in prior period	56	6
Gross decreases in tax positions in prior period	(12)	(5)
Gross decreases settlements	(8)	(1)
Gross decreases statute of limitations expired	(13)	(1)
Balance December 31	\$ 83	\$ 44

Included in the balance of unrecognized tax benefits at December 31, 2008 and 2007 were \$75 million and \$41 million respectively, of tax benefits, that, if recognized, would affect the effective tax rate. We recognize accrued interest and penalties related to unrecognized tax benefits as income tax expense. Related to the uncertain tax benefits noted above, we did not accrue penalties in 2008, in 2007 we accrued \$1 million for penalties. Additionally, we accrued interest of \$2 million in 2008 and \$3 million in 2007, respectively, related to unrecognized tax benefits. We have recognized in total, a liability for penalties of \$1 million at

**Table of Contents****TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

December 31, 2008 and \$2 million at December 31, 2007 and a liability for interest of \$7 million at December 31, 2008 and \$5 million at December 31, 2007, respectively.

Our unrecognized tax benefits at December 31, 2008 and 2007 included foreign exposures relating to the disallowance of deductions, global transfer pricing and various other issues. We believe it is reasonably possible that a decrease of up to \$21 million in unrecognized tax benefits related to the expiration of foreign statute of limitations and the conclusion of foreign income tax examinations may occur within the coming year.

We are subject to taxation in the U.S. and various state and foreign jurisdictions. As of December 31, 2008, our tax years open to examination in primary jurisdictions are as follows:

	<b>Open To Tax Year</b>
United States due to NOL	1998
Germany	2002
Belgium	2006
Canada	2005
UK	2006
Spain	2003

**9. Common Stock**

We have authorized 135 million shares (\$0.01 par value) of common stock, of which 48,314,490 shares and 47,892,532 shares were issued at December 31, 2008 and 2007, respectively. We held 1,294,692 shares of treasury stock at both December 31, 2008 and 2007.

*Equity Plans* In December 1996, we adopted the 1996 Stock Ownership Plan, which permitted the granting of a variety of awards, including common stock, restricted stock, performance units, stock equivalent units, stock appreciation rights ( SARs ), and stock options to our directors, officers, employees and consultants. The 1996 plan, which terminated as to new awards on December 31, 2001, was renamed the Stock Ownership Plan. In December 1999, we adopted the Supplemental Stock Ownership Plan, which permitted the granting of a variety of similar awards to our directors, officers, employees and consultants. We were authorized to deliver up to about 1.1 million treasury shares of common stock under the Supplemental Stock Ownership Plan, which also terminated as to new awards on December 31, 2001. In March 2002, we adopted the 2002 Long-Term Incentive Plan which permitted the granting of a variety of similar awards to our officers, directors, employees and consultants. Up to 4 million shares of our common stock were authorized for delivery under the 2002 Long-Term Incentive Plan. In March 2006, we adopted the 2006 Long-Term Incentive Plan which replaced the 2002 Long-Term Incentive Plan and permits the granting of a variety of similar awards to directors, officers, employees and consultants. As of December 31, 2008, up to 1,214,048 shares of our common stock remain authorized for delivery under the 2006 Long-Term Incentive Plan. Our nonqualified stock options have 7 to 20 year terms and vest equally over a three-year service period from the date of the grant.

We have granted restricted common stock to our directors and certain key employees. These awards generally require, among other things, that the award holder remain in service to our company during the restriction period. We also have granted stock equivalent units and long-term performance units to certain key employees that are payable in cash. At December 31, 2008, the long-term performance units outstanding included a one year stub 2008 grant payable in the first quarter of 2009, a three year grant for 2007-2009 payable in the first quarter of 2010 and a three year grant for 2008-2010 payable in the first quarter of 2011. Payment is based on the attainment of specified performance goals. The grant value is indexed to the stock

Table of Contents

## TENNECO INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

price. In addition, we have granted SARs to certain key employees in our Asian and Indian operations that are payable in cash after a three-year service period. The grant value is indexed to the stock price.

*Accounting Method* The impact of recognizing compensation expense related to nonqualified stock options is contained in the table below.

	<b>Year Ended December 31, 2008      2007 (Millions)</b>	
Selling, general and administrative	\$ 4	\$ 4
Loss before interest expense, income taxes and minority interest	(4)	(4)
Income tax benefit		(1)
Net loss	\$ (4)	\$ (3)
Decrease in basic earnings per share	\$ (0.09)	\$ (0.06)
Decrease in diluted earnings per share	\$ (0.09)	\$ (0.06)

For stock options awarded to retirement eligible employees, we immediately accelerate the recognition of any outstanding compensation cost when employees become retiree eligible before the end of the explicit vesting period.

As of December 31, 2008, there was approximately \$4 million of total unrecognized compensation costs related to these stock-based awards that we expect to recognize over a weighted average period of 0.9 years.

Compensation expense for restricted stock, stock equivalent units, long-term performance units and SARs net of tax, was \$5 million for each of the years ended December 31, 2008 and 2007 and was recorded in selling, general, and administrative expense on the statement of income (loss).

Cash received from option exercises for the year ended December 31, 2008, was \$2 million. Stock option exercises during 2008 would have generated an excess tax benefit of approximately \$1 million. Pursuant to footnote 82 of SFAS No. 123(R), this benefit was not recorded as we have federal and state net operating losses which are not currently being utilized. As a result, the excess tax benefit had no impact on our financial position or statement of cash flows.

*Assumptions* We calculated the fair values of stock option awards using the Black-Scholes option pricing model with the weighted average assumptions listed below. The fair value of share-based awards is determined at the time the awards are granted which is generally in January of each year, and requires judgment in estimating employee and market behavior. If actual results differ significantly from these estimates, stock-based compensation expense and our results of operations could be materially impacted.

	<b>Year Ended December 31,</b>		
	<b>2008</b>	<b>2007</b>	<b>2006</b>
Stock Options			
Weighted average grant date fair value, per share	\$ 8.03	\$ 9.93	\$ 9.27
Weighted average assumptions used:			
Expected volatility	37.7%	38.4%	42.6%
Expected lives	4.1	4.1	5.1
Risk-free interest rates	2.8%	4.7%	4.2%
Dividend yields	0.0%	0.0%	0.0%

Expected lives of options are based upon the historical and expected time to post-vesting forfeiture and exercise. We believe this method is the best estimate of the future exercise patterns currently available.



Table of Contents**TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

The risk-free interest rates are based upon the Constant Maturity Rates provided by the U.S. Treasury. For our valuations, we used the continuous rate with a term equal to the expected life of the options.

*Stock Options* The following table reflects the status and activity for all options to purchase common stock for the period indicated:

	Year Ended December 31, 2008			
	Shares Under Option	Weighted Avg. Exercise Prices (Millions)	Weighted Avg. Remaining Life in Years	Aggregate Intrinsic Value
Outstanding Stock Options				
Outstanding, January 1, 2008	2,820,889	\$ 13.10	4.6	\$ 46
Granted	580,750	23.75		
Canceled				
Forfeited	(3,740)	22.50		
Exercised	(43,824)	4.64		1
Outstanding, March 31, 2008	3,354,075	15.05	5.0	37
Granted	3,306	25.26		
Canceled				
Forfeited	(14,528)	23.98		
Exercised	(40,585)	11.35		1
Outstanding, June 30, 2008	3,302,268	15.06	4.5	31
Granted	9,130	12.77		
Canceled				
Forfeited	(17,732)	21.84		
Exercised	(95,767)	8.42		1
Outstanding, September 30, 2008	3,197,899	15.06	4.3	13
Granted				
Canceled				
Forfeited	(45,723)	19.90		
Exercised	(2,800)	2.90		
Outstanding, December 31, 2008	3,149,376	\$ 15.16	4.1	\$ 1
Vested or Expected to Vest, December 31, 2008	3,041,606	\$ 14.82	4.1	\$ 1

Edgar Filing: TENNECO INC - Form 10-K

Exercisable, December 31, 2008	2,144,163	\$	10.80	3.6	\$	1
--------------------------------	-----------	----	-------	-----	----	---

106

---

**Table of Contents****TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

*Restricted Stock* The following table reflects the status for all nonvested restricted shares for the period indicated:

	<b>Year Ended December 31, 2008</b>	
	<b>Shares</b>	<b>Weighted Avg. Grant Date Fair Value</b>
Nonvested Restricted Shares		
Nonvested balance at January 1, 2008	469,394	\$ 24.91
Granted	227,830	23.75
Vested	(235,145)	24.10
Forfeited		
Nonvested balance at March 31, 2008	462,079	\$ 24.75
Granted	1,653	25.26
Vested	(11,442)	23.80
Forfeited	(2,975)	24.48
Nonvested balance at June 30, 2008	449,315	\$ 24.77
Granted	6,040	12.76
Vested	(4,487)	25.69
Forfeited	(1,466)	24.24
Nonvested balance at September 30, 2008	449,402	\$ 24.61
Granted		
Vested	(5,164)	25.62
Forfeited	(8,770)	25.26
Nonvested balance at December 31, 2008	435,468	\$ 24.58

The fair value of restricted stock grants is equal to the average market price of our stock at the date of grant. As of December 31, 2008, approximately \$6 million of total unrecognized compensation costs related to restricted stock awards is expected to be recognized over a weighted-average period of 1.5 years.

*Long-term Performance Units and SARs* Long-term performance units and SARs are paid in cash and recognized as a liability based upon their fair value. As of December 31, 2008, less than \$1 million of total unrecognized compensation cost is expected to be recognized over a weighted average period of approximately 1.8 years.

*Rights Plan*

On September 9, 1998, we adopted a Rights Plan and established an independent Board committee to review it every three years. The Rights Plan was adopted to deter coercive takeover tactics and to prevent a potential acquirer from

gaining control of us in a transaction that is not in the best interests of our shareholders. Generally, under the Rights Plan, if a person became the beneficial owner of 15 percent or more of our outstanding common stock, each right entitled its holder to purchase, at the right's exercise price, a number of shares of our common stock or, under certain circumstances, of the acquiring person's common stock, having a market value of twice the right's exercise price. Rights held by the 15 percent or more holders would become void and will not be exercisable. The Rights Plan expired in September 2008.

Table of Contents**TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****10. Preferred Stock**

We had 50 million shares of preferred stock (\$0.01 par value) authorized at December 31, 2008 and 2007. No shares of preferred stock were outstanding at those dates.

**11. Pension Plans, Postretirement and Other Employee Benefits**

We have various defined benefit pension plans that cover some of our employees. We adopted the recognition provisions of SFAS 158, Accounting for Defined Benefit Pension and Other Postretirement Plans, on December 31, 2006, which resulted in a \$59 million after-tax reduction of Accumulated Other Comprehensive Loss in shareholders equity as of December 31, 2006. Effective January 1, 2007, we elected to early-adopt the measurement date provisions of SFAS No. 158, Accounting for Defined Benefit Pension and Other Postretirement Plans. As a result, the measurement date used to determine the measurement of our pension plan assets and benefit obligations changed from September 30th in 2006 to December 31st in 2007 for both our domestic and foreign plans.

The changes in plan assets and benefit obligations recognized in accumulated other comprehensive loss as a result of our adoption of the measurement date provision of SFAS No. 158 consisted of the following components:

	US	2007 Foreign (Millions)	Total
Net actuarial gain	\$ (18)	\$ (23)	\$ (41)
Recognized actuarial loss	(2)	(6)	(8)
Currency translation adjustment		9	9
Recognition of prior service cost	(1)	(2)	(3)
Total recognized in other comprehensive loss before tax effects	\$ (21)	\$ (22)	\$ (43)

Amounts recognized in accumulated other comprehensive loss for pension benefits consist of the following components:

	US	2007 Foreign (Millions)	
Net actuarial loss	\$ 81		\$ 101
Prior service cost	3		14
	\$ 84		\$ 115

As a result of the change in measurement date, on January 1, 2007, the following adjustments were made to retained earnings (accumulated deficit) and other comprehensive income (both net of tax effects) for our defined benefit pension plans:

	<b>US</b>	<b>Foreign</b>
	<b>(Millions)</b>	
Retained earnings (accumulated deficit), net of tax	\$ (3)	\$ (2)
Accumulated other comprehensive income, net of tax	8	6

Table of Contents**TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

Pension benefits are based on years of service and, for most salaried employees, on average compensation. Our funding policy is to contribute to the plans amounts necessary to satisfy the funding requirement of applicable federal or foreign laws and regulations. Of our \$610 million benefit obligation at December 31, 2008, approximately \$537 million required funding under applicable federal and foreign laws. At December 31, 2008, we had approximately \$361 million in assets to fund that obligation. The balance of our benefit obligation, \$73 million, did not require funding under applicable federal or foreign laws and regulations. Pension plan assets were invested in the following classes of securities:

	Percentage of Fair Market Value			
	December 31, 2008		December 31, 2007	
	US	Foreign	US	Foreign
Equity Securities	59%	51%	69%	61%
Debt Securities	41%	37%	31%	34%
Real Estate		3%		1%
Other		9%		4%

Our investment policy for both our domestic and foreign plans is to invest more heavily in equity securities than debt securities. Targeted pension plan allocations are 70 percent in equity securities and 30 percent in debt securities, with acceptable tolerance levels of plus or minus five percent within each category for our domestic plans. In light of recent volatility in the capital markets, we have elected to maintain a lower equity allocation. We will revisit the current allocation compared to the targeted allocation when stability returns to the markets. Our foreign plans are individually managed to different target levels depending on the investing environment in each country.

Our approach to determining expected return on plan asset assumptions evaluates both historical returns as well as estimates of future returns, and adjusts for any expected changes in the long-term outlook for the equity and fixed income markets for both our domestic and foreign plans.

Table of Contents**TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

A summary of the change in benefit obligation, the change in plan assets, the development of net amount recognized, and the amounts recognized in the balance sheets for the pension plans and postretirement benefit plans follows:

	<b>Pension</b>				<b>Postretirement</b>	
	<b>2008</b>		<b>2007</b>		<b>2008</b>	<b>2007</b>
	<b>US</b>	<b>Foreign</b>	<b>US</b>	<b>Foreign</b>	<b>US</b>	<b>US</b>
	<b>(Millions)</b>					
Change in benefit obligation:						
Benefit obligation at December 31 of the previous year	\$ 313	\$ 364	\$ 325	\$ 348	\$ 152	\$ 158
Adjustment to benefit obligation		17				
Currency rate conversion		(73)		23		
Settlement		(2)				
Curtailment						
Service cost	1	5	1	5	2	2
Interest cost	20	20	19	19	9	9
Plan amendments				1	(10)	
Acquisition		3				
Actuarial (gain)/ loss	14	(45)	(15)	(25)	(2)	(3)
Benefits paid	(14)	(17)	(18)	(14)	(8)	(9)
Participants contributions		4		4		
Impact of change in measurement data			1	3		(5)
Benefit obligation at December 31	\$ 334	\$ 276	\$ 313	\$ 364	\$ 143	\$ 152
Change in plan assets:						
Fair value at December 31 of the previous year	\$ 249	\$ 282	\$ 229	\$ 231	\$	\$
Adjustment to plan assets		17				
Currency rate conversion		(57)		17		
Settlement		(2)				
Actual return on plan assets	(78)	(50)	13	9		
Employer contributions	8	19	16	20	9	10
Participants contributions		4		4		
Benefits paid	(14)	(17)	(18)	(14)	(9)	(10)
Impact of change in measurement date			9	15		
Fair value at December 31	\$ 165	\$ 196	\$ 249	\$ 282	\$	\$
Development of net amount recognized:						
Unfunded status at December 31	\$ (169)	\$ (80)	\$ (64)	\$ (82)	\$ (143)	\$ (152)
Post measurement date contributions						
Unrecognized cost:						



Edgar Filing: TENNECO INC - Form 10-K

Actuarial loss	192	95	81	101	80	87
Prior service cost	3	11	3	14	(46)	(42)
Net amount recognized at December 31	\$ 26	\$ 26	\$ 20	\$ 33	\$ (109)	\$ (107)
Amounts recognized in the balance sheets as of						
December 31						
Noncurrent assets	\$	\$	\$	\$ 3	\$	\$
Current liabilities	(7)	(2)	(5)	(2)	(9)	(10)
Noncurrent liabilities	(162)	(78)	(59)	(83)	(134)	(142)
Net amount recognized	\$ (169)	\$ (80)	\$ (64)	\$ (82)	\$ (143)	\$ (152)

**Table of Contents****TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

Assets of one plan may not be utilized to pay benefits of other plans. Additionally, the prepaid (accrued) pension cost has been recorded based upon certain actuarial estimates as described below. Those estimates are subject to revision in future periods given new facts or circumstances.

The pension results for the year ended December 31, 2008 include amounts relating to our acquisition of Gruppo Marzocchi on September 1, 2008. In addition, during the year 2008, the Company adjusted the beginning balance of both the foreign pension benefit obligation and related plan assets by \$17 million to include a cash balance plan relating to a foreign subsidiary.

Net periodic pension costs (income) for the years 2008, 2007, and 2006, consist of the following components:

	2008		2007		2006	
	US	Foreign	US	Foreign	US	Foreign
			(Millions)			
Service cost – benefits earned during the year	\$ 1	\$ 5	\$ 1	\$ 5	\$ 15	\$ 6
Interest on prior year's projected benefit obligation	20	20	19	19	19	16
Expected return on plan assets	(23)	(21)	(21)	(20)	(19)	(16)
Curtailment gain					(25)	
Settlement loss		1				
Recognition of:						
Actuarial loss	3	4	2	6	21	1
Prior service cost	1	1	1	2	6	6
Net pension costs	\$ 2	\$ 10	\$ 2	\$ 12	\$ 17	\$ 13
Other comprehensive loss	\$	\$	\$	\$	\$	\$

Amounts recognized in accumulated other comprehensive loss for pension benefits consist of the following components:

	2008		2007	
	US	Foreign	US	Foreign
			(Millions)	
Net actuarial loss	\$ 192	\$ 95	\$ 81	\$ 101
Prior service cost	3	11	3	14
	\$ 195	\$ 106	\$ 84	\$ 115

In 2009, we expect to recognize the following amounts, which are currently reflected in accumulated other comprehensive income, as components of net periodic benefit cost:

	<b>2009</b>	
	<b>US</b>	<b>Foreign</b>
	<b>(Millions)</b>	
Net actuarial loss	\$ 2	\$ 4
Prior service cost	1	1
	<b>\$ 3</b>	<b>\$ 5</b>

Table of Contents**TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

The projected benefit obligation, accumulated benefit obligation and fair value of plan assets for all pension plans with accumulated benefit obligations in excess of plan assets at December 31, 2008 and December 31, 2007 were as follows:

	<b>December 31, 2008</b>		<b>December 31, 2007</b>	
	<b>US</b>	<b>Foreign</b>	<b>US</b>	<b>Foreign</b>
	<b>(Millions)</b>			
Projected Benefit Obligation	\$ 334	\$ 271	\$ 314	\$ 273
Accumulated Benefit Obligation	333	266	314	260
Fair Value of Plan Assets	165	191	249	188

The following estimated benefit payments are payable from the pension plans to participants:

<b>Year</b>	<b>US</b>	<b>Foreign</b>
	<b>(Millions)</b>	
2009	\$ 21	\$ 10
2010	29	10
2011	17	14
2012	18	11
2013	18	12
2014-2018	108	65

The following assumptions were used in the accounting for the pension plans for the years of 2008, 2007, and 2006:

	<b>2008</b>		<b>2007</b>	
	<b>US</b>	<b>Foreign</b>	<b>US</b>	<b>Foreign</b>
<b>Weighted-average assumptions used to determine benefit obligations</b>				
Discount rate	6.2%	6.3%	6.2%	5.6%
Rate of compensation increase	N/A	3.1%	N/A	4.4%

	<b>2008</b>		<b>2007</b>		<b>2006</b>	
	<b>US</b>	<b>Foreign</b>	<b>US</b>	<b>Foreign</b>	<b>US</b>	<b>Foreign</b>

**Weighted-average assumptions used to determine net periodic benefit cost**

Edgar Filing: TENNECO INC - Form 10-K

Discount rate	6.2%	5.6%	6.0%	5.0%	5.8%	5.0%
Expected long-term return on plan assets	8.8%	7.7%	8.8%	7.6%	8.8%	7.6%
Rate of compensation increase	N/A	4.4%	N/A	4.3%	3.2%	4.3%

We made contributions of \$27 million to our pension plans during 2008. Based on current actuarial estimates, we believe we will be required to make contributions of \$24 million to those plans during 2009. Pension contributions beyond 2009 will be required, but those amounts will vary based upon many factors, including the performance of our pension fund investments during 2009.

Effective December 31, 2006, we froze future accruals under our defined benefit plans for substantially all U.S. salaried and non-union hourly employees and replaced these benefits with additional contributions under defined contribution plans. These changes reduced expense in 2007 by approximately \$11 million from 2006. Additionally, we realized a one-time benefit of \$7 million in the fourth quarter 2006 related to curtailing the defined benefit pension plans. As of December 31, 2008, we froze future accruals for the formerly unionized employees at Grass Lake, Michigan participating in the Tenneco Pension Plan for Hourly Employees defined benefit plan.

Table of Contents**TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

The Tenneco Pension Plan for Hourly Employees, Tenneco Clevite Division Retirement Plan, Tenneco Angola Hourly Bargaining Pension Plan and Tenneco Local 878 (UAW) Retirement Income Plan pension plans were merged into the Tenneco Retirement Plan for Salaried Employees effective December 31, 2008. The plans were merged to reduce the cost of plan administration. There were no changes to the terms of the plans or to the benefits provided.

We have life insurance plans which provided benefit to a majority of our U.S. employees. We also have postretirement plans for our U.S. employees hired before January 1, 2001. The plans cover salaried employees retiring on or after attaining age 55 who have at least 10 years of service with us after attaining age 45. For hourly employees, the postretirement benefit plans generally cover employees who retire according to one of our hourly employee retirement plans. All of these benefits may be subject to deductibles, co-payment provisions and other limitations, and we have reserved the right to change these benefits. For those employees hired after January 1, 2001, we do not provide any postretirement benefits. Our postretirement healthcare and life insurance plans are not funded. The measurement date used to determine postretirement benefit obligations is December 31st.

On September 1, 2003, we changed our retiree medical benefits program to provide participating retirees with continued access to group health coverage while reducing our subsidization of the program. This negative plan amendment is being amortized over the average remaining service life to retirement eligibility of active plan participants as a reduction of service cost beginning September 1, 2003.

In July 2004, we entered into a settlement with a group of the retirees which were a part of the September 2003 change mentioned above. This settlement provided the group with increased coverage, and as a result, a portion of the negative plan amendment was reversed and a positive plan amendment put in place. The effect of the settlement increased our 2004 postretirement benefit expense by approximately \$1 million and increased our accumulated postretirement benefit obligation by approximately \$13 million.

Net periodic postretirement benefit cost for the years 2008, 2007, and 2006, consists of the following components:

	2008	2007	2006
	(Millions)		
Service cost – benefits earned during the year	\$ 2	\$ 2	\$ 2
Interest on accumulated postretirement benefit obligation	8	9	9
Recognition of:			
Actuarial loss	5	6	6
Prior service cost	(5)	(5)	(6)
Net periodic pension cost	\$ 10	\$ 12	\$ 11

In 2009, we expect to recognize the following amounts, which are currently reflected in accumulated other comprehensive income, as components of net periodic benefit cost:

	<b>2009</b>
Net actuarial loss	\$ 5
Prior service cost	(6)
	\$ (1)

**Table of Contents****TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

The following estimated postretirement benefit payments are payable from the plans to participants:

<b>Year</b>	<b>Postretirement Benefits (Millions)</b>
2009	\$ 10
2010	10
2011	10
2012	11
2013	11
2014-2018	53

The weighted average assumed health care cost trend rate used in determining the 2008 accumulated postretirement benefit obligation was 9 percent, declining to 5 percent by 2014. The healthcare cost trend rate was 10 percent for both 2007 and 2006, in each case trending down to 5 percent over succeeding periods.

The following assumptions were used in the accounting for postretirement cost for the years of 2008, 2007 and 2006:

	<b>2008</b>	<b>2007</b>
<b>Weighted-average assumptions used to determine benefit obligations</b>		
Discount rate	6.2%	6.2%
Rate of compensation increase	4.0%	4.0%

	<b>2008</b>	<b>2007</b>	<b>2006</b>
<b>Weighted-average assumptions used to determine net periodic benefit cost</b>			
Discount rate	6.2%	6.0%	5.8%
Rate of compensation increase	4.0%	4.0%	4.5%

The effect of a one-percentage-point increase or decrease in the 2008 assumed health care cost trend rates on total service cost and interest and the postretirement benefit obligation are as follows:

	<b>One-Percentage Point Increase</b>	<b>One-Percentage Point Decrease (Millions)</b>
Effect on total of service cost and interest cost	\$ 1	\$ (1)



Effect on postretirement benefit obligation	13	(11)
---	----	------

Based on current actuarial estimates, we believe we will be required to make postretirement contributions of approximately \$10 million during 2009.

*Employee Stock Ownership Plans (401(k) Plans)* We have established Employee Stock Ownership Plans for the benefit of our employees. Under the plans, subject to limitations in the Internal Revenue Code, participants may elect to defer up to 75 percent of their salary through contributions to the plan, which are invested in selected mutual funds or used to buy our common stock. Prior to January 1, 2009, we matched in cash 50 percent of each employee's contribution up to eight percent of the employee's salary. We have temporarily discontinued these matching contributions to salaried and hourly U.S. employees as a result of the recent global economic downturn. We will continue to reevaluate the Company's ability to restore the matching contribution for the U.S. employees. In connection with freezing the defined benefit pension plans for nearly all U.S. based salaried and non-union hourly employees effective December 31, 2006, and the related replacement of those defined benefit plans with defined contribution plans, we are making additional contributions to the Employee Stock Ownership Plans. These additional contributions are not affected by the temporary disruption of matching contributions discussed above. We recorded expense for these contributions

**Table of Contents**

**TENNECO INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

of approximately \$18 million, \$17 million and \$7 million in 2008, 2007 and 2006, respectively, of which \$10 million in each of 2008 and 2007 related to contributions for the defined benefit replacement plans. Matching contributions vest immediately. Defined benefit replacement contributions fully vest on the employee's third anniversary of employment.

**12. Segment and Geographic Area Information**

We are a global manufacturer with three geographic reportable segments: (1) North America, (2) Europe, South America and India ( Europe ), and (3) Asia Pacific. Each segment manufactures and distributes ride control and emission control products primarily for the automotive industry. We have not aggregated individual operating segments within these reportable segments. We evaluate segment performance based primarily on income before interest expense, income taxes, and minority interest. Products are transferred between segments and geographic areas on a basis intended to reflect as nearly as possible the market value of the products.

**Table of Contents****TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

Segment results for 2008, 2007, and 2006 are as follows:

	North America	Europe	Segment Asia Pacific (Millions)	Reclass & Elims	Consolidated
<b>At December 31, 2008, and for the Year Then Ended</b>					
Revenues from external customers	\$ 2,630	\$ 2,758	\$ 528	\$	\$ 5,916
Intersegment revenues	11	225	15	(251)	
Interest income		10	1		11
Depreciation and amortization of intangibles	108	97	17		222
Income (loss) before interest expense, income taxes, and minority interest	(107)	85	19		(3)
Total assets	1,120	1,352	322	34	2,828
Investment in affiliated companies		14			14
Expenditures for plant, property and equipment	108	89	24		221
Noncash items other than depreciation and amortization	(122)	(11)			(133)
<b>At December 31, 2007, and for the Year Then Ended</b>					
Revenues from external customers	\$ 2,901	\$ 2,737	\$ 546	\$	\$ 6,184
Intersegment revenues	9	398	14	(421)	
Interest income		12			12
Depreciation and amortization of intangibles	103	86	16		205
Income before interest expense, income taxes, and minority interest	120	99	33		252
Total assets	1,555	1,605	368	62	3,590
Investment in affiliated companies		10			10
Expenditures for plant, property and equipment	106	74	18		198
Noncash items other than depreciation and amortization	(18)	(1)	1		(18)
<b>At December 31, 2006, and for the Year Then Ended</b>					
Revenues from external customers	\$ 1,956	\$ 2,305	\$ 421	\$	\$ 4,682
Intersegment revenues	7	82	15	(104)	
Interest income		7			7
Depreciation and amortization of intangibles	92	79	13		184
Income before interest expense, income taxes, and minority interest	103	81	12		196
Total assets	1,460	1,422	301	91	3,274

Edgar Filing: TENNECO INC - Form 10-K

Investment in affiliated companies		9		9
Expenditures for plant, property and equipment	100	51	19	170
Noncash items other than depreciation and amortization	(14)	4	(1)	(11)
	116			

---

**Table of Contents****TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

The following table shows information relating to our external customer revenues for each product or each group of similar products:

	<b>Net Sales</b>		
	<b>Year Ended December 31,</b>		
	<b>2008</b>	<b>2007</b>	<b>2006</b>
	<b>(Millions)</b>		
<b>Emission Control Systems &amp; Products</b>			
Aftermarket	\$ 358	\$ 370	\$ 384
Original Equipment market OE Value-add	2,128	2,288	1,665
OE Substrate	1,492	1,673	927
	3,620	3,961	2,592
	3,978	4,331	2,976
<b>Ride Control Systems &amp; Products</b>			
Aftermarket	761	734	690
OE market	1,177	1,119	1,016
	1,938	1,853	1,706
Total Revenues	\$ 5,916	\$ 6,184	\$ 4,682

During 2008, sales to four major customers comprised approximately 20 percent, 13 percent, 9 percent and 7 percent of consolidated net sales and operating revenues. During 2007, sales to four major customers comprised approximately 20 percent, 14 percent, 9 percent and 8 percent of consolidated net sales and operating revenues. During 2006, sales to four major customers comprised approximately 14 percent, 11 percent, 11 percent and 11 percent of consolidated net sales and operating revenues.

	<b>Geographic Area</b>				<b>Reclass &amp; Elims</b>	<b>Consolidated</b>
	<b>United States</b>	<b>Germany</b>	<b>Canada</b>	<b>Other Foreign(a)</b>		
	<b>(Millions)</b>					
<b>At December 31, 2008, and for the Year Then Ended</b>						
Revenues from external customers(b)	\$ 1,954	\$ 898	\$ 483	\$ 2,581	\$	\$ 5,916

Edgar Filing: TENNECO INC - Form 10-K

Long-lived assets(c)	421	130	74	656		1,281
Total assets	1,066	429	112	1,335	(114)	2,828
<b>At December 31, 2007, and for the Year Then Ended</b>						
Revenues from external customers(b)	\$ 2,121	\$ 1,036	\$ 590	\$ 2,437	\$	\$ 6,184
Long-lived assets(c)	410	151	89	695		1,345
Total assets	1,476	477	150	1,621	(134)	3,590
<b>At December 31, 2006, and for the Year Then Ended</b>						
Revenues from external customers(b)	\$ 1,538	\$ 842	\$ 248	\$ 2,054	\$	\$ 4,682
Long-lived assets(c)	402	139	73	637		1,251
Total assets	1,365	329	122	1,553	(95)	3,274

Note: (a) Revenues from external customers and long-lived assets for individual foreign countries other than Germany and Canada are not material.

(b) Revenues are attributed to countries based on location of the shipper.

(c) Long-lived assets include all long-term assets except goodwill, intangibles and deferred tax assets.

**Table of Contents****TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****13. Commitments and Contingencies***Capital Commitments*

We estimate that expenditures aggregating approximately \$55 million will be required after December 31, 2008 to complete facilities and projects authorized at such date, and we have made substantial commitments in connection with these facilities and projects.

*Lease Commitments*

We have long-term leases for certain facilities, equipment and other assets. The minimum lease payments under non-cancelable leases with lease terms in excess of one year are:

	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>Subsequent Years</b>
	<b>(Millions)</b>					
Operating Leases	\$ 16	\$ 13	\$ 11	\$ 6	\$ 4	\$ 14
Capital Leases	\$ 4	\$ 4	\$	\$	\$	\$

Total rental expense for the year 2008, 2007, and 2006 was \$46 million, \$40 million and \$37 million respectively.

*Risk Related to the Automotive Industry and Concentration of Credit Risk*

The recent unprecedented deterioration in the global economy and global credit markets has negatively impacted global business activity in general, and specifically the automotive industry in which we operate. The market turmoil and tightening of credit, as well as the recent and dramatic decline in the housing market in the United States and Western Europe, have led to a lack of consumer confidence evidenced by a rapid decline in light vehicle purchases in 2008. Light vehicle production decreased by 16 percent in North America and five percent in Europe in 2008 from 2007 levels. General Motors, Ford and Chrysler in particular are burdened with substantial structural cost, such as pension and healthcare, that have impacted their profitability, and may ultimately result in severe financial difficulty, including bankruptcy.

In response to current economic conditions, some of our customers are expected to eliminate certain light vehicle models in order to remain financially viable. Changes in the models produced by our customers may have an adverse effect on our market share. Additionally, while we expect that light vehicle production volumes will recover in future years, continued declines in consumer demand may have an adverse effect on the financial condition of our OE customers, and on our future results of operations.

General Motors, Ford and Chrysler represented 20%, 11% and 2%, respectively, of our 2008 net sales and operating revenues. As of December 31, 2008, we had net receivables due from General Motors, Ford and Chrysler in North America that totaled \$142 million. Financial difficulties at any of our major customers could have an adverse impact

on the level of our future revenues and collection of our receivables if such customers were unable to pay for the products we provide or we experience a loss of, or significant reduction in, business from such customers. In addition, a bankruptcy filing by a significant customer could result in a condition of default under our U.S. accounts receivables securitization agreement, which would have an adverse effect on our liquidity.

Continued deterioration in the industry, or the bankruptcy or one or more of our major customers, may have an impact on our ability to meet future financial covenants which would require us to enter into negotiations with our senior credit lenders to request additional covenant relief. Such conditions and events may also result in incremental charges related to impairment of goodwill, intangible assets and long-lived assets, and in charges to record an additional valuation allowance against our deferred tax assets.

In the event that such financial difficulties or the bankruptcy of one of our major customers diminishes our future revenues or collection of receivables, we would pursue a range of actions to meet our cash flow



**Table of Contents**

**TENNECO INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

needs. Such actions include additional restructuring initiatives and other cost reductions, sales of assets, reductions to working capital and capital spending, issuance of equity and other alternatives to enhance our financial and operating position.

*Litigation*

We are from time to time involved in legal proceedings, claims or investigations that are incidental to the conduct of our business. Some of these proceedings allege damages against us relating to environmental liabilities (including toxic tort, property damage and remediation), intellectual property matters (including patent, trademark and copyright infringement, and licensing disputes), personal injury claims (including injuries due to product failure, design or warnings issues, and other product liability related matters), taxes, employment matters, and commercial or contractual disputes, sometimes related to acquisitions or divestitures. For example, one of our Argentina subsidiaries is currently defending against a criminal complaint alleging the failure to comply with laws requiring the proceeds of export transactions to be collected, reported and/or converted to local currency within specified time periods. We vigorously defend ourselves against all of these claims. In future periods, we could be subjected to cash costs or non-cash charges to earnings if any of these matters is resolved on unfavorable terms. However, although the ultimate outcome of any legal matter cannot be predicted with certainty, based on current information, including our assessment of the merits of the particular claim, we do not expect that these legal proceedings or claims will have any material adverse impact on our future consolidated financial position, results of operations or cash flows.

In addition, we are subject to a number of lawsuits initiated by a significant number of claimants alleging health problems as a result of exposure to asbestos. A small percentage of claims have been asserted by railroad workers alleging exposure to asbestos products in railroad cars manufactured by The Pullman Company, one of our subsidiaries. Nearly all of the claims are related to alleged exposure to asbestos in our automotive emission control products. Only a small percentage of these claimants allege that they were automobile mechanics and a significant number appear to involve workers in other industries or otherwise do not include sufficient information to determine whether there is any basis for a claim against us. We believe, based on scientific and other evidence, it is unlikely that mechanics were exposed to asbestos by our former muffler products and that, in any event, they would not be at increased risk of asbestos-related disease based on their work with these products. Further, many of these cases involve numerous defendants, with the number of each in some cases exceeding 200 defendants from a variety of industries. Additionally, the plaintiffs either do not specify any, or specify the jurisdictional minimum, dollar amount for damages. As major asbestos manufacturers continue to go out of business or file for bankruptcy, we may experience an increased number of these claims. We vigorously defend ourselves against these claims as part of our ordinary course of business. In future periods, we could be subject to cash costs or non-cash charges to earnings if any of these matters is resolved unfavorably to us. To date, with respect to claims that have proceeded sufficiently through the judicial process, we have regularly achieved favorable resolution. During 2008, voluntary dismissals were initiated on behalf of 635 plaintiffs and are in process; we were dismissed from an additional 74 cases. Accordingly, we presently believe that these asbestos-related claims will not have a material adverse impact on our future consolidated financial condition, results of operations or cash flows.

*Product Warranties*

We provide warranties on some of our products. The warranty terms vary but range from one year up to limited lifetime warranties on some of our premium aftermarket products. Provisions for estimated expenses related to

product warranty are made at the time products are sold or when specific warranty issues are identified on OE products. These estimates are established using historical information about the nature, frequency, and average cost of warranty claims. We actively study trends of our warranty claims and take action to improve product quality and minimize warranty claims. We believe that the warranty reserve is appropriate; however, actual claims incurred could differ from the original estimates, requiring adjustments to the reserve. The reserve is included in both current and long-term liabilities on the balance sheet.

**Table of Contents****TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

Below is a table that shows the activity in the warranty accrual accounts:

	<b>Year Ended December 31,</b>		
	<b>2008</b>	<b>2007</b>	<b>2006</b>
	<b>(Millions)</b>		
Beginning Balance	\$ 25	\$ 25	\$ 22
Accruals related to product warranties	17	12	17
Reductions for payments made	(15)	(12)	(14)
Ending Balance	\$ 27	\$ 25	\$ 25

*Environmental Matters*

We are subject to a variety of environmental and pollution control laws and regulations in all jurisdictions in which we operate. We expense or capitalize, as appropriate, expenditures for ongoing compliance with environmental regulations that relate to current operations. We expense costs related to an existing condition caused by past operations that do not contribute to current or future revenue generation. We record liabilities when environmental assessments indicate that remedial efforts are probable and the costs can be reasonably estimated. Estimates of the liability are based upon currently available facts, existing technology, and presently enacted laws and regulations taking into consideration the likely effects of inflation and other societal and economic factors. We consider all available evidence including prior experience in remediation of contaminated sites, other companies' cleanup experiences and data released by the United States Environmental Protection Agency or other organizations. These estimated liabilities are subject to revision in future periods based on actual costs or new information. Where future cash flows are fixed or reliably determinable, we have discounted the liabilities. All other environmental liabilities are recorded at their undiscounted amounts. We evaluate recoveries separately from the liability and, when they are assured, recoveries are recorded and reported separately from the associated liability in our consolidated financial statements.

As of December 31, 2008, we were designated as a potentially responsible party in one Superfund site. Including the Superfund site, we may have the obligation to remediate current or former facilities, and we estimate our share of environmental remediation costs at these facilities to be approximately \$11 million. For the Superfund site and the current and former facilities, we have established reserves that we believe are adequate for these costs. Although we believe our estimates of remediation costs are reasonable and are based on the latest available information, the cleanup costs are estimates and are subject to revision as more information becomes available about the extent of remediation required. At some sites, we expect that other parties will contribute to the remediation costs. In addition, at the Superfund site, the Comprehensive Environmental Response, Compensation and Liability Act provides that our liability could be joint and several, meaning that we could be required to pay in excess of our share of remediation costs. Our understanding of the financial strength of other potentially responsible parties at the Superfund site, and of other liable parties at our current and former facilities, has been considered, where appropriate, in our determination of our estimated liability. We believe that any potential costs associated with our current status as a potentially

responsible party in the Superfund site, or as a liable party at our current or former facilities, will not be material to our consolidated results of operations, financial position or cash flows.

#### **14. Supplemental Guarantor Condensed Consolidating Financial Statements**

##### *Basis of Presentation*

Subject to limited exceptions, all of our existing and future material domestic 100% owned subsidiaries (which are referred to as the Guarantor Subsidiaries) fully and unconditionally guarantee our senior subordinated notes due in 2014, our senior notes due in 2015 and our senior secured notes due 2013 on a joint and several basis. We have not presented separate financial statements and other disclosures concerning each of the

**Table of Contents**

**TENNECO INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

Guarantor Subsidiaries because management has determined that such information is not material to the holders of the notes. Therefore, the Guarantor Subsidiaries are combined in the presentation below.

These condensed consolidating financial statements are presented on the equity method. Under this method, our investments are recorded at cost and adjusted for our ownership share of a subsidiary's cumulative results of operations, capital contributions and distributions, and other equity changes. You should read the condensed consolidating financial information of the Guarantor Subsidiaries in connection with our consolidated financial statements and related notes of which this note is an integral part.

*Distributions*

There are no significant restrictions on the ability of the Guarantor Subsidiaries to make distributions to us.

Table of Contents

## TENNECO INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## STATEMENT OF INCOME (LOSS)

For the Year Ended December 31, 2008

	Guarantor Subsidiaries	Nonguarantor Subsidiaries	Tenneco Inc. (Parent Company) (Millions)	Reclass & Elims	Consolidated
<b>Revenues</b>					
Net sales and operating revenues					
External	\$ 2,392	\$ 3,524	\$	\$	\$ 5,916
Affiliated companies	66	476		(542)	
	2,458	4,000		(542)	5,916
<b>Costs and expenses</b>					
Cost of sales (exclusive of depreciation and amortization shown below)	2,058	3,547		(542)	5,063
Goodwill impairment charge	114				114
Engineering, research, and development	52	75			127
Selling, general, and administrative	124	264	4		392
Depreciation and amortization of intangibles	86	136			222
	2,434	4,022	4	(542)	5,918
<b>Other income (expense)</b>					
Loss on sale of receivables		(10)			(10)
Other income (expense)	63	(1)	(1)	(52)	9
	63	(11)	(1)	(52)	(1)
<b>Income (loss) before interest expense, income taxes, minority interest, and equity in net income from affiliated companies</b>					
	87	(33)	(5)	(52)	(3)
Interest expense					
External (net of interest capitalized)	(3)	3	113		113
Affiliated companies (net of interest income)	124	(10)	(114)		
Income tax expense (benefit)	20	89	185	(5)	289

Edgar Filing: TENNECO INC - Form 10-K

Minority interest		10			10
	(54)	(125)	(189)	(47)	(415)
Equity in net income (loss) from affiliated companies	(138)		(226)	364	
<b>Net income (loss)</b>	\$ (192)	\$ (125)	\$ (415)	\$ 317	\$ (415)

Table of Contents**TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****STATEMENT OF INCOME (LOSS)**

For the Year Ended December 31, 2007

	<b>Guarantor Subsidiaries</b>	<b>Nonguarantor Subsidiaries</b>	<b>Tenneco Inc. (Parent Company) (Millions)</b>	<b>Reclass &amp; Elims</b>	<b>Consolidated</b>
<b>Revenues</b>					
Net sales and operating revenues					
External	\$ 2,827	\$ 3,357	\$	\$	\$ 6,184
Affiliated companies	95	895		(990)	
	2,922	4,252		(990)	6,184
<b>Costs and expenses</b>					
Cost of sales (exclusive of depreciation and amortization shown below)	2,619	3,582	(1)	(990)	5,210
Engineering, research, and development	55	59			114
Selling, general, and administrative	145	249	4	1	399
Depreciation and amortization of intangibles	80	125			205
	2,899	4,015	3	(989)	5,928
<b>Other income (expense)</b>					
Loss on sale of receivables		(10)			(10)
Other income (expense)	13	3		(10)	6
	13	(7)		(10)	(4)
<b>Income (loss) before interest expense, income taxes, minority interest, and equity in net income from affiliated companies</b>					
	36	230	(3)	(11)	252
Interest expense					
External (net of interest capitalized)	(2)	2	164		164
Affiliated companies (net of interest income)	185	(16)	(169)		
Income tax expense (benefit)	(42)	78	57	(10)	83
Minority interest		10			10



Edgar Filing: TENNECO INC - Form 10-K

	(105)	156	(55)	(1)	(5)
Equity in net income (loss) from affiliated companies	135		50	(185)	
<b>Net income (loss)</b>	\$ 30	\$ 156	\$ (5)	\$ (186)	\$ (5)

123

---

Table of Contents**TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****STATEMENT OF INCOME (LOSS)**

For the Year Ended December 31, 2006

	<b>Guarantor Subsidiaries</b>	<b>Nonguarantor Subsidiaries</b>	<b>Tenneco Inc. (Parent Company) (Millions)</b>	<b>Reclass &amp; Elims</b>	<b>Consolidated</b>
<b>Revenues</b>					
Net sales and operating revenues					
External	\$ 1,892	\$ 2,790	\$	\$	\$ 4,682
Affiliated companies	88	483		(571)	
	1,980	3,273		(571)	4,682
<b>Costs and expenses</b>					
Cost of sales (exclusive of depreciation and amortization shown below)	1,614	2,793		(571)	3,836
Engineering, research, and development	45	43			88
Selling, general, and administrative	131	238	4		373
Depreciation and amortization of intangibles	71	113			184
	1,861	3,187	4	(571)	4,481
<b>Other income (expense)</b>					
Loss on sale of receivables		(9)			(9)
Other income (expense)		6	(3)	1	4
		(3)	(3)	1	(5)
<b>Income (loss) before interest expense, income taxes, minority interest, and equity in net income from affiliated companies</b>					
	119	83	(7)	1	196
Interest expense					
External (net of interest capitalized)	(4)	3	137		136
Affiliated companies (net of interest income)	165	(11)	(154)		
Income tax expense (benefit)	(33)	41	(4)	1	5
Minority interest		6			6

Edgar Filing: TENNECO INC - Form 10-K

	(9)	44	14		49
Equity in net income (loss) from affiliated companies	24	3	35	(62)	
<b>Net income (loss)</b>	\$ 15	\$ 47	\$ 49	\$ (62)	\$ 49

**Table of Contents****TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****BALANCE SHEET**

	<b>December 31, 2008</b>				
	<b>Guarantor</b>	<b>Nonguarantor</b>	<b>Tenneco</b>	<b>Reclass</b>	<b>Consolidated</b>
	<b>Subsidiaries</b>	<b>Subsidiaries</b>	<b>Inc.</b>	<b>&amp; Elims</b>	
			<b>(Parent</b>		
			<b>Company)</b>		
			<b>(Millions)</b>		
<b>ASSETS</b>					
Current assets:					
Cash and cash equivalents	\$ 16	\$ 110	\$	\$	\$ 126
Receivables, net	461	792	33	(712)	574
Inventories	193	320			513
Deferred income taxes	58			(40)	18
Prepayments and other	24	83			107
	752	1,305	33	(752)	1,338
Other assets:					
Investment in affiliated companies	399		614	(1,013)	
Notes and advances receivable from affiliates	3,641	234	5,605	(9,480)	
Long-term receivables, net	1	10			11
Goodwill	22	73			95
Intangibles, net	17	9			26
Deferred income taxes	64	24	46	(46)	88
Other	36	66	23		125
	4,180	416	6,288	(10,539)	345
Plant, property, and equipment, at cost	1,039	1,921			2,960
Less Accumulated depreciation and amortization	(687)	(1,128)			(1,815)
	352	793			1,145
	\$ 5,284	\$ 2,514	\$ 6,321	\$ (11,291)	\$ 2,828

**LIABILITIES AND SHAREHOLDERS****EQUITY**

Current liabilities:

Edgar Filing: TENNECO INC - Form 10-K

Short-term debt (including current maturities of long-term debt)						
Short-term debt non-affiliated	\$	\$	49	\$	\$	49
Short-term debt affiliated		174	371	10	(555)	
Trade payables		332	594		(136)	790
Accrued taxes		12	18			30
Other		132	169	48	(61)	288
		650	1,201	58	(752)	1,157
Long-term debt-non-affiliated			12	1,390		1,402
Long-term debt-affiliated	4,229		127	5,124	(9,480)	
Deferred income taxes		43	54		(46)	51
Postretirement benefits and other liabilities		345	89		4	438
Commitments and contingencies						
Minority interest			31			31
Shareholders equity		17	1,000	(251)	(1,017)	(251)
	\$	\$	5,284	\$	\$	(11,291)
			2,514			2,828

**Table of Contents****TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****BALANCE SHEET**

	<b>December 31, 2007</b>				
	<b>Guarantor</b>	<b>Nonguarantor</b>	<b>Tenneco</b>	<b>Reclass</b>	<b>Consolidated</b>
	<b>Subsidiaries</b>	<b>Subsidiaries</b>	<b>Inc.</b>	<b>&amp; Elims</b>	
			<b>(Parent</b>		
			<b>Company)</b>		
			<b>(Millions)</b>		
<b>ASSETS</b>					
Current assets:					
Cash and cash equivalents	\$ 6	\$ 182	\$	\$	\$ 188
Receivables, net	385	1,090	148	(866)	757
Inventories	198	341			539
Deferred income taxes	53		3	(20)	36
Prepayments and other	18	103			121
	660	1,716	151	(886)	1,641
Other assets:					
Investment in affiliated companies	628		1,083	(1,711)	
Notes and advances receivable from affiliates	3,607	232	5,383	(9,222)	
Long-term receivables, net		19			19
Goodwill	136	72			208
Intangibles, net	17	9			26
Deferred income taxes	310	60	180	(180)	370
Other	40	76	25		141
	4,738	468	6,671	(11,113)	764
Plant, property, and equipment, at cost	994	1,984			2,978
Less Accumulated depreciation and amortization	(658)	(1,135)			(1,793)
	336	849			1,185
	\$ 5,734	\$ 3,033	\$ 6,822	\$ (11,999)	\$ 3,590

**LIABILITIES AND SHAREHOLDERS  
EQUITY**

Current liabilities:

Edgar Filing: TENNECO INC - Form 10-K

Short-term debt (including current maturities of long-term debt)					
Short-term debt non-affiliated	\$	\$	44	\$	2
Short-term debt affiliated			439		10
Trade payables			774		(723)
Accrued taxes			27		(2)
Other			118		(24)
			769		33
Long-term debt-non-affiliated			1,442		(886)
Long-term debt-affiliated			7		1,321
Deferred income taxes			4,100		5,068
Postretirement benefits and other liabilities			213		(9,222)
Commitments and contingencies			264		(180)
Minority interest			89		6
Shareholders equity			31		
			388		(1,717)
	\$	\$	5,734	\$	6,822
			3,033		(11,999)
					3,590

Table of Contents**TENNECO INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****STATEMENT OF CASH FLOWS**

Year Ended December 31, 2008

	<b>Guarantor</b>	<b>Nonguarantor</b>	<b>Tenneco</b>	<b>Reclass</b>	<b>Consolidated</b>
	<b>Subsidiaries</b>	<b>Subsidiaries</b>	<b>Inc.</b>	<b>&amp;</b>	
			<b>(Parent</b>	<b>Elims</b>	
			<b>Company)</b>		
			<b>(Millions)</b>		
<b>Operating Activities</b>					
Net cash provided (used) by operating activities	\$ 167	\$ 130	\$ (137)	\$	\$ 160
<b>Investing Activities</b>					
Proceeds from sale of assets		3			3
Cash payments for plant, property, and equipment	(90)	(143)			(233)
Acquisition of business (net of cash acquired)	(19)	3			(16)
Cash payments for software related intangible assets	(9)	(6)			(15)
Investments and other					
Net cash used by investing activities	(118)	(143)			(261)
<b>Financing Activities</b>					
Issuance of common shares			2		2
Issuance of long-term debt		1			1
Retirement of long-term debt		(4)	(2)		(6)
Debit issuance cost on long-term debt			(2)		(2)
Increase (decrease) in bank overdrafts		(1)			(1)
Net increase (decrease) in revolver borrowings and short-term debt excluding current maturities of long-term debt		7	70		77
Intercompany dividends and net increase (decrease) in intercompany obligations	(39)	(30)	69		(13)
Distribution to minority interest partners		(13)			(13)
Net cash provided (used) by financing activities	(39)	(40)	137		58
		(19)			(19)



Effect of foreign exchange rate changes  
on cash and cash equivalents

Increase (decrease) in cash and cash equivalents	10	(72)	(62)
Cash and cash equivalents, January 1	6	182	188
Cash and cash equivalents, December 31 (Note)	\$ 16	\$ 110	\$ 126

Note: Cash and cash equivalents include highly liquid investments with a maturity of three months or less at the date of purchase.

Table of Contents

## TENNECO INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## STATEMENT OF CASH FLOWS

Year Ended December 31, 2007

	Guarantor	Nonguarantor	Tenneco Inc. (Parent Company) (Millions)	Reclass & Elims	Consolidated
	Subsidiaries	Subsidiaries			
<b>Operating Activities</b>					
Net cash provided (used) by operating activities	\$ 380	\$ 302	\$ (524)	\$	\$ 158
<b>Investing Activities</b>					
Proceeds from sale of assets	1	9			10
Cash payments for plant, property, and equipment	(59)	(118)			(177)
Cash payment for net assets purchased	(16)				(16)
Cash payments for software related intangible assets	(13)	(6)			(19)
Investments and other		(250)	250		
Net cash provided (used) by investing activities	(87)	(365)	250		(202)
<b>Financing Activities</b>					
Issuance of common shares			8		8
Issuance of subsidiary equity	41	(41)			
Issuance of long-term debt			400		400
Retirement of long-term debt		(3)	(588)		(591)
Debt issuance cost on long-term debt			(11)		(11)
Increase (decrease) in bank overdrafts		7			7
Net increase (decrease) in revolver borrowings and short-term debt excluding current maturities of long-term debt		16	167		183
Intercompany dividends and net increase (decrease) in intercompany obligations	(384)	86	298		
Distribution to minority interest partners		(6)			(6)
Net cash provided (used) by financing activities	(343)	59	274		(10)

Effect of foreign exchange rate changes on cash and cash equivalents			40				40
Increase (decrease) in cash and cash equivalents	(50)		36				(14)
Cash and cash equivalents, January 1	56		146				202
Cash and cash equivalents, December 31 (Note)	\$ 6	\$	182	\$	\$	\$	188

Note: Cash and cash equivalents include highly liquid investments with a maturity of three months or less at the date of purchase.

Table of Contents

## TENNECO INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## STATEMENT OF CASH FLOWS

Year Ended December 31, 2006

	Guarantor	Nonguarantor	Tenneco Inc. (Parent Company) (Millions)	Reclass & Elims	Consolidated
	Subsidiaries	Subsidiaries			
<b>Operating Activities</b>					
Net cash provided (used) by operating activities	\$ 242	\$ 249	\$ (288)	\$	\$ 203
<b>Investing Activities</b>					
Proceeds from sale of assets	10	7			17
Cash payment for plant, property, and equipment	(78)	(99)			(177)
Cash payment for software related intangible assets	(6)	(7)			(13)
Investments and other		1			1
Net cash used by investing activities	(74)	(98)			(172)
<b>Financing Activities</b>					
Issuance of common shares			17		17
Retirement of long-term debt		(3)	(1)		(4)
Net increase (decrease) in revolver borrowings and short-term debt excluding current maturities of long-term debt		3			3
Intercompany dividends and net increase (decrease) in intercompany obligations	(142)	(129)	271		
Distribution to minority interest partners		(4)			(4)
Net cash provided (used) by financing activities	(142)	(133)	287		12
Effect of foreign exchange rate changes on cash and cash equivalents		18			18
Increase (decrease) in cash and cash equivalents	26	36	(1)		61
Cash and cash equivalents, January 1	31	110			141

Cash and cash equivalents, December 31 (Note)	\$	57	\$	146	\$	(1)	\$	\$	202
--	----	----	----	-----	----	-----	----	----	-----

Note: Cash and cash equivalents include highly liquid investments with a maturity of three months or less at the date of purchase.

Table of Contents

## TENNECO INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## 15. Quarterly Financial Data (Unaudited)

Quarter	Net Sales and Operating Revenues	Cost of Sales (Excluding Depreciation and Amortization)	Income Before Interest Expense, Income Taxes and Minority Interest	Net Income (Loss)
	(Millions)			
2008				
1st	\$ 1,560	\$ 1,326	\$ 39	\$ 6
2nd	1,651	1,383	75	13
3rd	1,497	1,298	28	(136)
4th	1,208	1,056	(145)	(298)
	\$ 5,916	\$ 5,063	\$ (3)	\$ (415)
2007				
1st	\$ 1,400	\$ 1,179	\$ 49	\$ 5
2nd	1,663	1,377	103	41
3rd	1,556	1,313	57	21
4th	1,565	1,341	43	(72)
	\$ 6,184	\$ 5,210	\$ 252	\$ (5)

Quarter	Basic Earnings per Share of Common Stock	Diluted Earnings per Share of Common Stock
2008		
1st	\$ 0.14	\$ 0.13
2nd	0.26	0.26
3rd	(2.92)	(2.92)
4th	(6.40)	(6.40)
Full Year	(8.95)	(8.95)

Edgar Filing: TENNECO INC - Form 10-K

2007				
1st		\$	0.11	\$ 0.11
2nd			0.89	0.85
3rd			0.47	0.45
4th			(1.57)	(1.57)
Full Year			(0.11)	(0.11)

Note: The sum of the quarters may not equal the total of the respective year's earnings per share on either a basic or diluted basis due to changes in the weighted average shares outstanding throughout the year.

(The preceding notes are an integral part of the foregoing consolidated financial statements.)

Table of Contents

## SCHEDULE II

## TENNECO INC. AND CONSOLIDATED SUBSIDIARIES

## SCHEDULE II VALUATION AND QUALIFYING ACCOUNTS

Column A	Column B	Column C		Column D	Column E
Description	Balance at Beginning of Year	Additions Charged to Costs and Expenses	Additions Charged to Other Accounts (Millions)	Deductions	Balance at End of Year
Allowance for Doubtful Accounts and Notes Deducted from Assets to Which it Applies: Year Ended December 31, 2008	\$ 25	\$ 3	\$ 2	\$ 6	\$ 24
Year Ended December 31, 2007	\$ 23	\$ 3	\$ 2	\$ 3	\$ 25
Year Ended December 31, 2006	\$ 26	\$ 4	\$ 1	\$ 8	\$ 23



**Table of Contents**

**ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.**

None.

**ITEM 9A. CONTROLS AND PROCEDURES.**

**Evaluation of Disclosure Controls and Procedures**

An evaluation was carried out under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) and Rule 15d-15(e) under the Securities Exchange Act of 1934) as of the end of the year covered by this report. Based on their evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that the company's disclosure controls and procedures are effective to ensure that information required to be disclosed by our company in reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms and such information is accumulated and communicated to management as appropriate to allow timely decisions regarding required disclosures.

See Item 8, Financial Statements and Supplementary Data for management's report on internal control over financial reporting and the report of our independent registered public accounting firm thereon.

**Changes in Internal Control over Financial Reporting**

The following changes in our internal control over financial reporting in the fourth quarter of 2008 have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management previously reported a material weakness in our internal control over financial reporting in our 2007 Form 10-K, filed on February 29, 2008, related to accounting for income taxes. To address the current material weakness in accounting for income taxes, we undertook the following actions:

1. We required all income tax entries approved for recording at the consolidated level include supporting documentation which will be provided to the local finance personnel with instructions for recording the transactions on the local ledgers.
2. We formalized a process for documenting decisions and journal entries made based upon the review of tax packages or any other supporting information provided.
3. Based on review of each entity's quarterly balance sheet and income tax provision reconciliation, we identified variances requiring additional balance sheet and income tax provision reconciliations. The tax department instituted a process whereby a member of the tax department would work with the location to review the tax accounting if an analysis of the balance sheet and income tax provision reconciliation identifies multiple and/or significant tax reporting variances requiring further analysis and training.
4. We accelerated certain year end tax analysis and reporting activities to periods earlier in the year in order to provide additional analysis and reconciliation time.

During the fourth quarter of 2008, our testing of our internal controls over financial reporting indicated that controls and procedures over our accounting for income taxes operated throughout the year. Therefore, we believe that the

previously reported material weakness related to our accounting for income taxes process has been remediated as of December 31, 2008.

There were no other changes in our internal control over financial reporting during the quarter ended December 31, 2008 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

**ITEM 9B. OTHER INFORMATION.**

None.

**Table of Contents****PART III****ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.**

The sections entitled Election of Directors and Corporate Governance in our definitive Proxy Statement for the Annual Meeting of Stockholders to be held May 13, 2009 are incorporated herein by reference. In addition, Item 4.1 of this Annual Report on Form 10-K, which appears at the end of Part I, is incorporated herein by reference.

A copy of our Code of Ethical Conduct for Financial Managers, which applies to our Chief Executive Officer, Chief Financial Officer, Controller and other key financial managers, is filed as Exhibit 14 to this Form 10-K. We have posted a copy of the Code of Ethical Conduct for Financial Managers on our Internet website at [www.tenneco.com](http://www.tenneco.com). We will make a copy of this code available to any person, without charge, upon written request to Tenneco Inc., 500 North Field Drive, Lake Forest, Illinois 60045, Attn: General Counsel. We intend to satisfy the disclosure requirement under Item 5.05 of Form 8-K and applicable NYSE rules regarding amendments to or waivers of our Code of Ethical Conduct by posting this information on our Internet website at [www.tenneco.com](http://www.tenneco.com).

**ITEM 11. EXECUTIVE COMPENSATION.**

The section entitled Executive Compensation in our definitive Proxy Statement for the Annual Meeting of Stockholders to be held May 13, 2009 is incorporated herein by reference.

**ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.**

The section entitled Ownership of Common Stock in our definitive Proxy Statement for the Annual Meeting of Stockholders to be held May 13, 2009 is incorporated herein by reference.

**Securities Authorized for Issuance under Equity Compensation Plans**

The following table shows, as of December 31, 2008, information regarding outstanding awards available under our compensation plans (including individual compensation arrangements) under which our equity securities may be delivered:

Plan category	(a) Number of securities to be  issued upon exercise of outstanding options, warrants and rights(1)	(b) Weighted- average exercise price of outstanding options, warrants and rights	(c) Number of securities  available for future issuance (excluding shares in column (a))(1)
---------------	--	--	--

**Equity compensation plans approved by security holders:**

Edgar Filing: TENNECO INC - Form 10-K

Stock Ownership Plan(2)	620,667	\$	5.73	
2002 Long-Term Incentive Plan (as amended)(3)	1,200,226	\$	12.40	
2006 Long-Term Incentive Plan(4)	1,083,252	\$	25.11	1,214,048
<b>Equity compensation plans not approved by security holders:</b>				
Supplemental Stock Ownership Plan(5)	245,231	\$	8.56	

- (1) Reflects the number of shares of the Company's common stock. Does not include 220,604 shares that may be issued in settlement of common stock equivalent units that were credited to outside directors as payment for their retainer and other fees. In general, these units are settled in cash. At the option of the Company, however, the units may be settled in shares of the Company's common stock.
- (2) This plan terminated as to new awards on December 31, 2001 (except awards pursuant to commitments outstanding at that date).

**Table of Contents**

- (3) This plan terminated as to new awards upon adoption of our 2006 Long-term Incentive Plan (except awards pursuant to commitments outstanding on that date). Does not include 40,825 shares subject to outstanding restricted stock (vest over time) as of December 31, 2008 that were issued at a weighted-average issue price of \$21.23 per share.
- (4) Does not include 413,664 shares subject to outstanding restricted stock (vest over time) as of December 31, 2008 that were issued at a weighted average exercise price of \$25.05. Under this plan, as of December 31, 2008, a maximum of 442,484 shares remained available for delivery under full value awards (i.e., bonus stock, stock equivalent units, performance units, restricted stock and restricted stock units).
- (5) The plan described in the table above as not having been approved by security holders is the Tenneco Inc. Supplemental Stock Ownership Plan. This plan, which terminated on December 31, 2001 as to new awards (except awards pursuant to commitments outstanding at that date), originally covered the delivery of up to 1.5 million shares of common stock held in the Company's treasury. This plan was and continues to be administered by the Compensation/Nominating/Governance Committee. The Company's directors, officers and other employees were eligible to receive awards under this plan, although awards under the plan were limited to the Company's non-executive employees. Awards under the plan could take the form of non-statutory stock options, stock appreciation rights, restricted stock, stock equivalent units or performance units. All awards made under this plan were discretionary. The committee determined which eligible persons received awards and determined all terms and conditions (including form, amount and timing) of each award.

**ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE.**

The subsections entitled "The Board of Directors and its Committees - General" and "Transactions with Related Persons" under the section entitled "Corporate Governance" in our definitive Proxy Statement for the annual meeting of Stockholders to be held on May 13, 2009 are incorporated herein by reference.

**ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES.**

The sections entitled "Ratify Appointment of Independent Public Accountants - Audit, Audit-Related, Tax and All Other Fees" and "Ratify Appointment of Independent Public Accountants - Pre-Approval Policy" in our definitive Proxy Statement for the Annual Meeting of Stockholders to be held May 13, 2009 are incorporated herein by reference.

**Table of Contents**

**PART IV**

**ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.**

**CONSOLIDATED FINANCIAL STATEMENTS INCLUDED IN ITEM 8**

See Index to Financial Statements of Tenneco Inc. and Consolidated Subsidiaries set forth in Item 8, Financial Statements and Supplementary Data for a list of financial statements filed as part of this Report.

**INDEX TO SCHEDULE INCLUDED IN ITEM 8**

	<b>Page</b>
Schedule of Tenneco Inc. and Consolidated Subsidiaries Schedule II Valuation and qualifying accounts three years ended December 31, 2008	131

**SCHEDULES OMITTED AS NOT REQUIRED OR INAPPLICABLE**

Schedule I Condensed financial information of registrant	
Schedule III Real estate and accumulated depreciation	
Schedule IV Mortgage loans on real estate	
Schedule V Supplemental information concerning property casualty insurance operations	

**Table of Contents****EXHIBITS**

The following exhibits are filed with this Annual Report on Form 10-K for the fiscal year ended December 31, 2008, or incorporated herein by reference (exhibits designated by an asterisk are filed with the report; all other exhibits are incorporated by reference):

**INDEX TO EXHIBITS**

<b>Exhibit Number</b>	<b>Description</b>
2	None
3.1(a)	Restated Certificate of Incorporation of the registrant dated December 11, 1996 (incorporated herein by reference from Exhibit 3.1(a) of the registrant's Annual Report on Form 10-K for the year ended December 31, 1997, File No. 1-12387).
3.1(b)	Certificate of Amendment, dated December 11, 1996 (incorporated herein by reference from Exhibit 3.1(c) of the registrant's Annual Report on Form 10-K for the year ended December 31, 1997, File No. 1-12387).
3.1(c)	Certificate of Ownership and Merger, dated July 8, 1997 (incorporated herein by reference from Exhibit 3.1(d) of the registrant's Annual Report on Form 10-K for the year ended December 31, 1997, File No. 1-12387).
3.1(d)	Certificate of Designation of Series B Junior Participating Preferred Stock dated September 9, 1998 (incorporated herein by reference from Exhibit 3.1(d) of the registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1998, File No. 1-12387).
3.1(e)	Certificate of Elimination of the Series A Participating Junior Preferred Stock of the registrant dated September 11, 1998 (incorporated herein by reference from Exhibit 3.1(e) of the registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1998, File No. 1-12387).
3.1(f)	Certificate of Amendment to Restated Certificate of Incorporation of the registrant dated November 5, 1999 (incorporated herein by reference from Exhibit 3.1(f) of the registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1999, File No. 1-12387).
3.1(g)	Certificate of Amendment to Restated Certificate of Incorporation of the registrant dated November 5, 1999 (incorporated herein by reference from Exhibit 3.1(g) of the registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1999, File No. 1-12387).
3.1(h)	Certificate of Ownership and Merger merging Tenneco Automotive Merger Sub Inc. with and into the registrant, dated November 5, 1999 (incorporated herein by reference from Exhibit 3.1(h) of the registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1999, File No. 1-12387).
3.1(i)	Certificate of Amendment to Restated Certificate of Incorporation of the registrant dated May 9, 2000 (incorporated herein by reference from Exhibit 3.1(i) of the registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2000, File No. 1-12387).
3.1(j)	Certificate of Ownership and Merger merging Tenneco Inc. with and into the registrant, dated October 27, 2005 (incorporated herein by reference from Exhibit 99.1 of the registrant's Current Report on Form 8-K dated October 28, 2005, File No. 1-12387).
3.2	By-laws of the registrant, as amended March 4, 2008 (incorporated herein by reference from Exhibit 99.1 of the registrant's Current Report on Form 8-K event date March 4, 2008, File No. 1-12387).
3.3	Certificate of Incorporation of Tenneco Global Holdings Inc. ( Global ), as amended (incorporated herein by reference to Exhibit 3.3 to the registrant's Registration Statement on Form S-4, Reg. No. 333-93757).

Edgar Filing: TENNECO INC - Form 10-K

- 3.4 By-laws of Global (incorporated herein by reference to Exhibit 3.4 to the registrant's Registration Statement on Form S-4, Reg. No. 333-93757).
- 3.5 Certificate of Incorporation of TMC Texas Inc. ( TMC ) (incorporated herein by reference to Exhibit 3.5 to the registrant's Registration Statement on Form S-4, Reg. No. 333-93757).
- 3.6 By-laws of TMC (incorporated herein by reference to Exhibit 3.6 to the registrant's Registration Statement on Form S-4, Reg. No. 333-93757).
- 3.7 Amended and Restated Certificate of Incorporation of Tenneco International Holding Corp. ( TIHC ) (incorporated herein by reference to Exhibit 3.7 to the registrant's Registration Statement on Form S-4, Reg. No. 333-93757).



**Table of Contents**

<b>Exhibit Number</b>	<b>Description</b>
3.8	Amended and Restated By-laws of TIHC (incorporated herein by reference to Exhibit 3.8 to the registrant's Registration Statement on Form S-4, Reg. No. 333-93757).
3.9	Certificate of Incorporation of Clevite Industries Inc. ( Clevite ), as amended (incorporated herein by reference to Exhibit 3.9 to the registrant's Registration Statement on Form S-4, Reg. No. 333-93757).
3.10	By-laws of Clevite (incorporated herein by reference to Exhibit 3.10 to the registrant's Registration Statement on Form S-4, Reg. No. 333-93757).
3.11	Amended and Restated Certificate of Incorporation of the Pullman Company ( Pullman ) (incorporated herein by reference to Exhibit 3.11 to the registrant's Registration Statement on Form S-4, Reg. No. 333-93757).
3.12	By-laws of Pullman (incorporated herein by reference to Exhibit 3.12 to the registrant's Registration Statement on Form S-4, Reg. No. 333-93757).
3.13	Certificate of Incorporation of Tenneco Automotive Operating Company Inc. ( Operating ) (incorporated herein by reference to Exhibit 3.13 to the registrant's Registration Statement on Form S-4, Reg. No. 333-93757).
3.14	By-laws of Operating (incorporated herein by reference to Exhibit 3.14 to the registrant's Registration Statement on Form S-4, Reg. No. 333-93757).
4.1(a)	Indenture, dated as of November 1, 1996, between the registrant and The Chase Manhattan Bank, as Trustee (incorporated herein by reference from Exhibit 4.1 of the registrant's Registration Statement on Form S-4, Registration No. 333-14003).
4.1(b)	First Supplemental Indenture dated as of December 11, 1996 to Indenture dated as of November 1, 1996 between the registrant and The Chase Manhattan Bank, as Trustee (incorporated herein by reference from Exhibit 4.3(b) of the registrant's Annual Report on Form 10-K for the year ended December 31, 1996, File No. 1-12387).
4.1(c)	Third Supplemental Indenture dated as of December 11, 1996 to Indenture dated as of November 1, 1996 between the registrant and The Chase Manhattan Bank, as Trustee (incorporated herein by reference from Exhibit 4.3(d) of the registrant's Annual Report on Form 10-K for the year ended December 31, 1996, File No. 1-12387).
4.1(d)	Fourth Supplemental Indenture dated as of December 11, 1996 to Indenture dated as of November 1, 1996 between the registrant and The Chase Manhattan Bank, as Trustee (incorporated herein by reference from Exhibit 4.3(e) of the registrant's Annual Report on Form 10-K for the year ended December 31, 1996, File No. 1-12387).
4.1(e)	Eleventh Supplemental Indenture, dated October 21, 1999, to Indenture dated November 1, 1996 between The Chase Manhattan Bank, as Trustee, and the registrant (incorporated herein by reference from Exhibit 4.2(l) of the registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1999, File No. 1-12387).
4.2	Specimen stock certificate for Tenneco Inc. common stock (incorporated herein by reference from Exhibit 4.3 of the registrant's Annual Report on Form 10-K for the year ended December 31, 2006, File No. 1-12387).
4.3(a)	Indenture dated October 14, 1999 by and between the registrant and The Bank of New York, as trustee (incorporated herein by reference from Exhibit 4.4(a) of the registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1999, File No. 1-12387).
4.3(b)	Supplemental Indenture dated November 4, 1999 among Tenneco Automotive Operating Company Inc., Tenneco International Holding Corp., Tenneco Global Holdings Inc., the Pullman Company, Clevite Industries Inc. and TMC Texas Inc. in favor of The Bank of New York, as trustee (incorporated herein by reference from Exhibit 4.4(b) of the registrant's Quarterly Report on Form

- 10-Q for the quarter ended September 30, 1999, File No. 1-12387).
- 4.3(c) Subsidiary Guarantee dated as of October 14, 1999 from Tenneco Automotive Operating Company Inc., Tenneco International Holding Corp., Tenneco Global Holdings Inc., the Pullman Company, Clevite Industries Inc. and TMC Texas Inc. in favor of The Bank of New York, as trustee (incorporated herein by reference to Exhibit 4.4(c) to the registrant's Registration Statement on Form S-4, Reg. No. 333-93757).

**Table of Contents**

<b>Exhibit Number</b>	<b>Description</b>
4.4(a)	Second Amended and Restated Credit Agreement, dated as of March 16, 2007, among Tenneco Inc., JPMorgan Chase Bank, N.A., as administrative agent, and the other lenders party thereto (incorporated herein by reference from Exhibit 99.1 of the registrant's Current Report on Form 8-K dated March 16, 2007).
4.4(b)	Guarantee and Collateral Agreement, dated as of March 16, 2007 (amending and restating the Guarantee and Collateral Agreement dated as of November 4, 1999, as previously amended and amended and restated), among Tenneco Inc., various of its subsidiaries and JPMorgan Chase Bank, N.A., as administrative agent (incorporated herein by reference from Exhibit 99.2 of the registrant's Current Report on Form 8-K dated March 16, 2007).
4.4(c)	Waiver, dated July 23, 2007, to Second Amended and Restated Credit Agreement, dated as March 16, 2007, by and among the registrant, JPMorgan Chase Bank, N.A., as administrative agent, and the other lenders party thereto (incorporated herein by reference from Exhibit 4.5(c) to the registrant's Annual Report on Form 10-K for the year ended December 31, 2007, File No. 1-12387).
4.4(d)	Second Amendment, dated November 26, 2007, to Second Amended and Restated Credit Agreement, dated as March 16, 2007, by and among the registrant, JPMorgan Chase Bank, N.A., as administrative agent, and the other lenders party thereto (incorporated herein by reference from Exhibit 4.5(d) to the registrant's Annual Report on Form 10-K for the year ended December 31, 2007, File No. 1-12387).
4.4(e)	Third Amendment, dated as of December 23, 2008, to Second Amended and Restated Credit Agreement, dated as of March 16, 2007, by and among the registrant, JPMorgan Chase Bank, N.A., as administrative agent, and the other lenders party thereto (incorporated herein by reference from Exhibit 10.1 to the registrant's Current Report on Form 8-K dated December 23, 2008).
4.4(f)	Fourth Amendment, dated as of February 23, 2009, to Second Amended and Restated Credit Agreement, dated as of March 16, 2007, by and among the registrant, JP Morgan Chase Bank, N.A., as administrative agent, and the other lenders party thereto (incorporated herein by reference from Exhibit 4.1 to the registrant's Current Report on Form 8-K dated February 23, 2009).
4.5(a)	Indenture, dated as of June 19, 2003, among the registrant, the subsidiary guarantors named therein and Wachovia Bank, National Association (incorporated herein by reference from Exhibit 4.6(a) to the registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2003, File No. 1-12387).
4.5(b)	Collateral Agreement, dated as of June 19, 2003, by the registrant and the subsidiary guarantors named therein in favor of Wachovia Bank, National Association (incorporated herein by reference from Exhibit 4.6(b) to the registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2003, File No. 1-12387).
4.5(c)	Registration Rights Agreement, dated as of June 19, 2003, among the registrant, the subsidiary guarantors named therein, and the initial purchasers named therein, for whom JPMorgan Securities Inc. acted as representative (incorporated herein by reference from Exhibit 4.6(c) to the registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2003, File No. 1-12387).
4.5(d)	Supplemental Indenture, dated as of December 12, 2003, among the registrant, the subsidiary guarantors named therein and Wachovia Bank, National Association (incorporated herein by reference to Exhibit 4.6(d) to the registrant's Annual Report on Form 10-K for the year ended December 31, 2003, File No. 1-12387).
4.5(e)	Registration Rights Agreement, dated as of December 12, 2003, among the registrant, the subsidiary guarantors named therein, and the initial purchasers named therein, for whom Banc of America Securities LLC acted as representative agent (incorporated herein by reference to Exhibit 4.5(a) to

Edgar Filing: TENNECO INC - Form 10-K

the registrant's Annual Report on Form 10-K for the year ended December 31, 2003, File No. 1-12387).

- 4.5(f) Second Supplemental Indenture, dated as of October 28, 2005, among the registrant, the subsidiary guarantors named therein and Wachovia Bank, National Association (incorporated herein by reference from Exhibit 4.6(f) to the registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2005, File No. 1-12387).
- 4.5(g) Third Supplemental Indenture, dated as of November 14, 2007, by and among the registrant, the subsidiary guarantors party thereto and U.S. Bank National Association, as trustee (incorporated herein by reference from Exhibit 4.1 to the Company's Current Report on Form 8-K, dated November 14, 2007).

**Table of Contents**

<b>Exhibit Number</b>	<b>Description</b>
4.6	Intercreditor Agreement, dated as of June 19, 2003, among JPMorgan Chase Bank, as Credit Agent, Wachovia Bank, National Association, as Trustee and Collateral Agent, and the registrant (incorporated herein by reference from Exhibit 4.7 to the registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2003, File No. 1-12387).
4.7(a)	Indenture, dated as of November 19, 2004, among the registrant, the subsidiary guarantors named therein and The Bank of New York Trust Company (incorporated herein by reference from Exhibit 99.1 of the registrant's Current Report on Form 8-K dated November 19, 2004, File No. 1-12387).
4.7(b)	Supplemental Indenture, dated as of March 28, 2005, among the registrant, the guarantors party thereto and the Bank of New York Trust Company, N.A., as trustee (incorporated herein by reference from Exhibit 4.3 to the registrant's Registration Statement on Form S-4, Reg. No. 333-123752).
4.7(c)	Registration Rights Agreement, dated as of November 19, 2004, among the registrant, the guarantors party thereto and the initial purchasers party thereto (incorporated herein by reference from Exhibit 4.2 to the registrant's Registration Statement on Form S-4, Reg. No. 333-123752).
4.7(d)	Second Supplemental Indenture, dated as of October 27, 2005, among the registrant, the guarantors party thereto and the Bank of New York Trust Company, N.A., as trustee (incorporated herein by reference from Exhibit 4.8(d) to the registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2005, File No. 1-12387).
4.8(a)	Indenture, dated as of November 19, 2007, by and among the registrant, the subsidiary guarantors party thereto and Wells Fargo Bank, N.A., as trustee (incorporated herein by reference from Exhibit 4.9(a) to the registrant's Annual Report on Form 10-K for the year ended December 31, 2007, File No. 1-12387).
4.8(b)	Registration Rights Agreement, dated November 19, 2007, by and among the registrant, the subsidiary guarantors party thereto and the initial purchasers party thereto (incorporated herein by reference from Exhibit 4.9(b) to the registrant's Annual Report on Form 10-K for the year ended December 31, 2007, File No. 1-12387).
9	None.
10.1	Distribution Agreement, dated November 1, 1996, by and among El Paso Tennessee Pipeline Co., the registrant, and Newport News Shipbuilding Inc. (incorporated herein by reference from Exhibit 2 of the registrant's Form 10, File No. 1-12387).
10.2	Amendment No. 1 to Distribution Agreement, dated as of December 11, 1996, by and among El Paso Tennessee Pipeline Co., the registrant, and Newport News Shipbuilding Inc. (incorporated herein by reference from Exhibit 10.2 of the registrant's Annual Report on Form 10-K for the year ended December 31, 1996, File No. 1-12387).
10.3	Debt and Cash Allocation Agreement, dated December 11, 1996, by and among El Paso Tennessee Pipeline Co., the registrant, and Newport News Shipbuilding Inc. (incorporated herein by reference from Exhibit 10.3 of the registrant's Annual Report on Form 10-K for the year ended December 31, 1996, File No. 1-12387).
10.4	Benefits Agreement, dated December 11, 1996, by and among El Paso Tennessee Pipeline Co., the registrant, and Newport News Shipbuilding Inc. (incorporated herein by reference from Exhibit 10.4 of the registrant's Annual Report on Form 10-K for the year ended December 31, 1996, File No. 1-12387).
10.5	Insurance Agreement, dated December 11, 1996, by and among El Paso Tennessee Pipeline Co., the registrant, and Newport News Shipbuilding Inc. (incorporated herein by reference from Exhibit

Edgar Filing: TENNECO INC - Form 10-K

- 10.5 of the registrant's Annual Report on Form 10-K for the year ended December 31, 1996, File No. 1-12387).
- 10.6 Tax Sharing Agreement, dated December 11, 1996, by and among El Paso Tennessee Pipeline Co., Newport News Shipbuilding Inc., the registrant, and El Paso Natural Gas Company (incorporated herein by reference from Exhibit 10.6 of the registrant's Annual Report on Form 10-K for the year ended December 31, 1996, File No. 1-12387).
- 10.7 First Amendment to Tax Sharing Agreement, dated as of December 11, 1996, among El Paso Tennessee Pipeline Co., the registrant, El Paso Natural Gas Company and Newport News Shipbuilding Inc. (incorporated herein by reference from Exhibit 10.7 of the registrant's Annual Report on Form 10-K for the year ended December 31, 1996, File No. 1-12387).

**Table of Contents**

<b>Exhibit Number</b>	<b>Description</b>
+10.8	Change of Control Severance Benefits Plan for Key Executives (incorporated herein by reference from Exhibit 10.13 of the registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1999, File No. 1-12387).
+10.9	Stock Ownership Plan (incorporated herein by reference from Exhibit 10.10 of the registrant's Registration Statement on Form S-4, Reg. No. 333-93757).
+10.10	Key Executive Pension Plan (incorporated herein by reference from Exhibit 10.11 to the registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2000, File No. 1-12387).
+10.11	Deferred Compensation Plan (incorporated herein by reference from Exhibit 10.12 to the registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2000, File No. 1-12387).
+10.12	Supplemental Executive Retirement Plan (incorporated herein by reference from Exhibit 10.13 to the registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2000, File No. 1-12387).
10.13	Human Resources Agreement by and between the registrant and Tenneco Packaging Inc. dated November 4, 1999 (incorporated herein by reference to Exhibit 99.1 to the registrant's Current Report on Form 8-K dated November 4, 1999, File No. 1-12387).
10.14	Tax Sharing Agreement by and between the registrant and Tenneco Packaging Inc. dated November 3, 1999 (incorporated herein by reference to Exhibit 99.2 to the registrant's Current Report on Form 8-K dated November 4, 1999, File No. 1-12387).
10.15	Amended and Restated Transition Services Agreement by and between the registrant and Tenneco Packaging Inc. dated as of November 4, 1999 (incorporated herein by reference from Exhibit 10.21 of the registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1999, File No. 1-12387).
10.16	Assumption Agreement among Tenneco Automotive Operating Company Inc., Tenneco International Holding Corp., Tenneco Global Holdings Inc., The Pullman Company, Clevite Industries Inc., TMC Texas Inc., Salomon Smith Barney Inc. and the other Initial Purchasers listed in the Purchase Agreement dated as of November 4, 1999 (incorporated herein by reference from Exhibit 10.24 of the registrant's Registration Statement on Form S-4, Reg. No. 333-93757).
+10.17	Amendment No. 1 to Change in Control Severance Benefits Plan for Key Executives (incorporated herein by reference from Exhibit 10.23 to the registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2000, File No. 1-12387).
+10.18	Form of Indemnity Agreement entered into between the registrant and the following directors of the registrant: Paul Stecko, M. Kathryn Eickhoff and Dennis Severance (incorporated herein by reference from Exhibit 10.29 to the registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2000, File No. 1-12387).
+10.19	Letter Agreement dated July 27, 2000 between the registrant and Timothy E. Jackson (incorporated herein by reference from Exhibit 10.27 to the registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2000, File No. 1-12387).
+10.20	Letter Agreement dated as of June 1, 2001 between the registrant and Hari Nair (incorporated herein by reference from Exhibit 10.28 to the registrant's Annual Report on Form 10-K for the year ended December 31, 2001. File No. 1-12387).
+10.21	2002 Long-Term Incentive Plan (As Amended and Restated Effective March 11, 2003) (incorporated herein by reference from Exhibit 10.26 to the registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2003. File No. 1-12387).
+10.22	Amendment No. 1 to Deferred Compensation Plan (incorporated herein by reference from Exhibit 10.27 to the registrant's Annual Report on Form 10-K for the year ended December 31, 2002, File

- No. 1-12387).
- +10.23 Supplemental Stock Ownership Plan (incorporated herein by reference from Exhibit 10.28 to the registrant's Annual Report on Form 10-K for the year ended December 31, 2002, File No. 1-12387).
  - +10.24 Form of Stock Option Agreement for employees under the 2002 Long-Term Incentive Plan, as amended (providing for a ten year option term) (incorporated herein by reference from Exhibit 99.2 of the registrant's Current Report on Form 8-K dated January 13, 2005, File No. 1-12387).
  - +10.25 Form of Stock Option Agreement for non-employee directors under the 2002 Long-Term Incentive Plan, as amended (providing for a ten year option term) (incorporated herein by reference from Exhibit 99.3 of the registrant's Current Report on Form 8-K dated January 13, 2005, File No. 1-12387).



**Table of Contents**

<b>Exhibit Number</b>	<b>Description</b>
+10.26	Form of Restricted Stock Award Agreement for employees under the 2002 Long-Term Incentive Plan, as amended (three year cliff vesting) (incorporated herein by reference from Exhibit 99.4 of the registrant's Current Report on Form 8-K dated January 13, 2005, File No. 1-12387).
+10.27	Form of Restricted Stock Award Agreement for non-employee directors under the 2002 Long-Term Incentive Plan, as amended (incorporated herein by reference from Exhibit 99.5 of the registrant's Current Report on Form 8-K dated January 13, 2005, File No. 1-12387).
+10.28	Form of Restricted Stock Award Agreement for employees under the 2002 Long-Term Incentive Plan, as amended (vesting 1/3 annually) (incorporated herein by reference from Exhibit 99.1 of the registrant's Current Report on Form 8-K dated January 17, 2005, File No. 1-12387).
+10.29	Form of Stock Option Agreement for employees under the 2002 Long-Term Incentive Plan, as amended (providing for a seven year option term) (incorporated herein by reference from Exhibit 99.2 of the registrant's Current Report on Form 8-K dated January 17, 2005, File No. 1-12387).
+10.30	Form of Stock Option Agreement for non-employee directors under the 2002 Long-Term Incentive Plan, as amended (providing for a seven year option term) (incorporated herein by reference from Exhibit 99.3 of the registrant's Current Report on Form 8-K dated January 17, 2005, File No. 1-12387).
+10.31	Form of Performance Share Agreement for non-employee directors under the 2002 Long-Term Incentive Plan, as amended (incorporated herein by reference from Exhibit 10.37 to the registrant's Annual Report on Form 10-K for the year ended December 31, 2004, file No. 1-12387).
+10.32	Intentionally omitted.
+10.33	Intentionally omitted.
+10.34	Amendment No. 1 to the Key Executive Pension Plan (incorporated herein by reference from Exhibit 10.39 to the registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2005, File No. 1-12387).
+10.35	Amendment No. 1 to the Supplemental Executive Retirement Plan (incorporated herein by reference from Exhibit 10.40 to the registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2005, File No. 1-12387).
+10.36	Second Amendment to the Key Executive Pension Plan (incorporated herein by reference from Exhibit 10.41 to the registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2005, File No. 1-12387).
+10.37	Amendment No. 2 to the Deferred Compensation Plan (incorporated herein by reference from Exhibit 10.42 to the registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2005, File No. 1-12387).
+10.38	Supplemental Retirement Plan (incorporated herein by reference from Exhibit 10.43 to the registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2005, File No. 1-12387).
+10.45	Supplemental Pension Plan for Management (incorporated herein by reference from Exhibit 10.45 to the registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2005, File No. 1-12387).
+10.46	Intentionally omitted.
+10.47	Amended and Restated Value Added ( TAVA ) Incentive Compensation Plan, effective January 1, 2006 (incorporated herein by reference from Exhibit 10.47 to the registrant's Annual Report on Form 10-K for the year ended December 31, 2005, file No. 1-12387).
+10.48	Form of Restricted Stock Award Agreement for non-employee directors under the 2002 Long-Term Incentive Plan, as amended (providing for one year cliff vesting) (incorporated herein by reference from Exhibit 10.48 to the registrant's Annual Report on Form 10-K for the year ended

Edgar Filing: TENNECO INC - Form 10-K

- December 31, 2005, file No. 1-12387).
- +10.49 Tenneco Inc. 2006 Long-Term Incentive Plan (incorporated by reference to Exhibit 99.1 to the registrant's Current Report on Form 8-K, dated May 9, 2006).
  - +10.50 Form of Restricted Stock Award Agreement for non-employee directors under the Tenneco Inc. 2006 Long-Term Incentive Plan (incorporated by reference to Exhibit 99.2 to the registrant's Current Report on Form 8-K, dated May 9, 2006).
  - +10.51 Form of Stock Option Agreement for employees under the Tenneco Inc. 2006 Long-Term Incentive Plan (incorporated by reference to Exhibit 99.3 to the registrant's Current Report on Form 8-K, dated May 9, 2006).

**Table of Contents**

<b>Exhibit Number</b>	<b>Description</b>
+10.52	Form of Restricted Stock Award Agreement for employees under the Tenneco Inc. 2006 Long-Term Incentive Plan (incorporated by reference to Exhibit 99.4 to the registrant's Current Report on Form 8-K, dated May 9, 2006).
+10.53	Form of First Amendment to the Tenneco Inc. Supplemental Pension Plan for Management (incorporated herein by reference from Exhibit 10.56 to the registrant's Annual Report on Form 10-K for the year ended December 31, 2006. File No. 1-12387).
+10.54	Form of First Amendment to the Tenneco Inc. Supplemental Retirement Plan (incorporated herein by reference from Exhibit 10.57 to the registrant's Annual Report on Form 10-K for the year ended December 31, 2006. File No. 1-12387).
+10.55	Letter Agreement dated January 5, 2007 between the registrant and Hari N. Nair (incorporated herein by reference from Exhibit 10.60 to the registrant's Annual Report on Form 10-K for the year ended December 31, 2006. File No. 1-12387).
+10.56	Letter Agreement between Tenneco Inc. and Gregg Sherrill (incorporated herein by reference from Exhibit 99.2 of the registrant's Current Report on Form 8-K dated as of January 5, 2007, File No. 1-12387).
+10.57	Letter Agreement between Tenneco Inc. and Gregg Sherrill, dated as of January 15, 2007 (incorporated herein by reference from Exhibit 99.1 of the registrant's Current Report on Form 8-K dated as of January 15, 2007, File No. 1-12387).
+10.58	Form of Restricted Stock Agreement between Tenneco Inc. and Gregg M. Sherrill (incorporated by reference to Exhibit 10.63 to the registrant's Annual Report on Form 10-K for the year ended December 31, 2006, File No. 1-12387).
+10.59	Form of Long-Term Performance Unit Award Under the 2006 Long-Term Incentive Plan (stub period award for 2007) (incorporated herein by reference from Exhibit 10.64 to the registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2007, File No. 1-12387).
+10.60	Form of Long-Term Performance Unit Award Under the 2006 Long-Term Incentive Plan (three-year award for 2007-2009 period) (incorporated herein by reference from Exhibit 10.65 to the registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2007, File No. 1-12387).
*+10.61	Tenneco Inc. Change in Control Severance Benefit Plan for Key Executives, as Amended and Restated effective December 12, 2007.
+10.62	Form of Long-Term Performance Unit Award Under the 2006 Long-Term Incentive Plan (stub period award for 2008) (incorporated herein by reference from Exhibit 10.67 to the registrant's Annual Report on Form 10-K for the year ended December 31, 2007, File No. 1-12387).
+10.63	Form of Long-Term Performance Unit Award Under the 2006 Long-Term Incentive Plan (three-year award for periods commencing with 2008) (incorporated herein by reference from Exhibit 10.68 to the registrant's Annual Report on Form 10-K for the year ended December 31, 2007, File No. 1-12387).
+10.64	Letter Agreement dated January 5, 2007 between the registrant and Timothy E. Jackson (incorporated herein by reference from Exhibit 10.69 to the registrant's Annual Report on Form 10-K for the year ended December 31, 2007, File No. 1-12387).
*+10.65	Excess Benefit Plan, including Supplements for Gregg M. Sherrill and Kenneth R. Trammell.
*+10.66	Amendment No. 2 to Change in Control Severance Benefit Plan for Key Executives.
*+10.67	Incentive Deferral Plan, as Amended and Restated Effective as of January 1, 2008.
*+10.68	Code Section 409A Amendment to 2002 Long-Term Incentive Plan.
*+10.69	Code Section 409A Amendment to 2006 Long-Term Incentive Plan.

Edgar Filing: TENNECO INC - Form 10-K

- \*+10.70 Code Section 409A to Excess Benefit Plan.
- \*+10.71 Code Section 409A Amendment to Supplemental Retirement Plan.
- \*+10.72 Code Section 409A Amendment to Supplemental Pension Plan for Management.
- \*+10.73 Code Section 409A Amendment to Amended and Restated Value Added ( TAVA ) Incentive Compensation Plan.
- \*+10.74 Code Section 409A Amendment to Letter Agreement between the registrant and Gregg M. Sherrill.
- \*+10.75 Code Section 409A Amendment to Letter Agreement between the registrant and Hari N. Nair.
- \*+10.76 Code Section 409A Amendment to Letter Agreement between the registrant and Timothy E. Jackson.

**Table of Contents**

<b>Exhibit Number</b>	<b>Description</b>
*10.77	Second Amended and Restated Receivables Purchase Agreement, dated as of May 4, 2005, among the registrant, as Servicer, Tenneco Automotive RSA Company, as Seller, Jupiter Securitization Corporation and Liberty Street Funding Corp., as Conduits The Bank of Nova Scotia, JP Morgan Chase Bank, N.A. and the Committed Purchasers from time to time party thereto, and Amendments 1 through 10 thereto.
11	None.
*12	Computation of Ratio of Earnings to Fixed Charges.
13	None.
14	Tenneco Inc. Code of Ethical Conduct for Financial Managers (incorporated herein by reference from Exhibit 99.3 to the registrant's Annual Report on Form 10-K for the year ended December 31, 2002, File No. 1-12387).
16	None.
18	None.
*21	List of Subsidiaries of Tenneco Inc.
22	None.
*23	Consent of Independent Registered Public Accounting Firm.
*24	Powers of Attorney.
*31.1	Certification of Gregg M. Sherrill under Section 302 of the Sarbanes-Oxley Act of 2002.
*31.2	Certification of Kenneth R. Trammell under Section 302 of the Sarbanes-Oxley Act of 2002.
*32.1	Certification of Gregg M. Sherrill and Kenneth R. Trammell under Section 906 of the Sarbanes-Oxley Act of 2002.
33	None.
34	None.
35	None.
99	None.
100	None.

\* Filed herewith.

+ Indicates a management contract or compensatory plan or arrangement.

**Table of Contents**

**SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

TENNECO INC.

By \*  
 Gregg M. Sherrill  
 Chairman and Chief Executive Officer

Date: February 27, 2009

Pursuant to the requirements of the Securities Exchange Act of 1934 this report has been signed by the following persons in the capacities indicated on February 27, 2009.

<b>Signature</b>	<b>Title</b>
<p style="text-align: center;">*</p> <p style="text-align: center;">Gregg M. Sherrill</p>	<p style="text-align: center;">Chairman, President and Chief Executive Officer and Director (principal executive officer)</p>
<p>/s/ Kenneth R. Trammell</p> <p style="text-align: center;">Kenneth R. Trammell</p>	<p style="text-align: center;">Executive Vice President and Chief Financial Officer (principal financial officer)</p>
<p style="text-align: center;">*</p> <p style="text-align: center;">Paul D. Novas</p>	<p style="text-align: center;">Vice President and Controller (principal accounting officer)</p>
<p style="text-align: center;">*</p> <p style="text-align: center;">Charles W. Cramb</p>	<p style="text-align: center;">Director</p>
<p style="text-align: center;">*</p> <p style="text-align: center;">Dennis J. Letham</p>	<p style="text-align: center;">Director</p>
<p style="text-align: center;">*</p> <p style="text-align: center;">Frank E. Macher</p>	<p style="text-align: center;">Director</p>
<p style="text-align: center;">*</p> <p style="text-align: center;">Roger B. Porter</p>	<p style="text-align: center;">Director</p>
<p style="text-align: center;">*</p>	<p style="text-align: center;">Director</p>

David B. Price, Jr.

\*

Director

Paul T. Stecko

\*

Director

Mitsunobi Takeuchi

\*

Director

Jane L. Warner

\*By:

/s/ Kenneth R. Trammell

Kenneth R. Trammell  
Attorney in fact