FORD MOTOR CO
Form 10-K
February 09, 2017

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

FORM 10-K

(Mark One)

R Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the fiscal year ended December 31, 2016

or

o Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the transition period from __________ to __________

Commission file number 1-3950

Ford Motor Company
(Exact name of Registrant as specified in its charter)

Delaware	38-0549190
(State of incorporation)	(I.R.S. Employer Identification No.)
One American Road, Dearborn, Michigan	48126
(Address of principal executive offices)	(Zip Code)

313-322-3000
(Registrant's telephone number, including area code)

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

Title of each class	Name of each exchange on which registered*
Common Stock, par value $.01 per share	New York Stock Exchange

____
* In addition, shares of Common Stock of Ford are listed on certain stock exchanges in Europe.

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

Indicate by check mark if the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. R

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 definitions of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act. Large accelerated filer R Accelerated filer Non-accelerated filer Smaller reporting company

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

As of June 30, 2016, Ford had outstanding 3,902,375,117 shares of Common Stock and 70,852,076 shares of Class B Stock. Based on the New York Stock Exchange Composite Transaction closing price of the Common Stock on that date ($12.57 per share), the aggregate market value of such Common Stock was $49,052,855,221. Although there is no quoted market for our Class B Stock, shares of Class B Stock may be converted at any time into an equal number of shares of Common Stock for the purpose of effecting the sale or other disposition of such shares of Common Stock. The shares of Common Stock and Class B Stock outstanding at June 30, 2016 included shares owned by persons who may be deemed to be "affiliates" of Ford. We do not believe, however, that any such person should be considered to be an affiliate. For information concerning ownership of outstanding Common Stock and Class B Stock, see the Proxy Statement for Ford's Annual Meeting of Stockholders currently scheduled to be held on May 11, 2017 (our "Proxy Statement"), which is incorporated by reference under various Items of this Report as indicated below.

As of January 31, 2017, Ford had outstanding 3,903,445,093 shares of Common Stock and 70,852,076 shares of Class B Stock. Based on the New York Stock Exchange Composite Transaction closing price of the Common Stock on that date ($12.36 per share), the aggregate market value of such Common Stock was $48,246,581,349.

DOCUMENTS INCORPORATED BY REFERENCE

Document	Where Incorporated
Proxy Statement*	Part III (Items 10, 11, 12, 13, and 14)

* As stated under various Items of this Report, only certain specified portions of such document are incorporated by reference in this Report.

Exhibit Index begins on page
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FORD MOTOR COMPANY
ANNUAL REPORT ON FORM 10-K
For the Year Ended December 31, 2016

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PART I.
ITEM 1. Business.

Ford Motor Company was incorporated in Delaware in 1919. We acquired the business of a Michigan company, also known as Ford Motor Company, which had been incorporated in 1903 to produce and sell automobiles designed and engineered by Henry Ford. We are a global automotive and mobility company based in Dearborn, Michigan. With about 201,000 employees and 62 plants worldwide, our core business includes designing, manufacturing, marketing, and servicing a full line of Ford cars, trucks, and SUVs, as well as Lincoln luxury vehicles. To expand our business model, we are aggressively pursuing emerging opportunities with investments in electrification, autonomy, and mobility. We provide financial services through Ford Motor Credit Company LLC ("Ford Credit").

In addition to the information about Ford and our subsidiaries contained in this Annual Report on Form 10-K for the year ended December 31, 2016 ("2016 Form 10-K Report" or "Report"), extensive information about our Company can be found at http://corporate.ford.com, including information about our management team, our brands and products, and our corporate governance principles.

The corporate governance information on our website includes our Corporate Governance Principles, Code of Ethics for Senior Financial Personnel, Code of Ethics for the Board of Directors, Code of Corporate Conduct for all employees, and the Charters for each of the Committees of our Board of Directors. In addition, any amendments to our Code of Ethics or waivers granted to our directors and executive officers will be posted on our corporate website. All of these documents may be accessed by going to our corporate website, or may be obtained free of charge by writing to our Shareholder Relations Department, Ford Motor Company, One American Road, P.O. Box 1899, Dearborn, Michigan 48126-1899.

Our recent periodic reports filed with the Securities and Exchange Commission ("SEC") pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, are available free of charge at http://shareholder.ford.com. This includes recent Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K, as well as any amendments to those Reports. Recent Section 16 filings made with the SEC by the Company or any of our executive officers or directors with respect to our Common Stock also are made available free of charge through our website. We post each of these documents on our website as soon as reasonably practicable after it is electronically filed with the SEC. Our reports filed with the SEC also may be found on the SEC's website at www.sec.gov.

The foregoing information regarding our website and its content is for convenience only and not deemed to be incorporated by reference into this Report nor filed with the SEC.

Item 1. Business (Continued)

OVERVIEW

Segments. We have four operating segments that represent the primary businesses reported in our consolidated financial statements: Automotive, Financial Services, Ford Smart Mobility LLC, and Central Treasury Operations.

Automotive Segment. Our Automotive segment primarily includes the sale of Ford and Lincoln brand vehicles, service parts, and accessories worldwide, together with the associated costs to develop, manufacture, distribute, and service the vehicles, parts, and accessories. The segment includes five regional business units: North America, South America, Europe, Middle East & Africa, and Asia Pacific.

Financial Services Segment. The Financial Services segment primarily includes our vehicle-related financing and leasing activities at Ford Motor Credit Company LLC ("Ford Credit").

All Other. Ford Smart Mobility LLC and Central Treasury Operations are combined in All Other. See Note 4 of the Notes to the Financial Statements for more information regarding All Other.

AUTOMOTIVE SEGMENT

General

Our vehicle brands are Ford and Lincoln. In 2016, we sold approximately 6,651,000 vehicles at wholesale throughout the world. See "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" ("Item 7") for discussion of our calculation of wholesale unit volumes.

Substantially all of our vehicles, parts, and accessories are sold through distributors and dealers (collectively, "dealerships"), the substantial majority of which are independently owned. At December 31, 2016, the approximate number of dealerships worldwide distributing our vehicle brands was as follows:

Brand	Number of Dealerships at December 31, 2016
Ford	10,608
Ford-Lincoln (combined)	915
Lincoln	214
Total	11,737

We do not depend on any single customer or a few customers to the extent that the loss of such customers would have a material adverse effect on our business.

In addition to the products we sell to our dealerships for retail sale, we also sell vehicles to our dealerships for sale to fleet customers, including commercial fleet customers, daily rental car companies, and governments. We also sell parts and accessories, primarily to our dealerships (which in turn sell these products to retail customers) and to authorized parts distributors (which in turn primarily sell these products to retailers). We also offer extended service contracts.

The worldwide automotive industry is affected significantly by general economic conditions over which we have little control. Vehicles are durable goods, and consumers have latitude in determining whether and when to replace an existing vehicle. The decision whether to purchase a vehicle may be affected significantly by slowing economic growth, geopolitical events, and other factors (including the cost of purchasing and operating cars and trucks and the availability and cost of financing and fuel). As we have seen in the United States and Europe, in particular, the number of cars and trucks sold may vary substantially from year to year. Further, the automotive industry is a highly competitive business that has a wide and growing variety of product offerings from a growing number of manufacturers.

Our wholesale unit volumes vary with the level of total industry demand and our share of that industry demand. Our wholesale unit volumes also are influenced by the level of dealer inventory. Our share is influenced by how our products are perceived in comparison to those offered by other manufacturers based on many factors, including price, quality, styling, reliability, safety, fuel efficiency, functionality, and reputation. Our share also is affected by the timing and frequency of new model introductions. Our ability to satisfy changing consumer preferences with respect to type or size of vehicle, as well as design and performance characteristics, affects our sales and earnings significantly.

Item 1. Business (Continued)

As with other manufacturers, the profitability of our business is affected by many factors, including:

- Wholesale unit volumes
- Margin of profit on each vehicle sold - which in turn is affected by many factors, such as:
  - Market factors - volume and mix of vehicles and options sold, and net pricing (reflecting, among other factors, incentive programs)
  - Costs of components and raw materials necessary for production of vehicles
  - Costs for customer warranty claims and additional service actions
  - Costs for safety, emissions, and fuel economy technology and equipment
- A high proportion of relatively fixed structural costs, so that small changes in wholesale unit volumes can significantly affect overall profitability

Our industry has a very competitive pricing environment, driven in part by industry excess capacity, which is concentrated in Europe and Asia but affects other markets because much of this capacity can be redirected to other markets. The decline in the value of the yen during the past four years also has contributed significantly to competitive pressures in many of our markets. For the past several decades, manufacturers typically have given price discounts and other marketing incentives to maintain market share and production levels. A discussion of our strategies to compete in this pricing environment is set forth in the "Overview" section in Item 7.

Competitive Position. The worldwide automotive industry consists of many producers, with no single dominant producer. Certain manufacturers, however, account for the major percentage of total sales within particular countries, especially their countries of origin. Key competitors with global presence include Fiat Chrysler Automobiles, General Motors Company, Honda Motor Company, Hyundai-Kia Automotive Group, PSA Peugeot Citroen, Renault-Nissan B.V., Suzuki Motor Corporation, Toyota Motor Corporation, and Volkswagen AG Group.

Seasonality. We generally record the sale of a vehicle (and recognize revenue) when it is produced and shipped or delivered to our customer (i.e., the dealership). See the "Overview" section in Item 7 for additional discussion of revenue recognition practices.

We manage our vehicle production schedule based on a number of factors, including retail sales (i.e., units sold by our dealerships to their customers at retail) and dealer stock levels (i.e., the number of units held in inventory by our dealerships for sale to their customers). Historically, we have experienced some seasonal fluctuation in the business, with production in many markets tending to be higher in the first half of the year to meet demand in the spring and summer (typically the strongest sales months of the year).

Backlog Orders. We generally produce and ship our products on average within approximately 20 days after an order is deemed to become firm. Therefore, no significant amount of backlog orders accumulates during any period.

Raw Materials. We purchase a wide variety of raw materials from numerous suppliers around the world for use in production of our vehicles. These materials include base metals (e.g., steel, iron castings, and aluminum), precious metals (e.g., palladium), energy (e.g., natural gas), and plastics/resins (e.g., polypropylene). We believe we have adequate supplies or sources of availability of raw materials necessary to meet our needs. There always are risks and uncertainties with respect to the supply of raw materials, however, which could impact availability in sufficient quantities to meet our needs. See the "Overview" section of Item 7 for a discussion of commodity and energy price trends, and "Item 7A. Quantitative and Qualitative Disclosures about Market Risk" ("Item 7A") for a discussion of commodity price risks.

Intellectual Property. We own or hold licenses to use numerous patents, copyrights, and trademarks on a global basis. Our policy is to protect our competitive position by, among other methods, filing U.S. and international patent applications to protect technology and improvements that we consider important to the development of our business. We have generated a large number of patents, and expect this portfolio to continue to grow as we actively pursue additional technological innovation. We have approximately 48,000 active patents and pending patent applications globally, with an average age for patents in our active patent portfolio of just over five years. In addition to this intellectual property, we also rely on our proprietary knowledge and ongoing technological innovation to develop and maintain our competitive position. Although we believe these patents, patent applications, and know-how, in the aggregate, are important to the conduct of our business, and we obtain licenses to use certain intellectual property owned by others, none is individually considered material to our business. We also own numerous trademarks and service marks that contribute to the identity and recognition of our Company and its products and services globally. Certain of these marks are integral to the conduct of our business, a loss of any of which could have a material adverse effect on our business.

Item 1. Business (Continued)

Warranty Coverage, Field Service Actions, and Customer Satisfaction Actions. We provide warranties on vehicles we sell. Warranties are offered for specific periods of time and/or mileage, and vary depending upon the type of product and the geographic location of its sale. Pursuant to these warranties, we will repair, replace, or adjust all parts on a vehicle that are defective in factory-supplied materials or workmanship during the specified warranty period. In addition to the costs associated with this warranty coverage provided on our vehicles, we also incur costs as a result of field service actions (i.e., safety recalls, emission recalls, and other product campaigns), and for customer satisfaction actions.

For additional information regarding warranty and related costs, see "Critical Accounting Estimates" in Item 7 and Note 24 of the Notes to the Financial Statements.

Industry Volume, Market Share, and Wholesales

Our industry volume, market share, and wholesale unit volume in each region and in certain key markets within each region during the past three years were as follows:

	Industry Volume (a)			Market Share (b)			Wholesales (c)		
	(in millions of units)			(as a percentage)			(in thousands of units)		
	2014	2015	2016	2014	2015	2016	2014	2015	2016
United States	16.8	17.8	17.9	14.7%	14.7%	14.6%	2,457	2,677	2,588
Canada	1.9	1.9	2.0	15.5	14.4	15.4	288	285	313
Mexico	1.2	1.4	1.6	6.9	6.4	6.2	77	93	103
North America	20.2	21.5	21.8	14.2	14.0	13.9	2,842	3,073	3,019
Brazil	3.5	2.6	2.1	9.4 %	10.4%	9.2 %	320	250	182
Argentina	0.7	0.6	0.7	14.1	14.9	13.6	94	94	101
South America	5.3	4.2	3.7	8.9	9.6	8.8	463	381	325
United Kingdom	2.8	3.1	3.1	14.4%	14.3%	14.0%	425	447	428
Germany	3.4	3.5	3.7	7.1	7.3	7.6	237	261	283
Russia	2.5	1.6	1.5	2.6	2.4	2.9	57	38	45
Turkey	0.8	1.0	1.0	11.7	12.6	11.4	91	128	116
Europe	18.6	19.2	20.1	7.2	7.7	7.7	1,387	1,530	1,539
Middle East & Africa	4.3	4.3	3.6	4.6 %	4.4 %	4.5 %	192	187	161
China	24.0	23.5	26.4	4.5 %	4.8 %	4.8 %	1,116	1,160	1,267
Australia	1.1	1.2	1.2	7.2	6.1	6.9	80	71	82
India	3.2	3.5	3.7	2.4	2.1	2.4	77	78	86
ASEAN (d)	3.2	3.1	3.1	3.1	3.3	3.7	94	94	115
Asia Pacific (e)	39.7	39.1	42.1	3.5	3.6	3.8	1,439	1,464	1,607
Global	88.1	88.2	91.4	7.1 %	7.4 %	7.3 %	N/A	N/A	N/A
Total Company	N/A	N/A	N/A	N/A	N/A	N/A	6,323	6,635	6,651

(a) Industry volume is an internal estimate based on publicly-available data collected from various government, private, and public sources around the globe and is based, in part, on estimated vehicle registrations; includes medium and heavy trucks.

(b) Market share represents reported retail sales of our brands as a percent of total industry volume in the relevant market or region. Market share is based, in part, on estimated vehicle registrations; includes medium and heavy trucks.

(c) Wholesale unit volume includes sales of medium and heavy trucks. Wholesale unit volume includes all Ford and Lincoln badged units (whether produced by Ford or by an unconsolidated affiliate) that are sold to dealerships, units manufactured by Ford that are sold to other manufacturers, units distributed for other manufacturers, and local brand units produced by our unconsolidated Chinese joint venture Jiangling Motors Corporation, Ltd. ("JMC") that are sold to dealerships. Vehicles sold to daily rental car companies that are subject to a guaranteed repurchase option (i.e., rental repurchase), as well as other sales of finished vehicles for which the recognition of revenue is deferred (e.g., consignments), also are included in wholesale unit volume. Revenue from certain vehicles in wholesale unit volume (specifically, Ford badged vehicles produced and distributed by our unconsolidated affiliates, as well as JMC brand vehicles) are not included in our revenue.

(d) ASEAN includes Indonesia, Philippines, Thailand, Vietnam, and Malaysia.

(e) Asia Pacific market share includes Ford brand and JMC brand vehicles produced and sold by our unconsolidated affiliates.

Item 1. Business (Continued)

FINANCIAL SERVICES SEGMENT

Ford Motor Credit Company LLC

Our wholly-owned subsidiary Ford Credit offers a wide variety of automotive financing products to and through automotive dealers throughout the world. The predominant share of Ford Credit's business consists of financing our vehicles and supporting our dealers. Ford Credit earns its revenue primarily from payments made under retail installment sale and lease contracts that it originates and purchases; interest rate supplements and other support payments from us and our subsidiaries; and payments made under dealer financing programs.

As a result of these financing activities, Ford Credit has a large portfolio of finance receivables and operating leases which it classifies into two portfolios— "consumer" and "non-consumer." Finance receivables and operating leases in the consumer portfolio include products offered to individuals and businesses that finance the acquisition of our vehicles from dealers for personal and commercial use. Retail financing includes retail installment sale contracts for new and used vehicles and direct financing leases for new vehicles to retail and commercial customers including leasing companies, government entities, daily rental companies, and fleet customers. Finance receivables in the non-consumer portfolio include products offered to automotive dealers. Ford Credit makes wholesale loans to dealers to finance the purchase of vehicle inventory (i.e., floorplan financing), as well as loans to dealers to finance working capital and improvements to dealership facilities, finance the purchase of dealership real estate, and finance other dealer vehicle programs. Ford Credit also purchases receivables generated by us and our subsidiaries, primarily related to the sale of parts and accessories to dealers, Ford-related loans, and certain used vehicles from daily rental fleet companies.

Ford Credit does business in the United States and Canada through business centers. Outside of the United States, Europe is Ford Credit's largest operation. Ford Credit's European operations are managed through its United Kingdom-based subsidiary, FCE Bank plc ("FCE"). Within Europe, FCE's largest markets are the United Kingdom and Germany, representing 65% of FCE's finance receivables and operating leases at year-end 2016.

The following table shows Ford Credit's financing shares of new Ford and Lincoln vehicle retail sales in the United States and new Ford vehicles sold in Europe, as well as its wholesale financing shares of new Ford and Lincoln vehicles acquired by dealers in the United States (excluding fleet) and new Ford vehicles acquired by dealers in Europe:

	Years Ended December 31,		
	2014	2015	2016
United States - Financing Share			
Retail installment and lease share of Ford retail sales	63%	65%	56%
Wholesale	77	76	76
Europe - Financing Share			
Retail installment and lease share of total Ford sales	36%	37%	37%
Wholesale	98	98	98

See Item 7 and Notes 6, 7, and 8 of the Notes to the Financial Statements for a detailed discussion of Ford Credit's receivables, credit losses, allowance for credit losses, loss-to-receivables ratios, funding sources, and funding strategies. See Item 7A for discussion of how Ford Credit manages its financial market risks.

We routinely sponsor special retail and lease incentives to dealers' customers who choose to finance or lease our vehicles from Ford Credit. In order to compensate Ford Credit for the lower interest or lease payments offered to the retail customer, we pay the value of the incentive directly to Ford Credit when it originates the retail finance or lease contract. These programs increase Ford Credit's financing volume and share. See Note 2 of the Notes to the Financial Statements for information about our accounting for these programs.

We have an Amended and Restated Relationship Agreement with Ford Credit, pursuant to which, if Ford Credit's managed leverage for a calendar quarter were to be higher than 11.5:1 (as reported in its most recent periodic report), Ford Credit could require us to make or cause to be made a capital contribution to it in an amount sufficient to have caused such managed leverage to have been 11.5:1. No capital contributions have been made pursuant to this agreement. The agreement also allocates to Ford Credit $3 billion of commitments under our corporate credit facility. In a separate agreement with FCE, Ford Credit also has agreed to maintain FCE's net worth in excess of $500 million; no payments have been made pursuant to that agreement.

GOVERNMENTAL STANDARDS

Many governmental standards and regulations relating to safety, fuel economy, emissions control, noise control, vehicle recycling, substances of concern, vehicle damage, and theft prevention are applicable to new motor vehicles, engines, and equipment manufactured for sale in the United States, Europe, and elsewhere. In addition, manufacturing and other automotive assembly facilities in the United States, Europe, and elsewhere are subject to stringent standards regulating air emissions, water discharges, and the handling and disposal of hazardous substances. The most significant of the standards and regulations affecting us are discussed below:

Vehicle Emissions Control

U.S. Requirements – Federal and California Emission Standards. The federal Clean Air Act imposes stringent limits on the amount of regulated pollutants that lawfully may be emitted by new vehicles and engines produced for sale in the United States. In 2014, the U.S. Environmental Protection Agency ("EPA") finalized new "Tier 3" regulations that phase in increasingly stringent motor vehicle emission standards beginning with the 2017 model year. Pursuant to the Clean Air Act, California may establish its own vehicle emission standards, which can then be adopted by other states. The California Air Resources Board ("CARB") has adopted "LEV III" standards, which took effect with the 2015 model year and impose increasingly stringent tailpipe and evaporative emissions requirements for light and medium duty vehicles. Thirteen states, primarily located in the Northeast and Northwest, have adopted the LEV III standards. Compliance with both the Tier 3 and LEV III standards could be challenging.

Both federal and California regulations require motor vehicles to be equipped with on-board diagnostic ("OBD") systems that monitor emission-related systems and components. As OBD requirements become more complex and challenging over time, they could lead to increased vehicle recalls and warranty costs. Compliance with automobile emission standards depends in part on the widespread availability of high-quality and consistent automotive fuels that the vehicles were designed to use. Fuel variables that can affect vehicle emissions include ethanol content, octane ratings, and the use of metallic-based fuel additives, among other things. There are various ongoing regulatory and judicial proceedings related to fuel quality at the national and state level, and the outcome of these proceedings could affect vehicle manufacturers' warranty costs as well as their ability to comply with vehicle emission standards.

The California vehicle emissions program also includes requirements for manufacturers to produce and deliver for sale zero-emission vehicles ("ZEVs"). The current ZEV regulations mandate substantial annual increases in the production and sale of battery-electric, fuel cell, and plug-in hybrid vehicles, particularly for the 2018–2025 model years. By the 2025 model year, approximately 15% of a manufacturer's total California sales volume will need to be made up of such vehicles. Compliance with ZEV rules could have a substantial adverse effect on our sales volumes and profits. We are concerned that the market and infrastructure in California may not support the large volume of advanced-technology vehicles that manufacturers will be required to produce, especially if gasoline prices remain relatively low. We also are concerned about enforcement of the ZEV mandate in other states that have adopted California's ZEV program, where the existence of a market for such vehicles is even less certain. CARB conducts periodic reviews of its upcoming ZEV requirements, taking into account factors such as technology developments and market acceptance. Ford and the industry will be active participants in such reviews, with the goal of ensuring that ZEV requirements are feasible and not excessively burdensome.

European Requirements. European Union ("EU") directives and related legislation limit the amount of regulated pollutants that may be emitted by new motor vehicles and engines sold in the EU. Stringent new Stage 6 emission standards took effect for vehicle registrations starting in September 2014, with a second phase beginning in September 2017. These standards will drive the need for additional diesel exhaust after-treatment, which will add cost and potentially impact the diesel CO_2 advantage. The European Commission has also proposed new Real Driving

Emission (“RDE”) rules, which will require manufacturers to conduct on-road emission tests using portable emission analyzers. These on-road emission tests will complement the laboratory-based tests. During the initial phase, which started in January 2016, the RDE tests are used for monitoring purposes. Beginning in September 2017, manufacturers will have to reduce the divergence between the regulatory limit that is tested in laboratory conditions and the values of RDE tests (“conformity factors”). The additional costs associated with conducting the RDE tests and complying with the conformity factors are expected to be significant. Europe is in process of drafting the RDE in-use surveillance rules with proposals to allow third parties to conduct testing and to define a process to challenge the product compliance with Authorities. On a longer term approach, the WVTA (Whole Vehicle Type Approval) Regulations are being adapted to cover market surveillance, which is further expected to increase testing by Authorities across Europe from 2020+.

Item 1. Business (Continued)

Other National Requirements. Many countries, in an effort to address air quality concerns, are adopting previous versions of European or United Nations Economic Commission for Europe (“UN-ECE”) mobile source emission regulations. Some countries have adopted more advanced regulations based on the most recent version of European or U.S. regulations; for example, China adopted emission regulations based on European Stage VI emission standards and U.S. evaporative emissions and on-board diagnostic requirements. Korea and Taiwan have adopted very stringent U.S.-based standards for gasoline vehicles and European-based standards for diesel vehicles. Although these countries have adopted regulations based on UN-ECE or U.S. standards, there may be some unique testing provisions that require emission-control systems to be redesigned for these markets. Canadian criteria emissions regulations are aligned with U.S. Tier 2 requirements. In July 2015, the Canadian federal government amended the On-Road Vehicle and Engine Emission Regulations and the Sulphur in Gasoline Regulations to align Canadian emission standards with the U.S. Tier 3 regulations discussed above.

In October 2016, the Canadian Province of Quebec passed legislation enabling regulation of a ZEV mandate. Regulations are still under development but Quebec has signaled that they plan to follow California and Northeast States’ regulations.

Not all countries have adopted appropriate fuel quality standards to accompany the stringent emission standards adopted. This could lead to compliance problems, particularly if on-board diagnostic or in-use surveillance requirements are implemented.

Brazil and Chile have introduced stringent emission and on-board diagnostic standards based on the European Stage 5 standards for light duty vehicles and Stage V standards for heavy duty vehicles. In Brazil, all light duty vehicles are required to meet U.S.-based Proconve L6 standards and more stringent on-board diagnostic standards for diesel light duty vehicles were introduced in 2017. Argentina is phasing in European Stage 5 standards for all new light duty vehicle registrations by 2017 and European Stage V standards for heavy duty vehicles by 2018.

Global Developments. Since September 2015, the EPA and CARB have pursued enforcement actions against a major competitor in connection with its use of “defeat devices” in hundreds of thousands of light-duty diesel vehicles. These actions have resulted in settlements involving billions of dollars for environmental remediation and civil penalties, as well as indictments of several employees on charges of committing federal crimes. The competitor continues to face various class action suits, as well as numerous claims and investigations by various U.S. states and other nations. Defeat devices are elements of design (typically embedded in software) that improperly cause the emission control system to function less effectively during normal on-road driving than during an official laboratory emissions test, without justification. They are prohibited by law in many jurisdictions, including the United States and Europe. We do not use defeat devices in our vehicles.

The investigations by EPA and CARB of our competitor have led to increased scrutiny of automakers’ emission testing by regulators around the world. EPA began carrying out additional non-standard tests as part of its vehicle certification program, following an announcement in September 2015. The EU accelerated efforts to finalize its RDE testing program as described above. In 2016, several European countries, including France and Germany, conducted non-standard emission tests and published the results. In some cases, this supplemental testing has triggered investigations of other manufacturers for possible defeat devices. Testing is expected to continue on an ongoing basis.

Vehicle Fuel Economy and Greenhouse Gas Standards

U.S. Requirements – Light Duty Vehicles. Federal law requires that light duty vehicles meet minimum corporate average fuel economy (“CAFE”) standards set by the National Highway Traffic Safety Administration (“NHTSA”). Manufacturers are subject to substantial civil penalties if they fail to meet the CAFE standard in any model year, after taking into account all available credits for the preceding three model years and expected credits for the five succeeding model years. The law requires NHTSA to promulgate and enforce separate CAFE standards applicable to each manufacturer's fleet of domestic passenger cars, imported passenger cars, and light duty trucks.

EPA also regulates vehicle greenhouse gas ("GHG") emissions under the Clean Air Act. Because the vast majority of GHGs emitted by a vehicle are the result of fuel combustion, GHG emission standards effectively are fuel economy standards. Thus, it is necessary for NHTSA and EPA to coordinate with each other on their fuel economy and GHG standards, respectively, to avoid potential inconsistencies.

In 2010, EPA and NHTSA jointly promulgated regulations establishing the "One National Program" of CAFE and GHG regulations for light duty vehicles for the 2012-2016 model years. In 2012, EPA and NHTSA jointly promulgated regulations extending the One National Program framework through the 2025 model year. These rules require manufacturers to achieve, across the industry, a light duty fleet average fuel economy of approximately 35.5 mpg by the 2016 model year, 45 mpg by the 2021 model year, and 51.4 mpg by the 2025 model year. Each manufacturer's specific task depends on the mix of vehicles it sells. The rules include the opportunity for manufacturers to earn credits for technologies that achieve real-world CO_2 reductions, and fuel economy improvements that are not captured by the EPA fuel economy test procedures. Manufacturers also can earn credits for GHG reductions not specifically tied to fuel economy, such as improvements in air conditioning systems.

The One National Program standards become increasingly stringent over time, and they will be difficult to meet if fuel prices remain relatively low and market conditions do not drive consumers to purchase electric vehicles and other highly fuel-efficient vehicles in large numbers. We are concerned about the commercial feasibility of meeting future model year GHG and CAFE standards, particularly the 2022-2025 standards, because of the many unknowns regarding technology development, market conditions, and other factors so far into the future.

The One National Program rules provided for a midterm evaluation process under which, by April 2018, EPA and NHTSA would re-evaluate their standards for model years 2022-2025 in order to ensure that those standards are feasible and optimal in light of intervening events. Shortly before President Obama left office in January 2017, EPA announced an accelerated decision to maintain the GHG standards originally set for those model years. NHTSA is continuing to conduct its evaluation with respect to the model year 2022-2025 standards. It remains to be seen whether the EPA determination will be reconsidered under President Trump's administration, and whether the EPA and NHTSA determinations will ultimately be harmonized with each other.

If the agencies seek to impose and enforce fuel economy and GHG standards that are misaligned with market conditions, we likely would be forced to take various actions that could have substantial adverse effects on our sales volume and profits. Such actions likely would include restricting offerings of selected engines and popular options; increasing market support programs for our most fuel-efficient cars and light trucks; and ultimately curtailing the production and sale of certain vehicles such as high-performance cars, utilities, and/or full-size light trucks, in order to maintain compliance.

California has asserted the right to regulate motor vehicle GHG emissions, and other states have asserted the right to adopt the California standards. With the adoption of the federal One National Program standards discussed above, California and the other states have agreed that compliance with the federal program would satisfy compliance with any purported state GHG requirements for the 2012–2025 model years. This avoids a patchwork of potentially conflicting federal and state GHG standards. Should California and other states ever renew their efforts to enforce state-specific motor vehicle GHG rules, this would impose significant costs on automotive manufacturers.

U.S. Requirements – Heavy Duty Vehicles. EPA and NHTSA have jointly promulgated GHG and fuel economy standards on heavy duty vehicles (generally, vehicles over 8,500 pounds gross vehicle weight rating). In our case, the standards primarily affect our heavy duty pickup trucks and vans, plus vocational vehicles such as shuttle buses and delivery trucks. In 2016, EPA and NHTSA finalized GHG and fuel economy standards for these vehicles, covering model years 2019–2027. As the heavy-duty standards increase in stringency, it may become more difficult to comply while continuing to offer a full lineup of heavy duty trucks.

European Requirements. In December 2008, the EU approved regulation of passenger car CO_2 emissions beginning in 2012 that limits the industry fleet average to a maximum of 130 grams per kilometer ("g/km"), using a sliding scale based on vehicle weight. This regulation provides different targets for each manufacturer based on the respective average vehicle weight for its fleet of vehicles. Limited credits are available for CO_2 off-cycle actions ("eco-innovations"), certain alternative fuels, and vehicles with CO_2 emissions below 50 g/km. A penalty system will apply for manufacturers failing to meet targets. Pooling agreements between different manufacturers are possible, although it is not clear that these will be of much practical benefit under the regulations. Starting in 2020, an industry target of 95 g/km has been set, for which 95% of a manufacturer's fleet has to comply; by 2021, 100% of a manufacturer's fleet has to comply. Other non-EU European countries are likely to follow with similar regulations. For example, Switzerland has introduced similar rules, which began phasing-in starting in July 2012 with the same targets (which include a 2020 target of 95 g/km, with conditions still to be defined), although the industry average emission target is significantly higher. We face the risk of advance premium payment requirements if, for example, unexpected market fluctuation within a quarter negatively impact our average fleet performance.

In separate legislation, "complementary measures" have been mandated, including requirements related to fuel economy indicators, and more-efficient low-CO_2 mobile air conditioning systems. The EU Commission, Council and Parliament have approved a target for commercial light duty vehicles to be at an industry average of 175 g/km (with phase-in from 2014–2017), and 147 g/km in 2020. It is likely that other European countries, will implement similar rules but under even more difficult conditions. For instance, Switzerland will implement the same 147 g/km target in 2020 but under more difficult conditions. This regulation also provides different targets for each manufacturer based on its respective average vehicle weight in its fleet of vehicles. The final mass and CO_2 requirements for “multi-stage vehicles” (e.g., our Transit chassis cabs) are fully allocated to the base manufacturer (e.g., Ford) so that the base manufacturer is fully responsible for the CO_2 performance of the final up-fitted vehicles. The EU proposal also includes a penalty system, “super-credits” for vehicles below 50 g/km, and limited credits for CO_2 off-cycle eco-innovations, pooling, etc., similar to the passenger car CO_2 regulation.

The United Nations developed a new technical regulation for passenger car emissions and CO_2. This new world light duty test procedure (“WLTP”) is focused primarily on better aligning laboratory CO_2 and fuel consumption figures with customer-reported figures. The introduction of WLTP in Europe is likely to require updates to CO_2 labeling as early as 2018 and will increase certain consumer label values, thereby impacting taxes in countries with a CO_2 tax scheme. Costs associated with new or incremental testing for WLTP could be significant. The European Commission requires mandatory WLTP testing for regulated emissions and CO_2 starting in September 2017. The European Commission has assured comparable stringency to the existing fleet average rules for each automobile manufacturer if the 2021 fleet average targets are required to be measured on WLTP instead of under the current European New European Driving Cycle (“NEDC”) requirements. The legislative framework and process for the target translation is currently under development. The European Commission confirmed in October 2016 that there would be a delay in the introduction of a timetable for a post-2020 CO_2 proposal. The proposal is now expected to be released during the second half of 2017.

Some European countries have implemented or are considering other initiatives for reducing CO_2 vehicle emissions, including fiscal measures and CO_2 labeling. For example, the United Kingdom, France, Germany, Spain, Portugal, and the Netherlands, among others, have introduced taxation based on CO_2 emissions. The EU CO_2 requirements are likely to trigger further measures. To limit GHG emissions, the EU directive on mobile air conditioning currently requires the replacement of the current refrigerant with a lower “global warming potential” refrigerant for new vehicle types, and for all newly registered vehicles starting in January 2017. A refrigerant change adds considerable costs along the whole manufacturing chain.

Other National Requirements. The Canadian federal government has regulated vehicle GHG emissions under the Canadian Environmental Protection Act, beginning with the 2011 model year. In October 2014, the Canadian federal government published the final changes to the regulation for light duty vehicles, which maintain alignment with U.S. EPA vehicle GHG standards for the 2017–2025 model years. The final regulation for 2014–2018 heavy duty vehicles was published in February 2013. In October 2014, the Canadian federal government published the Notice of Intent to regulate heavy duty vehicles and engines for model year 2019 and beyond, which tracks U.S. EPA standards.

Mexico adopted fuel economy/CO_2 standards, based on the U.S. One National Program framework, that took effect in 2014.

Many Asia Pacific countries (such as Australia, China, India, South Korea, Taiwan, and Vietnam) are developing or enforcing fuel efficiency or labeling targets. For example, South Korea has set fuel efficiency targets for 2020, with incentives for early adoption. China published standards for Stage IV fuel efficiency targets for 2016–2020. The fuel efficiency targets will impact the cost of vehicle technology in the future.

In South America, Brazil introduced a voluntary vehicle energy-efficiency labeling program, indicating fuel consumption rates for all light-duty vehicles. Brazil has required inclusion of emission classification on fuel economy labels since January 2016. Brazil also published a new automotive regime establishing a minimum absolute CAFE value as a function of Fleet Corporate Average Mass for 2017 light duty vehicles with a spark ignition engine in order to qualify for industrialized products tax reduction. Additional tax reductions are available if further fuel efficiency improvements are achieved. A severe penalty system will apply to qualified manufacturers failing to meet fuel efficiency requirements for the 2013–2017 sales period. Brazil reduced import tax on electric and hybrid cars. The tax rate, which was 35%, will vary from zero to 7%, depending on a vehicle’s energy efficiency. Discussion on new fuel efficiency requirements has started. Chile introduced a tax based on urban fuel consumption and NOx emission for light and medium vehicles beginning in late 2014. In general, fuel efficiency targets may impact the cost of technology of our models in the future.

In the Middle East, the Kingdom of Saudi Arabia introduced new light duty vehicle fuel economy standards, which are patterned after the U.S. CAFE standard structure, with fuel economy targets following the design of the U.S. 2012–2016 fuel economy standards. The standards became effective on January 1, 2016 and will be fully phased in by the end of 2017.

Item 1. Business (Continued)

Vehicle Safety

U.S. Requirements. The National Traffic and Motor Vehicle Safety Act of 1966 (the "Safety Act") regulates vehicles and vehicle equipment in two primary ways. First, the Safety Act prohibits the sale in the United States of any new vehicle or equipment that does not conform to applicable vehicle safety standards established by NHTSA. Meeting or exceeding many safety standards is costly, in part because the standards tend to conflict with the need to reduce vehicle weight in order to meet emission and fuel economy standards. Second, the Safety Act requires that defects related to motor vehicle safety be remedied through safety recall campaigns. A manufacturer is obligated to recall vehicles if it determines the vehicles do not comply with a safety standard. Should we or NHTSA determine that either a safety defect or noncompliance issue exists with respect to any of our vehicles, the cost of such recall campaigns could be substantial.

Other National Requirements. The EU and many countries have established vehicle safety standards and regulations, and are likely to adopt additional or more stringent requirements in the future. The European General Safety Regulation introduced United Nations Economic Commission for Europe ("UN-ECE") regulations, which will be required for the European Type Approval process. EU regulators also are focusing on active safety features such as lane departure warning systems, electronic stability control, and automatic brake assist. Globally, governments generally have been adopting UN-ECE based regulations with minor variations to address local concerns. Any difference between North American and UN-ECE based regulations can add complexity and costs to the development of global platform vehicles, and we continue to support efforts to harmonize regulations to reduce vehicle design complexity while providing a common level of safety performance; several recently launched bilateral negotiations on free trade can potentially contribute to this goal. New safety and recall requirements in China, India, and Gulf Cooperation Council countries also may add substantial costs and complexity to our global recall practice. In South America, additional safety requirements are being introduced or proposed in Argentina, Brazil, Chile, Colombia, Ecuador, and Uruguay, influenced by The New Car Assessment Program for Latin America and the Caribbean ("Latin NCAP"), which may be a driver for similar actions in other countries. In Canada, regulatory requirements are currently aligned with U.S. regulations. However, recent amendments to the Canadian Motor Vehicle Safety Act have introduced broad powers to the Minister of Transport to order manufacturers to submit a notice of defect or non-compliance when the Minister considers it would be in the interest of safety.

New Car Assessment Programs. Organizations around the globe rate and compare motor vehicles in New Car Assessment Programs ("NCAPs") to provide consumers with additional information about the safety of new vehicles. NCAPs use crash tests and other evaluations that are different than what is required by applicable regulations, and use stars to rate vehicle safety, with five stars awarded for the highest rating and one for the lowest. Achieving high NCAP ratings can add complexity and cost to vehicles.

EMPLOYMENT DATA

The approximate number of individuals employed by us and entities that we consolidated as of December 31, 2015 and 2016 was as follows (in thousands):

	2015	2016
Automotive		
North America	96	101
South America	15	15
Europe	53	52
Middle East & Africa	3	3
Asia Pacific	25	23

Financial Services		
Ford Credit	7	7
Total	199	201

Substantially all of the hourly employees in our Automotive operations are represented by unions and covered by collective bargaining agreements. In the United States, approximately 99% of these unionized hourly employees in our Automotive segment are represented by the International Union, United Automobile, Aerospace and Agricultural Implement Workers of America ("UAW" or "United Auto Workers"). At December 31, 2016, approximately 57,000 hourly employees in the United States were represented by the UAW, an increase of about 3,000 employees since December 31, 2015. Approximately 1.5% of our U.S. salaried employees are represented by unions. Many non-management salaried employees at our operations outside of the United States also are represented by unions.

In 2016, we entered into collective bargaining agreements (covering wages, benefits and/or other employment provisions) with unions in Argentina, Brazil, Canada, France, Germany, Italy, Mexico, Romania, Russia, South Africa, Taiwan and Thailand.

In 2017, we will negotiate collective bargaining agreements (covering wages, benefits and/or other employment provisions) with unions in Argentina, Australia, Brazil, Britain, France, India, Mexico, Romania, Russia, and Thailand.

ENGINEERING, RESEARCH, AND DEVELOPMENT

We engage in engineering, research, and development primarily to improve the performance (including fuel efficiency), safety, and customer satisfaction of our products, and to develop new products and services (including for emerging opportunities). Engineering, research, and development expenses for 2014, 2015, and 2016 were $6.7 billion, $6.7 billion, and $7.3 billion, respectively.

ITEM 1A. Risk Factors.

We have listed below (not necessarily in order of importance or probability of occurrence) the most significant risk factors applicable to us:

Decline in industry sales volume, particularly in the United States, Europe, or China, due to financial crisis, recession, geopolitical events, or other factors. Because we, like other manufacturers, have a high proportion of relatively fixed structural costs, relatively small changes in industry sales volume can have a substantial effect on our cash flow and profitability. If industry vehicle sales were to decline to levels significantly below our planning assumption, particularly in the United States, Europe, or China, due to financial crisis, recession, geopolitical events, or other factors, the decline could have a substantial adverse effect on our financial condition, results of operations, and cash flow. For discussion of economic trends, see the “Overview” section of Item 7.

Lower-than-anticipated market acceptance of Ford’s new or existing products or services, or failure to achieve expected growth. Although we conduct extensive market research before launching new or refreshed vehicles and introducing new services, many factors both within and outside our control affect the success of new or existing products and services in the marketplace. Offering vehicles and services that customers want and value can mitigate the risks of increasing price competition and declining demand, but products and services that are perceived to be less desirable (whether in terms of price, quality, styling, safety, overall value, fuel efficiency, or other attributes) can exacerbate these risks. With increased consumer interconnectedness through the internet, social media, and other media, mere allegations relating to quality, safety, fuel efficiency, corporate social responsibility, or other key attributes can negatively impact our reputation or market acceptance of our products or services, even where such allegations prove to be inaccurate or unfounded. Further, our ability to successfully grow through investments in the area of emerging opportunities depends on many factors, including advancements in technology, regulatory changes, and other factors that are difficult to predict, that may significantly affect the future of electrification, autonomy, and mobility.

Market shift away from sales of larger, more profitable vehicles beyond Ford’s current planning assumption, particularly in the United States. A shift in consumer preferences away from larger, more profitable vehicles at levels beyond our current planning assumption—whether because of spiking fuel prices, a decline in the construction industry, government actions or incentives, or other reasons—could result in an immediate and substantial adverse effect on our financial condition and results of operations.

Continued or increased price competition resulting from industry excess capacity, currency fluctuations, or other factors. The global automotive industry is intensely competitive, with manufacturing capacity far exceeding current demand. According to the December 2016 report issued by IHS Automotive, the global automotive industry is estimated to have had excess capacity of about 32 million units in 2016. Industry overcapacity has resulted in many manufacturers offering marketing incentives on vehicles in an attempt to maintain and grow market share; these incentives historically have included a combination of subsidized financing or leasing programs, price rebates, and other incentives. As a result, we are not necessarily able to set our prices to offset higher costs of marketing incentives, commodity or other cost increases, or the impact of adverse currency fluctuations, including pricing advantages foreign competitors may have because of their weaker home market currencies. Continuation of or increased excess capacity could have a substantial adverse effect on our financial condition and results of operations.

Item 1A. Risk Factors (Continued)

Fluctuations in foreign currency exchange rates, commodity prices, and interest rates. As a resource-intensive manufacturing operation, we are exposed to a variety of market and asset risks, including the effects of changes in foreign currency exchange rates, commodity prices, and interest rates. We monitor and manage these exposures as an integral part of our overall risk management program, which recognizes the unpredictability of markets and seeks to reduce potentially adverse effects on our business. Nevertheless, changes in currency exchange rates, commodity prices, and interest rates cannot always be predicted or hedged. In addition, because of intense price competition and our high level of fixed costs, we may not be able to address such changes even if foreseeable. As a result, substantial unfavorable changes in foreign currency exchange rates, commodity prices, or interest rates could have a substantial adverse effect on our financial condition and results of operations. See “Overview” to Item 7 and Item 7A for additional discussion of currency, commodity price, and interest rate risks.

Adverse effects resulting from economic, geopolitical, protectionist trade policies, or other events. With the increasing interconnectedness of global economic and financial systems, a financial crisis, natural disaster, geopolitical crisis, or other significant event in one area of the world can have an immediate and material adverse impact on markets around the world. Concerns persist regarding the overall stability of the European Union, given the diverse economic and political circumstances of individual European currency area (“euro area”) countries. These concerns have been exacerbated by Brexit, which, among other things, has resulted in a weaker sterling versus U.S. dollar and euro. We have a sterling revenue exposure and a euro cost exposure; a sustained weakening of sterling against euro may have an adverse effect on our profitability. Further, the United Kingdom may be at risk of losing access to free trade agreements for goods and services with the European Union and other countries, which may result in increased tariffs on U.K. imports and exports that could have an adverse effect on our profitability.

FCE Bank plc (“FCE”), our subsidiary, is a bank authorized by the U.K. government to carry on a range of regulated activities within the United Kingdom and through a branch network in 11 other European countries through a passporting system, which allows it to establish or provide its services in the EU27 without further authorization requirements. If passporting arrangements cease to be effective as a result of Brexit, FCE could be required to reconsider its structure or seek additional authorizations to continue to do business in the EU27, which may be time-consuming and costly.

The economic and policy uncertainty on-going in the euro area highlights potential longer-term risks regarding its sustainability. This uncertainty could cause financial and capital markets within and outside Europe to constrict, thereby negatively impacting our ability to finance our business or, if a country within the euro area were to default on its debt or withdraw from the euro currency, or-—in a more extreme circumstance—the euro currency were to be dissolved entirely, the impact on markets around the world, and on Ford’s global business, could be immediate and significant.

In addition, we have operations in various markets with volatile economic or political environments and are pursuing growth opportunities in a number of newly developed and emerging markets. These investments may expose us to heightened risks of economic, geopolitical, or other events, including governmental takeover (i.e., nationalization) of our manufacturing facilities or intellectual property, restrictive exchange or import controls, disruption of operations as a result of systemic political or economic instability, outbreak of war or expansion of hostilities, and acts of terrorism, each of which could have a substantial adverse effect on our financial condition and results of operations. Further, the U.S. government, other governments, and international organizations could impose additional sanctions that could restrict us from doing business directly or indirectly in or with certain countries or parties, which could include affiliates.

Work stoppages at Ford or supplier facilities or other limitations on production (whether as a result of labor disputes, natural or man-made disasters, tight credit markets or other financial distress, production constraints or difficulties, or other factors). A work stoppage or other limitation on production could occur at Ford or supplier facilities for any number of reasons, including as a result of disputes under existing collective bargaining agreements with labor unions or in connection with negotiation of new collective bargaining agreements, or as a result of supplier financial distress or other production constraints or difficulties, or for other reasons. A work stoppage or other limitations on production at Ford or supplier facilities for any reason (including but not limited to labor disputes, natural or man-made disasters, tight credit markets or other financial distress, or production constraints or difficulties) could have a substantial adverse effect on our financial condition and results of operations.

Item 1A. Risk Factors (Continued)

Single-source supply of components or materials. Many components used in our vehicles are available only from a single supplier and cannot be re-sourced quickly or inexpensively to another supplier (due to long lead times, new contractual commitments that may be required by another supplier before ramping up to provide the components or materials, etc.). In addition to the general risks described above regarding interruption of supplies, which are exacerbated in the case of single-source suppliers, the exclusive supplier of a key component potentially could exert significant bargaining power over price, quality, warranty claims, or other terms relating to a component.

Labor or other constraints on Ford's ability to maintain competitive cost structure. Substantially all of the hourly employees in our Automotive operations in the United States and Canada are represented by unions and covered by collective bargaining agreements. These agreements provide guaranteed wage and benefit levels throughout the contract term and some degree of income security, subject to certain conditions. As a practical matter, these agreements may restrict our ability to close plants and divest businesses. A substantial number of our employees in other regions are represented by unions or government councils, and legislation or custom promoting retention of manufacturing or other employment in the state, country, or region may constrain as a practical matter our ability to sell or close manufacturing or other facilities.

Substantial pension and other postretirement liabilities impairing liquidity or financial condition. We have defined benefit retirement plans in the United States that cover many of our hourly and salaried employees. We also provide pension benefits to non-U.S. employees and retirees, primarily in Europe. In addition, we and certain of our subsidiaries sponsor plans to provide other postretirement benefits ("OPEB") for retired employees (primarily health care and life insurance benefits). See Note 13 of the Notes to the Financial Statements for more information about these plans. These benefit plans impose significant liabilities on us and could require us to make additional cash contributions, which could impair our liquidity. If our cash flows and capital resources were insufficient to meet any pension or OPEB obligations, we could be forced to reduce or delay investments and capital expenditures, suspend dividend payments, seek additional capital, or restructure or refinance our indebtedness.

Worse-than-assumed economic and demographic experience for pension and other postretirement benefit plans (e.g., discount rates or investment returns). The measurement of our obligations, costs, and liabilities associated with benefits pursuant to our pension and other postretirement benefit plans requires that we estimate the present value of projected future payments to all participants. We use many assumptions in calculating these estimates, including assumptions related to discount rates, investment returns on designated plan assets, and demographic experience (e.g., mortality and retirement rates). We generally remeasure these estimates at each year end, and recognize any gains or losses associated with changes to our plan assets and liabilities in the year incurred. To the extent actual results are less favorable than our assumptions, we may recognize a substantial remeasurement loss in our results. For discussion of our assumptions, see "Critical Accounting Estimates" in Item 7 and Note 13 of the Notes to the Financial Statements.

Restriction on use of tax attributes from tax law "ownership change." Section 382 of the U.S. Internal Revenue Code restricts the ability of a corporation that undergoes an ownership change to use its tax attributes, including net operating losses and tax credits ("Tax Attributes"). For these purposes, an ownership change occurs if 5 percent shareholders of an issuer's outstanding common stock, collectively, increase their ownership percentage by more than 50 percentage points over a rolling three-year period. At December 31, 2016, we had Tax Attributes that would offset more than $15 billion of taxable income. In 2015, we renewed for an additional three-year period our tax benefit preservation plan (the "Plan") to reduce the risk of an ownership change under Section 382. Under the Plan, shares held by any person who acquires, without the approval of our Board of Directors, beneficial ownership of 4.99% or more of our outstanding Common Stock could be subject to significant dilution. Our shareholders approved the renewal at our annual meeting in May 2016.

Item 1A. Risk Factors (Continued)

The discovery of defects in vehicles resulting in delays in new model launches, recall campaigns, or increased warranty costs. Government safety standards require manufacturers to remedy defects related to vehicle safety through safety recall campaigns, and a manufacturer is obligated to recall vehicles if it determines that the vehicles do not comply with a safety standard. NHTSA's enforcement strategy has shifted to a significant increase in civil penalties levied and the use of consent orders requiring direct oversight by NHTSA of certain manufacturers' safety processes, a trend that could continue. Should we or government safety regulators determine that a safety or other defect or a noncompliance exists with respect to certain of our vehicles prior to the start of production, the launch of such vehicle could be delayed until such defect is remedied. The costs associated with any protracted delay in new model launches necessary to remedy such defects, or the cost of recall campaigns or warranty costs to remedy such defects in vehicles that have been sold, could be substantial. Such recall and customer satisfaction actions may relate to defective components we receive from suppliers. The cost to complete a recall or customer satisfaction action could be exacerbated to the extent such action relates to a global platform. Furthermore, launch delays or recall actions could adversely affect our reputation or market acceptance of our products as discussed above under "Lower-than-anticipated market acceptance of Ford's new or existing products or services, or failure to achieve expected growth."

Increased safety, emissions, fuel economy, or other regulations resulting in higher costs, cash expenditures, and/or sales restrictions. The worldwide automotive industry is governed by a substantial amount of government regulation, which often differs by state, region, and country. Government regulation has arisen, and proposals for additional regulation are advanced, primarily out of concern for the environment (including concerns about the possibility of global climate change and its impact), vehicle safety, and energy independence. For example, as discussed above under "Item 1. Business - Governmental Standards," in the United States the CAFE standards for light duty vehicles increase sharply to 51.4 mpg by the 2025 model year; EPA's parallel CO_2 emission regulations impose similar standards. California's ZEV rules also mandate steep increases in the sale of electric vehicles and other advanced technology vehicles beginning in the 2018 model year. In addition, many governments regulate local product content and/or impose import requirements as a means of creating jobs, protecting domestic producers, and influencing the balance of payments.

In recent years, we have made significant changes to our product cycle plan to improve the overall fuel economy of vehicles we produce, thereby reducing their GHG emissions. There are limits on our ability to achieve fuel economy improvements over a given time frame, however, primarily relating to the cost and effectiveness of available technologies, consumer acceptance of new technologies and changes in vehicle mix, willingness of consumers to absorb the additional costs of new technologies, the appropriateness (or lack thereof) of certain technologies for use in particular vehicles, the widespread availability (or lack thereof) of supporting infrastructure for new technologies, and the human, engineering, and financial resources necessary to deploy new technologies across a wide range of products and powertrains in a short time. The current fuel economy, CO_2, and ZEV standards will be difficult to meet if fuel prices remain relatively low and market conditions do not drive consumers to purchase electric vehicles and other highly fuel-efficient vehicles in large numbers.

The U.S. government has pursued an enforcement action against a major competitor in connection with its alleged use of "defeat devices" in hundreds of thousands of light duty diesel vehicles, collecting billions of dollars for environmental remediation projects and civil penalties. Several of the competitor's employees have been indicted on charges of committing federal crimes. The competitor also faces various class action suits, as well as numerous claims and investigations by various U.S. states and other nations. The emergence of this issue has led to increased scrutiny of automaker emission testing by regulators around the world, which in turn has triggered investigations of other manufacturers. These events may lead to new regulations, more stringent enforcement programs, requests for field actions, and/or delays in regulatory approvals. The cost to comply with existing government regulations is substantial and additional regulations or changes in consumer preferences that affect vehicle mix could have a substantial adverse impact on our financial condition and results of operations. For more discussion of the impact of such standards on our global business, see the "Governmental Standards" discussion in "Item 1. Business" above. In addition, a number of governments, as well as non-governmental organizations, publicly assess vehicles to their own protocols. The protocols could change aggressively, and any negative perception regarding the performance of our vehicles subjected to such tests could reduce future sales.

Item 1A. Risk Factors (Continued)

Unusual or significant litigation, governmental investigations, or adverse publicity arising out of alleged defects in products, perceived environmental impacts, or otherwise. We spend substantial resources ensuring that we comply with governmental safety regulations, mobile and stationary source emissions regulations, and other standards. Compliance with governmental standards, however, does not necessarily prevent individual or class actions, which can entail significant cost and risk. In certain circumstances, courts may permit tort claims even where our vehicles comply with federal and/or other applicable law. Furthermore, simply responding to actual or threatened litigation or government investigations of our compliance with regulatory standards, whether related to our products or business or commercial relationships, may require significant expenditures of time and other resources. Litigation also is inherently uncertain, and we could experience significant adverse results. In addition, adverse publicity surrounding an allegation may cause significant reputational harm that could have a significant adverse effect on our sales.

Adverse effects on results from a decrease in or cessation or clawback of government incentives related to investments. We receive economic benefits from national, state, and local governments in various regions of the world in the form of incentives designed to encourage manufacturers to establish, maintain, or increase investment, workforce, or production. These incentives may take various forms, including grants, loan subsidies, and tax abatements or credits. The impact of these incentives can be significant in a particular market during a reporting period. For example, most of our manufacturing facilities in South America are located in Brazil, where the state or federal governments have historically offered, and continue to offer, significant incentives to manufacturers to encourage capital investment, increase manufacturing production, and create jobs. As a result, the performance of our South American operations has been impacted favorably by government incentives to a substantial extent. In Brazil, however, the federal government has levied assessments against us concerning our calculation of federal incentives we received, and certain states have challenged the grant to us of tax incentives by the state of Bahia, including a constitutional challenge of state incentives that is pending in Brazil's Supreme Court. A decrease in, expiration without renewal of, or other cessation or clawback of government incentives for any of our business units, as a result of administrative decision or otherwise, could have a substantial adverse impact on our financial condition and results of operations. See Note 2 of the Notes to the Financial Statements for discussion of our accounting for government incentives, and "Item 3. Legal Proceedings" for a discussion of tax proceedings in Brazil and the potential requirement for us to post collateral.

Cybersecurity risks to operational systems, security systems, or infrastructure owned by Ford, Ford Credit, or a third-party vendor or supplier. We are at risk for interruptions, outages, and breaches of: (i) operational systems (including business, financial, accounting, product development, consumer receivables, data processing, or manufacturing processes); (ii) facility security systems; and/or (iii) in-vehicle systems or mobile devices. Such cyber incidents could materially disrupt operational systems; result in loss of trade secrets or other proprietary or competitively sensitive information; compromise personally identifiable information of customers, employees, or others; jeopardize the security of our facilities; and/or affect the performance of in-vehicle systems. A cyber incident could be caused by malicious third parties using sophisticated, targeted methods to circumvent firewalls, encryption, and other security defenses, including hacking, fraud, trickery, or other forms of deception. The techniques used by third parties change frequently and may be difficult to detect for long periods of time. A significant cyber incident could impact production capability, harm our reputation and/or subject us to regulatory actions or litigation.

Failure of financial institutions to fulfill commitments under committed credit and liquidity facilities. Under our corporate credit facility), we are able to borrow, repay, and then re-borrow up to $13.4 billion. Certain of our subsidiaries have standby or revolving credit facilities on which they depend for liquidity. If the financial institutions that provide commitments under the corporate credit facility, our subsidiaries' standby or revolving credit facilities, or other committed credit facilities were to default on their obligation to fund the commitments, these facilities would not be available to us, which could substantially adversely affect our liquidity and financial condition. For discussion of our Credit Agreement, see "Liquidity and Capital Resources" in Item 7 and Note 14 of the Notes to the Financial Statements.

Item 1A. Risk Factors (Continued)

Inability of Ford Credit to access debt, securitization, or derivative markets around the world at competitive rates or in sufficient amounts, due to credit rating downgrades, market volatility, market disruption, regulatory requirements, or other factors. Ford Credit's ability to obtain unsecured funding at a reasonable cost is dependent on its credit ratings or its perceived creditworthiness. Ford Credit's ability to obtain securitized funding under its committed asset-backed liquidity programs and certain other asset-backed securitization transactions is subject to having a sufficient amount of assets eligible for these programs, as well as Ford Credit's ability to obtain appropriate credit ratings and, for certain committed programs, derivatives to manage the interest rate risk. Over time, and particularly in the event of any credit rating downgrades, market volatility, market disruption, or other factors, Ford Credit may reduce the amount of receivables it purchases or originates because of funding constraints. In addition, Ford Credit may be limited in the amount of receivables it purchases or originates in certain countries or regions if the local capital markets, particularly in developing countries, do not exist or are not adequately developed. Similarly, Ford Credit may reduce the amount of receivables it purchases or originates if there is a significant decline in the demand for the types of securities it offers or Ford Credit is unable to obtain derivatives to manage the interest rate risk associated with its securitization transactions. A significant reduction in the amount of receivables Ford Credit purchases or originates would significantly reduce its ongoing profits and could adversely affect its ability to support the sale of Ford vehicles.

Higher-than-expected credit losses, lower-than-anticipated residual values, or higher-than-expected return volumes for leased vehicles. Credit risk is the possibility of loss from a customer's or dealer's failure to make payments according to contract terms. Credit risk (which is heavily dependent upon economic factors including unemployment, consumer debt service burden, personal income growth, dealer profitability, and used car prices) has a significant impact on Ford Credit's business. The level of credit losses Ford Credit may experience could exceed its expectations and adversely affect its financial condition and results of operations. In addition, Ford Credit projects expected residual values (including residual value support payments from Ford) and return volumes for the vehicles it leases. Actual proceeds realized by Ford Credit upon the sale of returned leased vehicles at lease termination may be lower than the amount projected, which would reduce the profitability of the lease transaction. Among the factors that can affect the value of returned lease vehicles are the volume of vehicles returned, economic conditions, and quality or perceived quality, safety, fuel efficiency, or reliability of the vehicles. Actual return volumes may be higher than expected and can be influenced by contractual lease-end values relative to auction values, marketing programs for new vehicles, and general economic conditions. Each of these factors, alone or in combination, has the potential to adversely affect Ford Credit's profitability if actual results were to differ significantly from Ford Credit's projections. See "Critical Accounting Estimates" in Item 7 for additional discussion.

Increased competition from banks, financial institutions, or other third parties seeking to increase their share of financing Ford vehicles. No single company is a dominant force in the automotive finance industry. Most of Ford Credit's competitors in the United States use credit aggregation systems that permit dealers to send, through standardized systems, retail credit applications to multiple finance sources to evaluate financing options offered by these sources. Also, direct on-line or large dealer group financing options provide consumers with alternative finance sources and/or increased pricing transparency. All of these financing alternatives drive greater competition based on financing rates and terms. Competition from such institutions and alternative finance sources could adversely affect Ford Credit's profitability and the volume of its retail business. In addition, Ford Credit may face increased competition on wholesale financing for Ford dealers.

New or increased credit regulations, consumer or data protection regulations, or other regulations resulting in higher costs and/or additional financing restrictions. As a finance company, Ford Credit is highly regulated by governmental authorities in the locations in which it operates, which can impose significant additional costs and/or restrictions on its business. In the United States, for example, Ford Credit's operations are subject to regulation, supervision, and licensing under various federal, state, and local laws and regulations, including the federal Truth-in-Lending Act, Consumer Leasing Act, Equal Credit Opportunity Act, and Fair Credit Reporting Act.

The Dodd-Frank Act directs federal agencies to adopt rules to regulate the consumer finance industry and the capital markets and gives the Consumer Financial Protection Bureau ("CFPB") broad rule-making and enforcement authority for a wide range of consumer financial protection laws that regulate consumer finance businesses, such as Ford Credit's retail automotive financing business. Exercise of these powers by the CFPB may increase the costs of, impose additional restrictions on, or otherwise adversely affect companies in the automotive finance business. The CFPB has authority to supervise and examine the largest nonbank automotive finance companies, such as Ford Credit, for compliance with consumer financial protection laws.

Item 1A. Risk Factors (Continued)

In some countries outside the United States, some of Ford Credit's subsidiaries are regulated banking institutions and are required, among other things, to maintain minimum capital and liquidity. In many other locations, governmental authorities require companies to have licenses in order to conduct financing businesses. Compliance with these laws and regulations imposes additional costs on Ford Credit and affects the conduct of its business. Additional regulation could add significant cost or operational constraints that might impair Ford Credit's profitability.

ITEM 1B. Unresolved Staff Comments.

None.

ITEM 2. Properties.

Our principal properties include manufacturing and assembly facilities, distribution centers, warehouses, sales or administrative offices, and engineering centers.

We own substantially all of our U.S. manufacturing and assembly facilities. Our facilities are situated in various sections of the country and include assembly plants, engine plants, casting plants, metal stamping plants, transmission plants, and other component plants. About half of our distribution centers are leased (we own approximately 47% of the total square footage, and lease the balance). A substantial amount of our warehousing is provided by third-party providers under service contracts. Because the facilities provided pursuant to third-party service contracts need not be dedicated exclusively or even primarily to our use, these spaces are not included in the number of distribution centers/warehouses listed in the table below. The majority of the warehouses that we operate are leased, although many of our manufacturing and assembly facilities contain some warehousing space. Substantially all of our sales offices are leased space. Approximately 98% of the total square footage of our engineering centers and our supplementary research and development space is owned by us.

In addition, we maintain and operate manufacturing plants, assembly facilities, parts distribution centers, and engineering centers outside of the United States. We own substantially all of our non-U.S. manufacturing plants, assembly facilities, and engineering centers. The majority of our parts distribution centers outside of the United States are either leased or provided by vendors under service contracts.

We and the entities that we consolidated as of December 31, 2016 use nine regional engineering, research, and development centers, and 62 manufacturing plants as shown in the table below:

Automotive Business Units	Plants
North America	29
South America	8
Europe	16
Middle East & Africa	2
Asia Pacific	7
Total	62

Included in the number of plants shown above are plants that are operated by us or our consolidated joint ventures that support our Automotive segment. The significant consolidated joint ventures and the number of plants each owns are as follows:

- Ford Lio Ho Motor Company Ltd. ("FLH") — a joint venture in Taiwan among Ford (70% partner), the Lio Ho Group (25% partner), and individual shareholders (5% ownership in aggregate) that assembles a variety of Ford and Mazda vehicles sourced from Ford as well as Mazda. In addition to domestic assembly, FLH imports Ford brand built-up vehicles from the Asia Pacific region, Europe, and the United States. The joint venture operates one plant in Taiwan.

- Ford Sollers Netherlands B.V. ("Ford Sollers") — a 50/50 joint venture between Ford and Sollers OJSC ("Sollers"), in which Ford has control. The joint venture primarily is engaged in manufacturing a range of Ford passenger cars and light commercial vehicles for sale in Russia, and has an exclusive right to manufacture, assemble, and distribute certain Ford vehicles in Russia through the licensing of certain trademarks and intellectual property rights. The joint venture has been approved to participate in Russia's industrial assembly regime, which qualifies it for reduced import duties for parts imported into Russia. In addition to its three existing manufacturing facilities in Russia, Ford Sollers launched an engine plant in Russia in 2015.

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Ford Vietnam Limited — a joint venture between Ford (75% partner) and Diesel Song Cong One Member Limited Liability Company (a subsidiary of the Vietnam Engine and Agricultural Machinery Corporation, which in turn is majority owned (87.43%) by the State of Vietnam represented by the Ministry of Industry and Trade) (25% partner). Ford Vietnam Limited assembles and distributes a variety of Ford passenger and commercial vehicle models. The joint venture operates one plant in Vietnam.

Item 2. Properties (Continued)

In addition to the plants that we operate directly or that are operated by our consolidated joint ventures, additional plants that support our Automotive segment are operated by unconsolidated joint ventures of which we are a partner. These plants are not included in the number of plants shown in the table above. The most significant of the automotive unconsolidated joint ventures are as follows:

- AutoAlliance (Thailand) Co., Ltd. ("AAT") — a 50/50 joint venture between Ford and Mazda that owns and operates a manufacturing plant in Rayong, Thailand. AAT produces Ford and Mazda products for domestic and export sales.

- Changan Ford Automobile Corporation, Ltd. ("CAF") — a 50/50 joint venture between Ford and Chongqing Changan Automobile Co., Ltd. ("Changan"). CAF currently operates five assembly plants, an engine plant, and a transmission plant in China where it produces and distributes an expanding variety of Ford passenger vehicle models.

- Changan Ford Mazda Engine Company, Ltd. ("CFME") — a joint venture among Ford (25% partner), Mazda (25% partner), and Changan (50% partner). CFME is located in Nanjing, and produces engines for Ford and Mazda vehicles manufactured in China.

- Ford Otomotiv Sanayi Anonim Sirketi ("Ford Otosan") — a joint venture in Turkey among Ford (41% partner), the Koc Group of Turkey (41% partner), and public investors (18%) that is a major supplier to us of the Transit, Transit Custom, and Transit Courier commercial vehicles and is our sole distributor of Ford vehicles in Turkey. Ford Otosan also manufactures the Cargo truck for the Turkish and certain export markets and certain engines and transmissions, most of which are under license from us. The joint venture owns three plants, a parts distribution depot, and a new research and development center in Turkey.

- Getrag Ford Transmissions GmbH ("GFT") — a 50/50 joint venture with Getrag International GmbH, a German company belonging to Magna Powertrain GmbH. GFT operates plants in Halewood, England; Cologne, Germany; Bordeaux, France; and Kechnec, Slovakia to produce, among other things, manual transmissions for our Europe business unit.

- JMC — a publicly-traded company in China with Ford (32% shareholder) and Jiangling Holdings, Ltd. (41% shareholder) as its controlling shareholders. Jiangling Holdings, Ltd. is a 50/50 joint venture between Changan and Jiangling Motors Company Group. The public investors in JMC own 27% of its total outstanding shares. JMC assembles Ford Transit, Ford Everest, Ford engines, and non-Ford vehicles and engines for distribution in China and in other export markets. JMC operates two assembly plants and one engine plant in Nanchang. In 2015, JMC opened a new plant in Taiyuan to assemble heavy duty trucks and engines.

The facilities described above are, in the opinion of management, suitable and adequate for the manufacture and assembly of our and our joint ventures' products.

The furniture, equipment, and other physical property owned by our Financial Services operations are not material in relation to the operations' total assets.

ITEM 3. Legal Proceedings.

The litigation process is subject to many uncertainties, and the outcome of individual matters is not predictable with assurance. See Note 24 of the Notes to the Financial Statements for discussion of loss contingencies. Following is a discussion of our significant pending legal proceedings:

PRODUCT LIABILITY MATTERS

We are a defendant in numerous actions in state and federal courts within and outside of the United States alleging damages from injuries resulting from (or aggravated by) alleged defects in our vehicles. In many, no monetary amount of damages is specified, or the specific amount alleged is the jurisdictional minimum. Our experience with litigation alleging a specific amount of damages suggests that such amounts, on average, bear little relation to the actual amount of damages, if any, that we will pay in resolving such matters.

In addition to pending actions, we assess the likelihood of incidents that likely have occurred but not yet been reported to us; we also take into consideration specific matters that have been raised as claims but have not yet proceeded to litigation. Individual product liability matters which, if resolved unfavorably to the Company, likely would involve a significant cost would be described herein. Currently there are no such matters to report.

ASBESTOS MATTERS

Asbestos was used in some brakes, clutches, and other automotive components from the early 1900s. Along with other vehicle manufacturers, we have been the target of asbestos litigation and, as a result, are a defendant in various actions for injuries claimed to have resulted from alleged exposure to Ford parts and other products containing asbestos. Plaintiffs in these personal injury cases allege various health problems as a result of asbestos exposure, either from component parts found in older vehicles, insulation or other asbestos products in our facilities, or asbestos aboard our former maritime fleet. We believe that we are being targeted more aggressively in asbestos suits because many previously-targeted companies have filed for bankruptcy, or emerged from bankruptcy relieved of liability for such claims.

Most of the asbestos litigation we face involves individuals who claim to have worked on the brakes of our vehicles. We are prepared to defend these cases, and believe that the scientific evidence confirms our long-standing position that there is no increased risk of asbestos-related disease as a result of exposure to the type of asbestos formerly used in the brakes on our vehicles. The extent of our financial exposure to asbestos litigation remains very difficult to estimate and could include both compensatory and punitive damage awards. The majority of our asbestos cases do not specify a dollar amount for damages; in many of the other cases the dollar amount specified is the jurisdictional minimum, and the vast majority of these cases involve multiple defendants, sometimes more than one hundred. Many of these cases also involve multiple plaintiffs, and often we are unable to tell from the pleadings which plaintiffs are making claims against us (as opposed to other defendants). Annual payout and defense costs may become significant in the future.

ENVIRONMENTAL MATTERS

We have received notices under various federal and state environmental laws that we (along with others) are or may be a potentially responsible party for the costs associated with remediating numerous hazardous substance storage, recycling, or disposal sites in many states and, in some instances, for natural resource damages. We also may have been a generator of hazardous substances at a number of other sites. The amount of any such costs or damages for which we may be held responsible could be significant.

We have two environmental legal proceedings to which a governmental authority is a party and in which we believe there is the possibility of monetary sanctions in excess of $100,000:

Notices of Violation to Ford Chicago Assembly Plant and Dearborn Truck Plant. On August 17, 2015, the U.S. Environmental Protection Agency ("EPA") issued a notice of violation to our Chicago Assembly Plant and on December 26, 2015, EPA issued a notice of violation to our Dearborn Truck Plant. EPA alleges that the plants violated several requirements related to their air permits. Monetary sanctions, if any, have not yet been determined.

Item 3. Legal Proceedings (Continued)

CLASS ACTIONS

In light of the fact that very few of the purported class actions filed against us in the past have ever been certified by the courts as class actions, in general we list those actions that (i) have been certified as a class action by a court of competent jurisdiction (and any additional purported class actions that raise allegations substantially similar to an existing and certified class), and (ii) likely would involve a significant cost if resolved unfavorably to the Company. At this time, we have no such purported class actions filed against us.

OTHER MATTERS

Brazilian Tax Matters. Two Brazilian states and the Brazilian federal tax authority currently have outstanding substantial tax assessments against Ford Brazil related to state and federal tax incentives Ford Brazil receives for its operations in the Brazilian state of Bahia. All assessments have been appealed to the relevant administrative court of each jurisdiction. For each assessment, if we do not prevail at the administrative level, we plan to appeal to the relevant state or federal judicial court, which would likely require us to post significant collateral in order to proceed. Our appeals with one state and the federal tax authority remain at the administrative level. In the other state, where three cases are pending, one remains at the administrative level and two have been appealed to the judicial court. To date we have not been required to post any collateral.

Transit Connect Customs Ruling. On March 8, 2013, U.S. Customs and Border Protection ("CBP") ruled that Transit Connects imported as passenger wagons and later converted into cargo vans are subject to the 25% duty applicable to cargo vehicles, rather than the 2.5% duty applicable to passenger vehicles. As a result of the ruling, CBP is requiring Ford to pay the 25% duty upon importation of Transit Connects that will be converted to cargo vehicles, and is seeking the difference in duty rates for prior imports. Our protest of the ruling within CBP was denied and we filed a challenge in the U.S. Court of International Trade ("CIT"). A decision by CIT may be appealed to the U.S. Court of Appeals for the Federal Circuit. If we prevail, we will receive a refund of the contested amounts paid, plus interest. If we do not prevail, CBP would recover the increased duties for prior imports, plus interest, and might assert a claim for penalties.

ITEM 4. Mine Safety Disclosures.

Not applicable.

ITEM 4A. Executive Officers of Ford.

Our executive officers are as follows, along with each executive officer's position and age at February 1, 2017:

Name	Position	Position Held Since	Age
William Clay Ford, Jr. (a)	Executive Chairman and Chairman of the Board	September 2006	59
Mark Fields (b)	President and Chief Executive Officer	July 2014	56
James D. Farley, Jr.	Executive Vice President – President, Europe, Middle East & Africa	January 2015	54
Joseph R. Hinrichs	Executive Vice President – President, The Americas	December 2012	50
Stephen T. Odell	Executive Vice President – Global Marketing, Sales and Service	January 2015	61
Raj Nair	Executive Vice President – Product Development and Chief Technical Officer	December 2015	52
Bob Shanks	Executive Vice President and Chief Financial Officer	April 2012	64
John Casesa	Group Vice President – Global Strategy	March 2015	54
Ray Day	Group Vice President – Communications	March 2013	50
Joy Falotico	Group Vice President – Chairman and Chief Executive Officer, Ford Motor Credit Co.	October 2016	49
Felicia Fields	Group Vice President – Human Resources and Corporate Services	April 2008	51
Bennie Fowler	Group Vice President – Quality and New Model Launch	April 2008	60
Bradley M. Gayton	Group Vice President and General Counsel	January 2016	53
Bruce Hettle	Group Vice President – Manufacturing and Labor Affairs	January 2016	55
Marcy Klevorn	Group Vice President – Information Technology and Chief Information Officer	January 2017	57
Ziad S. Ojakli	Group Vice President – Government and Community Relations	January 2004	49
Kimberly Pittel	Group Vice President – Sustainability, Environment & Safety Engineering	January 2017	57
Dave Schoch	Group Vice President – President, Asia Pacific	December 2012	65
Hau Thai-Tang	Group Vice President – Global Purchasing	August 2013	50
John Lawler	Vice President and Controller	June 2016	50

(a) Also a Director, Chair of the Office of the Chairman and Chief Executive, Chair of the Finance Committee, and a member of the Sustainability Committee of the Board of Directors.

(b) Also a Director and member of the Office of the Chairman and Chief Executive and the Finance Committee of the Board of Directors.

Each of the officers listed above, except for John Casesa, has been employed by Ford or its subsidiaries in one or more capacities during the past five years. Prior to joining Ford in March 2015, John Casesa was Senior Managing Director of Guggenheim Partners, where he led the firm's automotive investment banking activities since 2010.

Under our by-laws, executive officers are elected by the Board of Directors at an annual meeting of the Board held for this purpose or by a resolution to fill a vacancy. Each officer is elected to hold office until a successor is chosen or as otherwise provided in the by-laws.

PART II.

ITEM 5. Market for Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

Our Common Stock is listed on the New York Stock Exchange in the United States.

The table below shows the high and low sales prices for our Common Stock, and the dividends we paid per share of Common and Class B Stock, for each quarterly period in 2015 and 2016:

	2015				2016			
Ford Common Stock price per share (a)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
High	$ 16.74	$ 16.16	$ 15.30	$ 15.84	$ 14.00	$ 14.22	$ 14.04	$ 13.20
Low	14.30	14.78	10.44	13.40	11.02	12.00	11.90	11.07
Dividends per share of Ford Common and Class B Stock	0.15	0.15	0.15	0.15	0.40	0.15	0.15	0.15

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(a) New York Stock Exchange composite intraday prices as listed in the price history database available at www.NYSEnet.com.

As of January 31, 2017, stockholders of record of Ford included approximately 125,465 holders of Common Stock and 34 holders of Class B Stock.

In the first quarter of 2016, we repurchased shares of Ford Common Stock from our employees or directors related to certain exercises of stock options, in accordance with our various compensation plans. We also completed a modest anti-dilutive share repurchase program to offset the dilutive effect of share-based compensation granted during 2016. The plan authorized repurchases of up to 10.7 million shares of Ford Common Stock.

ITEM 6. Selected Financial Data.

The following table sets forth selected financial data for each of the last five years (dollar amounts in millions, except for per share amounts):

SUMMARY OF INCOME	2012	2013	2014	2015	2016
Total revenues	$133,559	$146,917	$144,077	$149,558	$151,800
Income before income taxes	$2,005	$14,371	$1,234	$10,252	$6,796
Provision for/(Benefit from) income taxes	89	2,425	4	2,881	2,189
Net income	1,916	11,946	1,230	7,371	4,607
Less: Income/(Loss) attributable to noncontrolling interests	(1)	(7)	(1)	(2)	11
Net income attributable to Ford Motor Company	$1,917	$11,953	$1,231	$7,373	$4,596
Earnings Per Share Attributable to Ford Motor Company Common and Class B Stock					
Average number of shares of Ford Common and Class B Stock outstanding (in millions)	3,815	3,935	3,912	3,969	3,973
Basic income	$0.50	$3.04	$0.31	$1.86	$1.16
Diluted income	0.49	2.94	0.31	1.84	1.15
Cash dividends declared	0.15	0.40	0.50	0.60	0.85
Common Stock price range (NYSE Composite Intraday)					
High	13.08	18.02	18.12	16.74	14.22
Low	8.82	12.10	13.26	10.44	11.02
BALANCE SHEET DATA AT YEAR-END					
Total assets	$189,800	$202,204	$208,615	$224,925	$237,951
Automotive debt	$14,256	$15,683	$13,824	$12,839	$15,907
Financial Services debt	90,802	99,005	105,347	120,015	127,063
Total equity	$15,924	$26,173	$24,465	$28,657	$29,187

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

OVERVIEW

Beginning with the second quarter of 2016, we changed our reportable segments. Prior-period amounts have been adjusted retrospectively to reflect the reportable segment change. See Note 4 of the Notes to the Financial Statements for additional information.

Non-GAAP Financial Measures That Supplement GAAP Measures

We use both generally accepted accounting principles ("GAAP") and non-GAAP financial measures for operational and financial decision making, and to assess Company and segment business performance. The non-GAAP measures listed below are intended to be considered by users as supplemental information to their equivalent GAAP measures, to aid investors in better understanding our financial results. We believe that these non-GAAP measures provide useful perspective on underlying business results and trends, and a means to assess our period-over-period results. These non-GAAP measures should not be considered as a substitute for, or superior to measures of financial performance prepared in accordance with GAAP. These non-GAAP measures may not be the same as similarly titled measures used by other companies due to possible differences in method and in items or events being adjusted.

- Total Company Adjusted Pre-tax Profit (Most Comparable GAAP Measure: Net Income Attributable to Ford) – The non-GAAP measure is useful to management and investors because it allows users to evaluate our pre-tax results excluding pre-tax special items. Pre-tax special items consist of (i) pension and other postretirement employee benefits ("OPEB") remeasurement gains and losses that are not reflective of our underlying business results, (ii) significant restructuring actions related to our efforts to match production capacity and cost structure to market demand and changing model mix, and (iii) other items that we do not necessarily consider to be indicative of earnings from ongoing operating activities. When we provide guidance for adjusted pre-tax profit, we do not provide guidance on a net income basis because the GAAP measure will include potentially significant special items that have not yet occurred and are difficult to predict with reasonable certainty prior to year-end, specifically pension and OPEB remeasurement gains and losses.

- Adjusted Earnings Per Share (Most Comparable GAAP Measure: Earnings Per Share) – Measure of Company's diluted net earnings per share adjusted for impact of pre-tax special items (described above) and tax special items. The measure provides investors with useful information to evaluate performance of our business excluding items not indicative of the underlying run rate of our business. When we provide guidance for adjusted earnings per share, we do not provide guidance on an earnings per share basis because the GAAP measure will include potentially significant special items that have not yet occurred and are difficult to predict with reasonable certainty prior to year-end, specifically pension and OPEB remeasurement gains and losses.

- Adjusted Effective Tax Rate (Most Comparable GAAP Measure: Effective Tax Rate) – Measure of Company's tax rate excluding pre-tax special items (described above) and tax special items. The measure provides an ongoing effective rate which investors find useful for historical comparisons and for forecasting. When we provide guidance for adjusted effective tax rate, we do not provide guidance on an effective tax rate basis because the GAAP measure will include potentially significant special items that have not yet occurred and are difficult to predict with reasonable certainty prior to year-end, specifically pension and OPEB remeasurement gains and losses.

- Ford Credit Managed Receivables (Most Comparable GAAP Measure: Net Finance Receivables plus Net Investment in Operating Leases) – Measure of Ford Credit's total net receivables, excluding unearned interest supplements and residual support, allowance for credit losses, and other (primarily accumulated supplemental depreciation). The measure is useful to management and investors as it closely approximates the customer's outstanding balance on the receivables, which is the basis for earning revenue.

• Ford Credit Managed Leverage (Most Comparable GAAP Measure: Financial Statement Leverage) – Ford Credit's debt-to-equity ratio adjusted (i) to exclude cash, cash equivalents, and marketable securities (other than amounts related to insurance activities), and (ii) for derivative accounting. The measure is useful to investors because it reflects the way Ford Credit manages its business. Cash, cash equivalents, and marketable securities are deducted because they generally correspond to excess debt beyond the amount required to support operations and on-balance sheet securitization transactions. Derivative accounting adjustments are made to asset, debt, and equity positions to reflect the impact of interest rate instruments used with Ford Credit's term-debt issuances and securitization transactions. Ford Credit generally repays its debt obligations as they mature, so the interim effects of changes in market interest rates are excluded in the calculation of managed leverage.

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

Revenue

Our Automotive segment revenue is generated primarily by sales of vehicles, parts, and accessories; we generally treat sales and marketing incentives as a reduction to revenue. Revenue is recorded when all risks and rewards of ownership are transferred to our customers (generally, our dealers and distributors). For the majority of sales, this occurs when products are shipped from our manufacturing facilities. This is not the case, however, with respect to vehicles produced for sale to daily rental car companies that are subject to a guaranteed repurchase option. These vehicles are accounted for as operating leases, with lease revenue and profits recognized over the term of the lease. Proceeds from the sale of vehicles at auction are recognized in revenue at the time of sale.

Most of the vehicles sold by us to our dealers and distributors are financed at wholesale by Ford Credit. Upon Ford Credit originating the wholesale receivable related to a dealer's purchase of a vehicle, Ford Credit pays cash to the relevant Automotive legal entity in payment of the dealer's obligation for the purchase price of the vehicle. The dealer then pays the wholesale finance receivable to Ford Credit when it sells the vehicle to a retail customer.

Our Financial Services segment revenue is generated primarily from interest on finance receivables, net of certain deferred origination costs that are included as a reduction of financing revenue, and such revenue is recognized over the term of the receivable using the interest method. Also, revenue from operating leases is recognized on a straight-line basis over the term of the lease. Income is generated to the extent revenues exceed expenses, most of which are interest, depreciation, and operating expenses.

Transactions between our Automotive and Financial Services segments occur in the ordinary course of business. For example, we offer special retail financing and lease incentives to dealers' customers who choose to finance or lease our vehicles from Ford Credit. The estimated cost for these incentives is recorded as revenue reduction to Automotive sales at the later of the date the related vehicle sales to our dealers are recorded or the date the incentive program is both approved and communicated. In order to compensate Ford Credit for the lower interest or lease rates offered to the retail customer, we pay the discounted value of the incentive directly to Ford Credit when it originates the retail finance or lease contract with the dealer's customer. Ford Credit recognizes the amount over the life of retail finance contracts as an element of financing revenue and over the life of lease contracts as a reduction to depreciation. See Note 1 of the Notes to the Financial Statements for a more detailed discussion of transactions between our Automotive and Financial Services segments.

Costs and Expenses

Our income statement classifies our Automotive segment total costs and expenses into two categories: (i) cost of sales, and (ii) selling, administrative, and other expenses. We include within cost of sales those costs related to the development, manufacture, and distribution of our vehicles, parts, and accessories. Specifically, we include in cost of sales each of the following: material costs (including commodity costs); freight costs; warranty, including product recall and customer satisfaction program costs; labor and other costs related to the development and manufacture of our products; depreciation and amortization; and other associated costs. We include within selling, administrative, and other expenses labor and other costs not directly related to the development and manufacture of our products, including such expenses as advertising and sales promotion costs.

Certain of our costs, such as material costs, generally vary directly with changes in volume and mix of production. In our industry, production volume often varies significantly from quarter to quarter and year to year. Quarterly production volumes experience seasonal shifts throughout the year (including peak retail sales seasons, and the impact on production of model changeover and new product launches). As we have seen in recent years, annual production volumes are heavily impacted by external economic factors, including the pace of economic growth and factors such as the availability of consumer credit and cost of fuel.

As a result, we analyze the profit impact of certain cost changes holding constant present-year volume and mix and currency exchange, in order to evaluate our cost trends absent the impact of varying production and currency exchange levels. We analyze these cost changes in the following categories:

- Contribution Costs – these costs typically vary with production volume. These costs include material, commodity, warranty, and freight and duty costs.
- Structural Costs – these costs typically do not have a directly proportionate relationship to production volume. These costs include manufacturing, engineering, spending-related, advertising and sales promotion, administrative and selling, and pension and OPEB costs.

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

While contribution costs generally vary directly in proportion to production volume, elements within our structural costs category are impacted to differing degrees by changes in production volume. We also have varying degrees of discretion when it comes to controlling the different elements within our structural costs. For example, depreciation and amortization expense largely is associated with prior capital spending decisions. On the other hand, while labor costs do not vary directly with production volume, manufacturing labor costs may be impacted by changes in volume, for example when we increase overtime, add a production shift or add personnel to support volume increases. Other structural costs, such as advertising or engineering costs, do not necessarily have a directly proportionate relationship to production volume. Our structural costs generally are within our discretion, although to varying degrees, and can be adjusted over time in response to external factors.

We consider certain structural costs to be a direct investment in future growth and revenue. For example, increases in structural costs are necessary to grow our business and improve profitability as we expand around the world, invest in new products and technologies, respond to increasing industry sales volume, and grow our market share.

Cost of sales and Selling, administrative, and other expenses for full-year 2016 were $138.8 billion. Our Automotive segment's material and commodity costs make up the largest portion of these costs and expenses, representing in 2016 about two-thirds of the total amount. Structural costs are the largest piece of the remaining balance. Although material costs are our largest absolute cost, our margins can be affected significantly by changes in any category of costs.

Key Economic Factors and Trends Affecting the Automotive Industry

Currency Exchange Rate Volatility. The U.S. Federal Reserve raised its policy interest rate in December 2016, a move which has been accompanied by an upward shift in longer term interest rates since November 2016. The related shifts in capital flows have contributed to downward pressure on both developed and emerging market currencies globally. In some emerging markets, that pressure is aggravated by low commodity prices, high inflation, or unstable policy environments. Additionally, the yen, euro and pound have depreciated as a result of monetary policy easing by the central banks in those markets, as well as ongoing Brexit negotiations in Europe. The weak yen, in particular, adds significant potential downward pressure on vehicle pricing across many markets globally. In most markets, exchange rates are market-determined, and all are impacted by many different macroeconomic and policy factors, and thus likely to remain volatile. However, in some markets, exchange rates are heavily influenced or controlled by governments.

Excess Capacity. According to IHS Automotive, an automotive research firm, the estimated automotive industry global production capacity for light vehicles of about 125 million units exceeded global production by about 32 million units in 2016. In North America and Europe, two regions where a significant share of industry revenue is earned, excess capacity as a percent of production was an estimated 7% and 21%, respectively, in 2016. In China, the auto industry also witnessed excess capacity at 48% of production in 2016, as manufacturers compete to capitalize on China's future market potential. According to production capacity data projected by IHS Automotive, global excess capacity conditions could continue for several years at an average of about 39 million units per year during the period from 2017 to 2021.

Pricing Pressure. Excess capacity, coupled with a proliferation of new products being introduced in key segments, will keep pressure on manufacturers' ability to increase prices. In North America, the industry restructuring of the past few years has allowed manufacturers to better match production with demand, although Japanese and Korean manufacturers also have capacity located outside of the region directed to North America. In the future, Chinese and Indian manufacturers are expected to enter U.S. and European markets, further intensifying competition. Over the long term, intense competition and excess capacity will continue to put downward pressure on inflation-adjusted prices for similarly-contented vehicles in the United States and contribute to a challenging pricing environment for the automotive industry. In Europe, the excess capacity situation was exacerbated by weakening demand and the lack of reductions in existing capacity, such that negative pricing pressure is expected to continue for the foreseeable future.

Commodity and Energy Price Changes. The price of oil has increased since late 2016 as oil producing nations agreed to modest output reductions, although the average oil price for the year was below the 2015 level. Other commodity prices have begun to increase as well, with continued volatility likely. Over the longer term, commodity prices are likely to trend higher given expectations for global demand growth.

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

Vehicle Profitability. Our financial results depend on the profitability of the vehicles we sell, which may vary significantly by vehicle line. In general, larger vehicles tend to command higher prices and be more profitable than smaller vehicles, both across and within vehicle segments. For example, in North America, our larger, more profitable vehicles had an average contribution margin that was about 135% of our total average contribution margin across all vehicles, whereas our smaller vehicles had significantly lower contribution margins. In addition, government regulations aimed at reducing emissions and increasing fuel efficiency may increase the cost of vehicles by more than the perceived benefit to the consumer. Given the backdrop of excess capacity, these regulations could dampen contribution margins.

Trade Policy. To the extent governments in various regions erect or intensify barriers to imports, or implement currency policy that advantages local exporters selling into the global marketplace, there can be a significant negative impact on manufacturers based in markets that promote free trade. While we believe the long-term trend is toward the growth of free trade, we have noted with concern recent developments in a number of regions. In Asia Pacific, for example, the recent dramatic depreciation of the yen significantly reduces the cost of exports into the United States, Europe, and other global markets by Japanese manufacturers. Over a period of time, the emerging weakness of the yen can contribute to other countries pursuing weak currency policies by intervening in the exchange rate markets. This is particularly likely in other Asian countries, such as South Korea. As another example, government actions in South America to incentivize local production and balance trade are driving trade frictions between South American countries and also with Mexico, resulting in business environment instability and new trade barriers. We will continue to monitor and address developing issues around trade policy.

Other Economic Factors. During 2016, mature market government bond yields and inflation were lower than expected. Although in recent months interest rates have risen, and deflation risks have receded somewhat, this is occurring against a backdrop of loose monetary policy, particularly in Europe and Japan. At the same time, government deficits and debt remain at high levels in many major markets. The eventual implications of higher government deficits and debt, with potentially higher long-term interest rates, may drive a higher cost of capital over our planning period. Higher interest rates and/or taxes to address the higher deficits also may impede real growth in gross domestic product and, therefore, vehicle sales over our planning period.

For additional information on our assessment of the business environment, refer to the "Outlook" section below.

Trends and Strategies

In 2016, we updated our vision and strategy to reflect our expansion to be an automotive and mobility company. Our strategy is to deliver top quartile shareholder returns through automotive and high-growth mobility businesses. We are doing this by focusing on the strategic priorities in both our core business and emerging opportunities that will fortify, transform, and grow our business.

Fortifying the Profit Pillars

The profit pillars are the foundation and underlying strength of Ford. We are focused on keeping these areas strong and we intend to strengthen them further through new innovations that will continue to address the needs of our customers.

Trucks, Vans, and Commercial Vehicles. F-Series has been the U.S. truck leader for 40 years. We plan to strengthen our truck leadership with the 2018 model year new F-150, which will feature new powertrains, including our first diesel for F-150, and will be equipped with advanced connectivity to provide even more productivity for our customers. In 2020, F-150 will be available in a hybrid version that will improve capability, productivity, and fuel efficiency. The new Super Duty is off to a strong start, with high average transaction price and mix. And for the second year in a row, we are the commercial vehicle leader in Europe. We saw strong performance around the world in 2016 from our Ranger mid-size pickup. In 2019, Ranger will be joining F-150 and Super Duty in North America, expanding our pickup portfolio in our largest market.

Utilities. We will introduce an all-new aluminum-body Expedition in 2017 with new capability. We also plan to introduce five other all-new utilities through 2020, including an all-new Bronco and an all-new fully electric utility vehicle that will have an expected range of at least 300 miles.

Performance Vehicles. We are on track to deliver 12 new performance vehicles by the end of the decade, including the all-new Raptor and Ford GT. Mustang will be available in a hybrid version by 2020, delivering V-8 equivalent power with greater low-end torque.

Ford Credit. Ford Credit remains a strategic asset to our automotive business around the world, delivering class-leading services.

Ford Customer Service Division. Our parts and service business continues to grow, including a significant expansion of Quick Lane globally, adding to customer satisfaction and owner loyalty.

Transforming the Underperforming Parts of the Business

In addition to fortifying our profit pillars, we are transforming the underperforming parts of our business.

Luxury. Sales for Lincoln were up 24% globally and tripled in China in 2016, and Lincoln is being recognized for product appeal, quality, and customer satisfaction. We are strengthening the Lincoln product portfolio with the Continental flagship launched in 2016 and the all-new aluminum-body Navigator to be launched in 2017. We will continue to evaluate further opportunities to improve returns on capital in the Lincoln business.

Small Vehicles. Small vehicles in developed markets is an area of challenge. We have repositioned and capped capacity for the next generation Fiesta in Europe and underpinned it with an attractive value entry, our KA+, made in India from a low-cost operation. We are producing the EcoSport mini utility for Europe and North America in low-cost manufacturing locations. To match capacity with demand, we have cancelled our plans to build a new plant in Mexico and will instead build the next-generation Focus at an existing plant in Mexico.

Emerging Markets. We exited Indonesia and Japan in 2016, given the lack of a clear path to sustained profitability in these markets. In ASEAN, we returned to a profit in 2016, while in Russia, the business improved substantially in 2016, with further improvement expected in 2017. Similarly, in South America, we expect results to improve in 2017 as economic conditions begin to turn around. In our Middle East & Africa operations, we also expect results to improve in 2017 as we work to strengthen our distribution, particularly in the Middle East. We achieved significant year-over-year growth in production in India in 2016, driven primarily by strong exports. Despite the growth, India remains a significant challenge; we will continue to work this year to evaluate alternative business models for this large and growing emerging market.

Growing with Investments in Emerging Opportunities

We are driving for leadership in three key emerging opportunity areas—electrification, autonomy, and mobility. In each area, we are leveraging the strengths of our core business, as well as synergies across the three areas.

Electrification. In the area of electrification, we are focusing on our profit pillars of trucks, vans, commercial vehicles, utilities, and performance vehicles to provide more to our customers—more capability, more productivity, and more performance—in addition to better fuel economy. We have 13 new electrified products we plan to bring to market by 2020. These include hybrid versions of the F-150 and Mustang, a new Transit Custom plug-in hybrid in Europe, an all-new fully electric small SUV with an estimated range of at least 300 miles, and two new electrified police vehicles.

Autonomy. We continue to make progress in the area of autonomy. We announced in 2016 our intention to produce a high-volume, dedicated, level 4 autonomous vehicle in 2021 for ride sharing applications in a “geo-fenced” area. We have made progress toward this objective with a new-generation Fusion Hybrid autonomous development vehicle. It demonstrates the advancement of Ford’s in-house hardware and software engineering efforts. In 2016, we expanded our autonomous test fleet from 10 to 30 vehicles. In 2017, we plan to further expand the fleet and begin testing in Europe.

Mobility. We are developing mobility services and related business models that are designed to reduce transportation congestion and increase transportation capacity in crowded cities. These cities need more flow, but, at the same time, they need to reduce congestion and they need to reduce pollution. We are moving quickly to develop partnerships with major cities to co-create solutions for congestion. The Ford Smart Mobility team is deploying innovative solutions to support both shared and owned business models, while aggressively developing new products and services. In 2016, Ford Smart Mobility LLC acquired Chariot, a demand responsive shuttle company that operates in two U.S. cities and has plans to expand to eight cities by the end of 2017, including a city outside the United States.

Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations (Continued)

RESULTS OF OPERATIONS - 2016

TOTAL COMPANY

Net income attributable to Ford. The chart below shows our net income attributable to Ford for full year 2016:

Net income attributable to Ford for full year 2016 was $4.6 billion or $1.15 diluted earnings per share of Common and Class B Stock, a decrease of $2.8 billion or $0.69 per share compared with 2015. Full year 2016 pre-tax results of our Automotive segment, Financial Services segment, All Other, and Special Items, as well as Taxes are discussed in the following sections in “Results of Operations.”

Revenue. Company revenue for full year 2016 was $151.8 billion, $2.2 billion higher than a year ago.

Cost of sales and Selling, administrative, and other expenses for the full year 2016 were $138.8 billion, an increase of about $4.2 billion compared with 2015. The detail for the change is shown below (in billions):

	2016 Lower/(Higher) 2015
Volume and mix, exchange, and other	$ (0.1)
Contribution costs	
Material excluding commodities	(0.3)
Commodities	0.9
Warranty and other	(0.4)
Structural costs	(1.5)
Special items	(2.8)
Total	$ (4.2)

Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations (Continued)

Equity. At December 31, 2016, total equity attributable to Ford was $29.2 billion, an increase of $0.5 billion compared with December 31, 2015. The detail for this change is shown below (in billions):

	Increase/(Decrease)
Net income	$ 4.6
Dividends	(3.4)
Other comprehensive income	(0.8)
Compensation-related equity issuances	0.2
Treasury stock share repurchases	(0.1)
Total	$ 0.5

The chart below shows our full year 2016 total Company adjusted pre-tax results and pre-tax results of our Automotive segment by regional business unit, our Financial Services segment, and All Other, which is mainly net interest expense.

Our total Company adjusted pre-tax profit for full year 2016 was $10.4 billion, or $1.76 of adjusted earnings per share of Common and Class B Stock, a decrease of $425 million or $0.17 per share compared with 2015. Our total Company adjusted pre-tax profit consisted of our second-best Automotive segment profit of $9.4 billion, a solid profit of $1.8 billion in the Financial Services segment, and a loss of $867 million in All Other.

Automotive results were driven by North America, a record profit in Europe, and the second-best profit in Asia Pacific.

In total, our Automotive operations outside North America delivered a full year profit of $421 million, $198 million higher than in 2015.

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

AUTOMOTIVE SEGMENT

In general, we measure year-over-year change in Automotive segment pre-tax results using the causal factors listed below, with net pricing and cost variances calculated at present-year volume and mix and exchange:

- Market Factors:
  Volume and Mix – primarily measures profit variance from changes in wholesale volumes (at prior-year average contribution margin per unit) driven by changes in industry volume, market share, and dealer stocks, as well as the profit variance resulting from changes in product mix, including mix among vehicle lines and mix of trim levels and options within a vehicle line
  Net Pricing – primarily measures profit variance driven by changes in wholesale prices to dealers and marketing incentive programs such as rebate programs, low-rate financing offers, special lease offers, and stock adjustments on dealer inventory

- Contribution Costs – primarily measures profit variance driven by per-unit changes in cost categories that typically vary with volume, such as material costs (including commodity and component costs), warranty expense, and freight and duty costs

- Structural Costs – primarily measures profit variance driven by absolute change in cost categories that typically do not have a directly proportionate relationship to production volume. Structural costs include the following cost categories:
  Manufacturing, Including Volume Related – consists primarily of costs for hourly and salaried manufacturing personnel, plant overhead (such as utilities and taxes), and new product launch expense. These costs could be affected by volume for operating pattern actions such as overtime, line-speed, and shift schedules
  Engineering – consists primarily of costs for engineering personnel, prototype materials, testing, and outside engineering services
  Spending-Related – consists primarily of depreciation and amortization of our manufacturing and engineering assets, but also includes asset retirements and operating leases
  Advertising and Sales Promotions – includes costs for advertising, marketing programs, brand promotions, customer mailings and promotional events, and auto shows
  Administrative and Selling – includes primarily costs for salaried personnel and purchased services related to our staff activities and selling functions, as well as associated information technology costs
  Pension and OPEB – consists primarily of past service pension costs and other postretirement employee benefit costs

- Exchange – primarily measures profit variance driven by one or more of the following: (i) transactions denominated in currencies other than the functional currencies of the relevant entities, (ii) effects of converting functional currency income to U.S. dollars, (iii) effects of remeasuring monetary assets and liabilities of the relevant entities in currencies other than their functional currency, or (iv) results of our foreign currency hedging

- Other – includes a variety of items, such as parts and services profits, royalties, government incentives and compensation-related changes

In addition, definitions and calculations used in this report include:

- Wholesales and Revenue – wholesale unit volumes include all Ford and Lincoln badged units (whether produced by Ford or by an unconsolidated affiliate) that are sold to dealerships, units manufactured by Ford that are sold to other manufacturers, units distributed by Ford for other manufacturers, and local brand units produced by our China joint venture, Jiangling Motors Corporation, Ltd. ("JMC"), that are sold to dealerships. Vehicles sold to daily rental car companies that are subject to a guaranteed repurchase option (i.e., rental repurchase), as well as other sales of finished vehicles for which the recognition of revenue is deferred (e.g., consignments), also are included in wholesale unit volumes. Revenue from certain vehicles in wholesale unit volumes (specifically, Ford badged vehicles produced and distributed by our unconsolidated affiliates, as well as JMC brand vehicles) are not included in our revenue

- Automotive Segment Operating Margin – defined as Automotive segment pre-tax profit divided by Automotive segment revenue

- Industry Volume and Market Share – based, in part, on estimated vehicle registrations; includes medium and heavy duty trucks

- Automotive Cash – includes cash, cash equivalents, and marketable securities

References to Automotive records for operating cash flow, operating margin, and business units are since at least 2000.

The charts on the following pages detail full year 2016 key metrics and the change in full year 2016 pre-tax results compared with full year 2015 by causal factor for our Automotive segment and its business units — North America, South America, Europe, Middle East & Africa, and Asia Pacific.

Shown above are the key financial metrics for our Automotive segment for full year 2016. Wholesales and revenue were about the same as a year ago with all other metrics down, consistent with our expectations for the year.

Global industry volume, estimated at 91.4 million units, was up 3.2 million units or 4%. The increase was driven by industry gains in Asia Pacific, Europe, and North America.

Global market share was down one-tenth of a percentage point driven by lower market share in North America and South America. Market share was flat in Europe and higher in Middle East & Africa and Asia Pacific.

Our Automotive operating margin was 6.7% and pre-tax profit was $9.4 billion. Both metrics were the second-best for a full year and only slightly lower than our record performance in 2015.

Shown above are the factors that contributed to the $146 million decline in full year Automotive segment pre-tax profit. The lower profit was more than explained by higher warranty costs, including about $600 million for the door latch recall we announced in the third quarter of 2016.

Market factors were favorable, driven by strong mix in all regions except South America. This more than offset unfavorable dealer stock changes which reflected stock reductions this year compared to increases in 2015 in North America, Europe, and Asia Pacific.

North America generated a full year pre-tax profit of $9 billion with an operating margin of 9.7%.

North America industry, at 21.8 million units, was up 300,000 units, reflecting increases in Mexico, United States, and Canada. U.S. industry, at 17.9 million units, was up 100,000 units.

Our North America market share was down one-tenth of a percentage point, with U.S. share down by one-tenth of a point to 14.6%. The decrease was driven by lower retail sales, mainly cars. F-Series retail share was a partial offset, improving two-tenths from a year ago.

Included in North America's profit is about $600 million for the door latch recall we announced in the third quarter, which negatively impacted North America's operating margin by six-tenths of a percentage point.

North America’s full year pre-tax profit was $344 million lower than a year ago driven by unfavorable stock changes and higher recall costs.

The unfavorable stock changes reflect decreases in dealer stock this year compared to increases a year ago when we were building F-150 stock after the Kansas City plant launch. It also reflects actions to align production to demand for several vehicles.

The higher product costs reflect primarily the impact of our first major refresh of the Super Duty.

The non-repeat of last year’s one-time ratification bonus related to the UAW agreement was a partial offset.

Within the United States, average retail transaction prices were $1,300 per vehicle higher compared to a year ago, more than double the industry average increase. Our incentives were up as a percent of revenue, but less than the industry average.

For 2017, we expect our North America operating margin and profit to be strong but lower than in 2016, mainly due to unfavorable volume and mix, and increased investments in emerging opportunities.

All full year key metrics were lower than a year ago, reflecting the difficult external environment.

Industry volume for the region, at 3.7 million units, was 500,000 units lower than 2015 due to Brazil.

Our market share for the region, at 8.8%, was down eight-tenths of a percentage point, reflecting our continued focus on optimizing more profitable share amid higher industry discounting.

South America's full year loss was $277 million greater than in 2015. This was more than explained by the unfavorable effects of high local inflation and weaker local currencies exceeding higher net pricing and favorable cost performance.

For 2017, we expect South America's loss to improve as a result of improving market conditions as the economy begins to recover.

Europe delivered a record full year profit of $1.2 billion and a record operating margin of 4.2%, both up sharply from a year ago.

Europe industry volume, at 20.1 million units, was 5% higher than a year ago.

Europe’s market share, at 7.7%, was flat from a year ago.

In 2016, Ford remained Europe’s best-selling commercial vehicle brand and improved its share in the commercial vehicle market, reflecting the strength of the Transit line and Ranger.

Europe’s full year pre-tax profit improved $946 million from a year ago. This was driven by favorable mix, reflecting increasing demand for our higher trim series across all major vehicle lines, and improved cost performance, reflecting our continued focus on material cost reductions. Improved results in Russia also contributed to Europe’s favorable year-over-year profit improvement.

For 2017, we expect Europe to remain profitable, although at levels below 2016 due mainly to a weaker sterling resulting from Brexit and higher costs associated with continued investment in the business, including the launch of Fiesta and Ecosport. Net pricing is expected to be a partial offset. We also expect continued improvements from our business in Russia.

Middle East & Africa’s operating margin and pre-tax results were down sharply, reflecting difficult external conditions resulting in lower volume and unfavorable exchange, primarily the South African rand.

Industry volume for the region, at 3.6 million units, was down 700,000 units from 2015. Lower industry volume was the primary driver in the 14% reduction in our wholesale volume. Our market share for the region was 4.5%, up one-tenth of a percentage point.

For 2017, we expect results in Middle East & Africa to improve due to lower costs, higher net pricing, and favorable exchange.

In 2016, Asia Pacific generated its second-best full year pre-tax profit.

Wholesale volume increased by 10% while revenue from consolidated operations was up 12%.

Asia Pacific industry was 42.1 million units, up 3.0 million units from 2015, primarily explained by a 2.9 million unit increase in China industry volume, estimated at 26.4 million units. The increase was driven by the government purchase tax incentive for vehicles with engine displacements of 1.6 liters or lower.

Our Asia Pacific market share was 3.8%, up two-tenths of a percentage point. The improvement in share was driven by new product introductions, including Taurus, Edge, Lincoln MKX, and Lincoln MKZ.

Our China joint ventures contributed $1.4 billion to Asia Pacific’s pre-tax profit, reflecting our equity share of the unconsolidated JVs’ after-tax earnings; this was $75 million lower than in 2015. Our China joint ventures’ net income margin was 14.6%, a reduction of 1 percentage point from 2015. The decline in margin reflects negative industry pricing in China and a higher mix of vehicles with engine displacement of 1.6 liters or lower.

Asia Pacific’s full year profit was $627 million, down $138 million from 2015, reflecting lower net pricing, adverse exchange effects (mainly a weaker Chinese renminbi), and unfavorable cost performance.

Lower net pricing compared to a year ago reflects continued negative pricing trends in China.

Unfavorable cost performance was driven by cost increases to support higher volumes and continued investment for future product and regulatory actions. The investments in structural cost were offset partially by our continued focus on material cost efficiencies.

Volume and mix were up reflecting higher industry volume in China and improved mix from new product launches.

For 2017, we expect Asia Pacific’s profit to improve due to favorable volume and mix. This will be offset, in part, by lower net pricing which will be lower due to continued negative China industry pricing and unfavorable exchange, mainly the Chinese renminbi.

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

FINANCIAL SERVICES SEGMENT

In general, we measure year-over-year changes in Ford Credit's pre-tax results using the causal factors listed below:

- Volume and Mix:
  - Volume primarily measures changes in net financing margin driven by changes in average managed receivables at prior period financing margin yield (defined below in financing margin) at prior period exchange rates. Volume changes are primarily driven by the volume of new and used vehicle sales and leases, the extent to which Ford Credit purchases retail installment sale and lease contracts, the extent to which Ford Credit provides wholesale financing, the sales price of the vehicles financed, the level of dealer inventories, Ford-sponsored special financing programs available exclusively through Ford Credit, and the availability of cost-effective funding for the purchase of retail installment sale and lease contracts and to provide wholesale financing
  - Mix primarily measures changes in net financing margin driven by period over period changes in the composition of Ford Credit's average managed receivables by product and by country or region

- Financing Margin:
  - Financing margin variance is the period-to-period change in financing margin yield multiplied by the present period average managed receivables at prior period exchange rates. This calculation is performed at the product and country level and then aggregated. Financing margin yield equals revenue, less interest expense and scheduled depreciation for the period, divided by average managed receivables for the same period
  - Financing margin changes are driven by changes in revenue and interest expense. Changes in revenue are primarily driven by the level of market interest rates, cost assumptions in pricing, mix of business, and competitive environment. Changes in interest expense are primarily driven by the level of market interest rates, borrowing spreads, and asset-liability management

- Credit Loss:
  - Credit loss is the change in the provision for credit losses at prior period exchange rates. For analysis purposes, management splits the provision for credit losses into net charge-offs and the change in the allowance for credit losses
  - Net charge-off changes are primarily driven by the number of repossessions, severity per repossession, and recoveries. Changes in the allowance for credit losses are primarily driven by changes in historical trends in credit losses and recoveries, changes in the composition and size of Ford Credit's present portfolio, changes in trends in historical used vehicle values, and changes in economic conditions. For additional information on the allowance for credit losses, refer to the "Critical Accounting Estimates - Allowance for Credit Losses" section below

- Lease Residual:
  - Lease residual measures changes to residual performance at prior period exchange rates. For analysis purposes, management splits residual performance primarily into residual gains and losses, and the change in accumulated supplemental depreciation
  - Residual gain and loss changes are primarily driven by the number of vehicles returned to Ford Credit and sold, and the difference between the auction value and the depreciated value (which includes both base and accumulated supplemental depreciation) of the vehicles sold. Changes in accumulated supplemental depreciation are primarily driven by changes in Ford Credit's estimate of the expected auction value at the end of the lease term, and changes in the estimate of the number of vehicles that will be returned to it and sold. For additional information on accumulated supplemental depreciation, refer to the "Critical Accounting Estimates - Accumulated Depreciation on Vehicles Subject to Operating Leases" section below

- Exchange:
  - Reflects changes in pre-tax results driven by the effects of converting functional currency income to U.S. dollars

- Other:

Primarily includes operating expenses, other revenue, and insurance expenses at prior period exchange rates

Changes in operating expenses are primarily driven by salaried personnel costs, facilities costs, and costs associated with the origination and servicing of customer contracts

In general, other revenue changes are primarily driven by changes in earnings related to market valuation adjustments to derivatives (primarily related to movements in interest rates) and other miscellaneous items

Ford Credit’s receivables were higher than a year ago, in line with expectations, and while full year pre-tax profit was lower, it remained solid at $1.9 billion. Portfolio performance remained robust, despite higher LTRs. Origination, servicing, and collection practices remained disciplined and consistent.

Ford Credit’s lower full year pre-tax profit is primarily explained by unfavorable lease residual performance and credit losses. Favorable volume and mix, driven by growth in consumer and non-consumer finance receivables globally and operating leases in North America, was a partial offset. Lease residual performance primarily reflects higher depreciation in North America as we expect lower auction values in the future. Credit loss performance primarily reflects higher charge-offs in North America.

For 2017, we continue to expect Ford Credit’s full year pre-tax profit to be about $1.5 billion, which is lower compared with 2016 due to the impact of increased accumulated depreciation driven by expected lower residual values for Ford Credit’s lease portfolio in North America.

Over the last several years, we have seen industry lease share grow. As a result, the supply of off-lease vehicles is higher, and will continue to grow for the next several years. The increased supply of used vehicles is resulting in lower auction values, and we expect this trend to continue. Ford Credit’s off-lease vehicle auction performance reflects industry trends. In 2016, Ford Credit’s off-lease auction values were lower than 2015, primarily reflecting higher return volume and lower auction values on smaller vehicles.

Ford Credit’s 2016 full year lease share was flat compared with 2015 and remains below the industry, reflecting the parameters of our leasing strategy which focuses on supporting sales, protecting residual values, and managing the trade cycle. Industry off-lease volume is expected to continue to grow. Ford Credit continues to plan for lower auction values.

The average placement terms and average FICO score have remained stable for several years, reflecting Ford Credit’s disciplined and consistent underwriting practices.

ALL OTHER

All Other is a combination of Central Treasury Operations (formerly Other Automotive) and Ford Smart Mobility LLC, two operating segments that did not meet the quantitative thresholds in this reporting period to qualify as reportable segments.

The Central Treasury Operations segment is primarily engaged in decision making for investments, risk management activities, and providing financing for the Automotive segment. Interest income (excluding interest earned on our extended service contract portfolio that is included in our Automotive segment), interest expense, gains and losses on cash equivalents and marketable securities, and foreign exchange derivatives associated with intercompany lending are included in the results of Central Treasury Operations. The underlying assets and liabilities, primarily cash and cash equivalents, marketable securities, debt, and derivatives, remain with the Automotive segment.

Ford Smart Mobility LLC is a subsidiary formed to design, build, grow, and invest in emerging mobility services. Designed to compete like a start-up company, Ford Smart Mobility LLC will design and build mobility services on its own, and collaborate with start-ups and tech companies.

In 2016, pre-tax results for All Other were a loss of $867 million, a $71 million higher loss compared with a year ago. This increase is more than explained by higher net interest expense, offset partially by lower net losses on cash equivalents and marketable securities.

Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations (Continued)

SPECIAL ITEMS

As detailed in Note 4 of the Notes to the Financial Statements, special items are reflected as a separate reconciling item, as opposed to being allocated among the Automotive segment, Financial Services segment, and All Other. This reflects the fact that management excludes these items from its review of operating segment results for purposes of measuring segment profitability and allocating resources.

Our pre-tax and tax special items were as follows:

TAXES

Our provision for income taxes for full year 2016 was $2.2 billion, resulting in an effective tax rate of 32.2%.

Our full year 2016 adjusted effective tax rate, which excludes special items, was 31.9%.

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

RESULTS OF OPERATIONS - 2015

TOTAL COMPANY

Net income attributable to Ford. The chart below shows our net income attributable to Ford for full year 2015:

Net income attributable to Ford for full year 2015 was $7.4 billion or $1.84 diluted earnings per share of Common and Class B Stock, an increase of $6.1 billion or $1.53 per share compared with 2014. Full year 2015 pre-tax results of our Automotive segment, Financial Services segment, All Other, Special Items, and Taxes are discussed in the following sections in "Results of Operations."

Revenue. Company revenue for full year 2015 was $149.6 billion, $5.5 billion higher than 2014.

Cost of sales and Selling, administrative, and other expenses for full year 2015 were $134.5 billion, a decrease of $2.3 billion compared with 2014. The detail for the change is shown below (in billions):

	2015 Lower/(Higher) 2014
Volume and mix, exchange, and other	$ 1.4
Contribution costs	
Material excluding commodities	(3.7)
Commodities	0.9
Warranty, freight, and other	1.4
Structural costs	(1.8)
Special items	4.1
Total	$ 2.3

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

Equity. At December 31, 2015, total equity attributable to Ford was $28.6 billion, an increase of $4.2 billion compared with December 31, 2014. The detail for this change is shown below (in billions):

	Increase/(Decrease)
Net income	$ 7.4
Dividends	(2.4)
Other comprehensive income	(1.0)
Compensation-related equity issuances	0.3
Treasury stock share repurchases	(0.1)
Total	$ 4.2

The chart below shows our full year 2015 total Company adjusted pre-tax results and pre-tax results of our Automotive segment by regional business unit, our Financial Services segment, and All Other, which is mainly net interest expense.

We achieved a record Company full-year adjusted pre-tax profit of $10.8 billion in 2015. Collectively, our operations outside of North America were profitable and every business unit, with the exception of South America, was profitable in 2015. In Europe, we earned $259 million, reflecting the progress of our Transformation Plan announced in 2012. Asia Pacific had its best-ever annual profit. North America and Ford Credit continued to deliver benchmark profitability. And as shown below the chart, all business units improved compared with 2014.

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

AUTOMOTIVE SEGMENT

The charts on the following pages detail 2015 key metrics and the change in 2015 pre-tax results compared with 2014 by causal factor for our Automotive segment and its business units —North America, South America, Europe, Middle East & Africa, and Asia Pacific.

Shown above are the key market factors and financial metrics for our Automotive segment for full year 2015. Our Automotive operating margin of 6.8 percent was the highest since at least the 1990s. Each of the key metrics improved compared to 2014:

•Wholesale volume was up 5%,
•Automotive revenue was up 4%, or 9% at constant exchange,
•Automotive operating margin was up 2.2 points or nearly 50%, and
•Record full year Automotive pre-tax profit, at $9.6 billion, was up 53%.

Global industry volume, estimated at 88.2 million units, was up 0.1 million units from a year ago. Our global market share, at 7.4%, was up three-tenths of a percentage point with gains in South America and Europe.

As shown above, our full year Automotive segment pre-tax profit improved by $3.3 billion. The improvement was driven by $7.4 billion of favorable market factors, reflecting the success of our new product launches, our Asia Pacific growth strategy, as well as industry growth in North America and Europe. Cost increases were mainly product-related costs and manufacturing and engineering expense that supported our growth in 2015, and will support further growth in 2016 and beyond.

North America had an outstanding year. We delivered substantial top-line growth, operating margin at 10.2%, and full year pre-tax profit of $9.3 billion—up 26%.

The North America industry volume improved compared with a year ago; the U.S. industry volume totaled 17.8 million units, up 1 million units. U.S. market share was flat compared to last year. In addition, although not shown above, U.S. retail share increased one-tenth of a percentage point to 13.0% driven by strong demand for our newest products, including F-150 and Mustang.

Favorable volume and mix and higher net pricing drove North America’s pre-tax profit higher than a year ago. Higher costs, including a one-time ratification bonus in Other related to the UAW agreement in the fourth quarter, and unfavorable exchange were partial offsets.

We achieved our highest annual sales in the United States since 2005. Ford remained the best-selling vehicle brand in the United States and Ford F-Series was the best-selling vehicle in the United States for the 34th straight year.

Wholesale volume, revenue, and operating margin were each lower than a year ago, reflecting the continued deterioration of the business environment in South America. Despite the tough conditions, South America’s pre-tax loss for the full year was reduced by $332 million, or 29%, compared to a year ago.

The South America industry volume, at 4.2 million units, was down 1.1 million units. Most of this was in Brazil. Ford’s market share in South America, at 9.6%, was up seven-tenths of a percentage point reflecting our strong performance in Brazil with the all-new Ka.

The full year pre-tax loss in South America was less severe than a year ago, reflecting higher net pricing and market share, partially offset by lower industry.

Our team in the region continued to work on all areas of the business to counter the effects of the difficult business environment and position ourselves to be able to recover quickly once conditions begin to improve.

With the exception of revenue, which was impacted adversely by the strong U.S. dollar, all metrics for the full year were better than a year ago.

The Europe industry volume was 600,000 units higher compared to a year ago, more than explained by the improvement in the Europe 20 markets. Our total Europe market share in the region was up five-tenths of a percentage point to 7.7%, reflecting the strength of EcoSport and Mondeo and geographic mix.

In 2015, Ford became Europe’s best-selling commercial vehicle brand, reflecting the strength of our renewed Transit line-up and Ranger as well as our dedicated dealer network support.

In Europe, our full year pre-tax profit was $259 million, up over $850 million compared to a year ago. The improvement in Europe reflects favorable market factors and improved costs flowing through to the bottom line, partially offset by unfavorable exchange and the consolidation of Ford Sollers, our joint venture in Russia. Returning to profitability in 2015 reflected the progress of our Transformation Plan announced in 2012.

Our pre-tax results and operating margin improved from a year ago, reflecting higher net pricing offset by lower volume. Wholesale volume and revenue declined compared to a year ago.

The industry volume for the region was flat and our market share declined two-tenths of a percentage point due to industry growth in markets in which we do not participate. Market share was higher compared to 2014 in the major markets in which we do participate.

In Asia Pacific, we had our best year yet as we continued to execute our growth strategy.

Asia Pacific achieved record volume, revenue, operating margin, and pre-tax profit in 2015, mainly reflecting the strength of our new products, including the all-new three-row Edge, Figo, Everest, Lincoln MKX, Taurus, and new Ranger.

Our China joint ventures contributed $1.5 billion to pre-tax profit in 2015, reflecting our equity share of the unconsolidated joint ventures' after-tax earnings; this was $234 million higher than last year.

The industry volume for the region was 39.1 million units, down 600,000 units from a year ago, primarily explained by a decrease in the China industry volume. For the full year, both our Asia Pacific regional market share of 3.6% and our China market share of 4.8% were higher than a year ago.

Asia Pacific delivered an outstanding year with a record pre-tax profit of $765 million, up 29% from a year ago. Favorable volume was driven by strong industry in China, where we were able to leverage the government incentive program with our strong line-up of vehicles with 1.6L or smaller engines. Higher mix reflected the strength of our new products, highlighted by the performance of the locally produced all-new three-row Edge. Higher structural cost was a partial offset to the improvement, as we continued to invest for further growth in the region.

FINANCIAL SERVICES SEGMENT

Ford Credit earned a pre-tax profit of $2.1 billion in 2015, up $232 million from 2014, and its receivables were higher than 2014.

Ford Credit's 2015 pre-tax profit improved compared with 2014. The improvement is more than explained by favorable volume and mix, driven by growth in all products globally. Higher credit losses and the adverse effect of the stronger U.S. dollar were partial offsets. The higher credit losses, primarily in North America, reflect reserve increases in 2015 compared with reserve releases in 2014. Charge-offs were also higher.

ALL OTHER

Our full year 2015 All Other pre-tax results were a loss of $796 million, a $41 million higher loss compared with a year ago. This increase primarily reflects higher net interest expense.

SPECIAL ITEMS

Our pre-tax and tax special items were as follows:

TAXES

Our tax provision for full year 2015 was $2.9 billion, resulting in an effective tax rate of 28.1%.

Our full year 2015 adjusted effective tax rate, which excludes special items, was 28.6%.

LIQUIDITY AND CAPITAL RESOURCES

Automotive Segment

Liquidity. One of our key priorities is to maintain a strong balance sheet, while at the same time having resources available to grow our core business and invest in emerging opportunities. Based on our planning assumptions, we believe we have sufficient liquidity and capital resources to continue to invest in new products and services that customers want and value, transform and grow our business, pay our debts and obligations as and when they come due, pay a sustainable dividend, and provide protection within an uncertain global economic environment.

Our key balance sheet metrics include total cash, cash equivalents, and marketable securities (collectively “Automotive cash”), Automotive liquidity, which includes Automotive cash and total available committed credit lines, and cash net of debt.

At December 31, 2016, we had $27.5 billion of Automotive cash, of which about 89% was held by consolidated entities domiciled in the United States. We target to have an average ongoing Automotive cash balance of about $20 billion. We expect to have periods when we will be above or below this amount due to (i) future cash flow expectations, such as for pension contributions, debt maturities, capital investments, investments in emerging opportunities, or restructuring requirements, (ii) short-term timing differences, and (iii) changes in the global economic environment.

Our Automotive cash investments primarily include U.S. Department of Treasury obligations, federal agency securities, bank time deposits with investment-grade institutions, corporate investment-grade securities, commercial paper rated A-1/P-1 or higher, and debt obligations of a select group of non-U.S. governments, non-U.S. governmental agencies, and supranational institutions. The average maturity of these investments is approximately one year, and is adjusted based on market conditions and liquidity needs. We monitor our Automotive cash levels and average maturity on a daily basis.

In addition to our target Automotive cash balance, we also target to maintain a corporate credit facility for our Automotive business of about $10 billion to protect against exogenous shocks. Our corporate credit facility is discussed below. We assess the appropriate long-term target for total Automotive liquidity, comprised of Automotive cash and the corporate credit facility, to be about $30 billion, which is an amount we believe is sufficient to support our business priorities and to protect our business. At December 31, 2016, we had $38.3 billion of Automotive liquidity. Our Automotive cash and Automotive liquidity targets could be reduced over time based on improved operating performance and changes in our risk profile.

Changes in Automotive Cash. Changes in Automotive segment cash are summarized below (in billions):

In managing our Automotive business, we classify changes in Automotive cash into operating and other items. Operating items include: Automotive segment pre-tax profits, capital spending, depreciation and tooling amortization, changes in working capital, and All Other and timing differences. Non-operating items include: separation payments, transactions with other segments, acquisitions and divestitures, changes in Automotive debt, contributions to funded pension plans, and dividends paid to shareholders.

Automotive operating cash flow was $6.4 billion in 2016, more than explained by Automotive segment pre-tax profits. Automotive total cash flow of $3.9 billion in 2016 includes $2.8 billion in proceeds from our unsecured debt issuance in the United States.

Capital spending was $6.9 billion in 2016, and is projected to be about $7 billion in 2017. Based on expected cash flows and the identification of additional opportunities for profitable growth, the ongoing amount of capital spending to support product development, growth, restructuring, and infrastructure is expected to be between $8 billion and $9 billion per year through 2020.

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

With respect to "Changes in working capital," in general we carry relatively low Automotive segment trade receivables compared with our trade payables because the majority of our Automotive wholesales are financed (primarily by Ford Credit) immediately upon sale of vehicles to dealers, which generally occurs at the time the vehicles are gate-released shortly after being produced. In addition, our inventories are lean because we build to order, not for inventory. In contrast, our Automotive trade payables are based primarily on industry-standard production supplier payment terms generally ranging between 30 days to 45 days. As a result, our cash flow tends to improve as wholesale volumes increase, but can deteriorate significantly when wholesale volumes drop sharply. These working capital balances generally are subject to seasonal changes that can impact cash flow. For example, we typically experience cash flow timing differences associated with inventories and payables due to our annual summer and December shutdown periods, when production, and therefore inventories and wholesale volumes, are usually at their lowest levels, while payables continue to come due and be paid. The net impact of this typically results in cash outflows from changes in our working capital balances during these shutdown periods.

Available Credit Lines. Total committed Automotive credit lines at December 31, 2016 were $11.9 billion, consisting of $10.4 billion of our corporate credit facility and $1.5 billion of local credit facilities available to non-U.S. Automotive affiliates. At December 31, 2016, the amount available under the corporate credit facility was about $10.4 billion with about $35 million utilized for letters of credit. At December 31, 2016, the amount available under local credit facilities was about $500 million with about $1 billion utilized.

Lenders under our corporate credit facility have commitments to us totaling $13.4 billion, with 75% of the commitments maturing on April 30, 2021 and 25% of the commitments maturing on April 30, 2019. We have allocated $3 billion of commitments to Ford Credit on an irrevocable and exclusive basis to support its growth and liquidity. Any borrowings by Ford Credit under the corporate credit facility would be guaranteed by us.

The corporate credit facility is unsecured and free of material adverse change conditions to borrowing, restrictive financial covenants (for example, interest or fixed charge coverage ratio, debt-to-equity ratio, and minimum net worth requirements), and credit rating triggers that could limit our ability to obtain funding. The corporate credit facility contains a liquidity covenant that requires us to maintain a minimum of $4 billion in aggregate of domestic cash, cash equivalents, and loaned and marketable securities and/or availability under the facility. If our senior, unsecured, long-term debt does not maintain at least two investment grade ratings from Fitch, Moody's, and S&P (each as defined under "Credit Ratings" below), the guarantees of certain subsidiaries will be required.

Debt. Total Automotive debt at December 31, 2016 was $15.9 billion, which is about $3.1 billion higher than at December 31, 2015. The increase primarily reflects our unsecured debt issuance in the United States, local funding in international markets and foreign currency exchange, offset partially by debt repayments, including repayments to the U.S. Department of Energy.

U.S. Department of Energy ("DOE") Advanced Technology Vehicle Manufacturer ("ATVM") Incentive Program. See Note 14 of the Notes to the Financial Statements for information regarding the ATVM loan.

Leverage. We manage Automotive debt levels with a leverage framework to maintain strong, investment grade credit ratings through a normal business cycle. The leverage framework includes a ratio of Automotive debt, underfunded pension liabilities, operating leases, and other adjustments, divided by Automotive income before income tax, adjusted for depreciation, amortization, interest expense on Automotive debt, and other adjustments. Ford Credit's leverage is calculated as a separate business as described in the Liquidity - Financial Services section of Item 7. Ford Credit is self-funding and its debt, which is used to fund its operations, is separate from our Automotive debt.

Financial Services Segment

Ford Credit

Funding Overview. Ford Credit’s primary funding and liquidity objective is to maintain a strong investment grade balance sheet with ample liquidity to support its financing activities and growth under a variety of market conditions, including short-term and long-term market disruptions. Ford Credit’s funding strategy remains focused on diversification, and it plans to continue accessing a variety of markets, channels, and investors.

Ford Credit’s liquidity profile continues to be diverse, robust, and focused on maintaining liquidity levels that meet its business and funding requirements. Ford Credit annually stress tests its balance sheet and liquidity to ensure that it continues to meet its financial obligations through economic cycles.

Funding Sources. Ford Credit’s funding sources include primarily unsecured debt and securitization transactions (including other structured financings). Ford Credit issues both short-term and long-term debt that is held by both institutional and retail investors, with long-term debt having an original maturity of more than 12 months. Ford Credit sponsors a number of securitization programs that can be structured to provide both short-term and long-term funding through institutional investors in the United States and international capital markets.

Ford Credit obtains short-term unsecured funding from the sale of floating rate demand notes under its Ford Interest Advantage program and by issuing unsecured commercial paper in the United States and other international markets. At December 31, 2016, the principal amount outstanding of Ford Interest Advantage notes, which may be redeemed at any time at the option of the holders thereof without restriction, was $6 billion. At December 31, 2016, the principal amount outstanding of Ford Credit’s unsecured commercial paper was $4.5 billion, which primarily represents issuance under its commercial paper program in the United States. Ford Credit maintains multiple sources of readily available liquidity to fund the payment of its unsecured short-term debt obligations.

Funding Portfolio. The chart below shows the trends in funding for Ford Credit’s managed receivables:

Managed receivables of $137 billion at the end of 2016 were funded primarily with term debt and term asset-backed securities. Securitized funding as a percent of managed receivables was 37%.

Ford Credit expects the mix of securitized funding to trend lower over time. The calendarization of the funding plan may result in quarterly fluctuations of the securitized funding percentage.

Public Term Funding Plan. The chart below shows Ford Credit's issuances for full-year 2014, 2015, and 2016, and its planned issuances for full-year 2017, excluding short-term funding programs:

In 2016, Ford Credit completed $28 billion of public term funding.

For 2017, Ford Credit projects full-year public term funding in the range of $24 billion to $30 billion. Through February 8, 2017, Ford Credit has completed over $5 billion of public term issuances.

Liquidity. The chart below shows Ford Credit's liquidity sources and utilization:

Ford Credit's liquidity available for use will fluctuate quarterly based on factors including near-term debt maturities, receivable growth, and timing of funding transactions. Ford Credit targets liquidity of at least $25 billion. At December 31, 2016, Ford Credit's liquidity available for use was $27 billion, $3.5 billion higher than year-end 2015.

Ford Credit's sources of liquidity include cash, committed asset-backed facilities, unsecured credit facilities, and the corporate credit facility allocation.

Ford Credit's balance sheet is inherently liquid because of the short-term nature of its finance receivables, investment in operating leases, and cash. Ford Credit ensures its cumulative debt maturities have a longer tenor than its cumulative asset maturities. This positive maturity profile is intended to provide Ford Credit with additional liquidity after all of its assets have been funded.

Leverage. Ford Credit uses leverage, or the debt-to-equity ratio, to make various business decisions, including evaluating and establishing pricing for finance receivable and operating lease financing, and assessing its capital structure.

The chart below shows the calculation of Ford Credit's financial statement leverage and managed leverage:

Ford Credit believes that managed leverage is useful to its investors because it reflects the way Ford Credit manages its business. Ford Credit deducts cash, cash equivalents, and marketable securities (excluding amounts related to insurance activities) because they generally correspond to excess debt beyond the amount required to support its operations and amounts to support on-balance sheet securitization transactions. Ford Credit makes derivative accounting adjustments to its assets, debt, and equity positions to reflect the impact of interest rate instruments Ford Credit uses in connection with its term-debt issuances and securitization transactions. The derivative accounting adjustments related to these instruments vary over the term of the underlying debt and securitized funding obligations based on changes in market interest rates. Ford Credit generally repays its debt obligations as they mature. As a result, Ford Credit excludes the impact of these derivative accounting adjustments on both the numerator and denominator in order to exclude the interim effects of changes in market interest rates.

Ford Credit plans its managed leverage by considering prevailing market conditions and the risk characteristics of its business. At December 31, 2016, Ford Credit's financial statement leverage was 9.9:1, and managed leverage was 9.2:1. Ford Credit targets managed leverage in the range of 8:1 to 9:1. Managed leverage is above the targeted range reflecting growth in receivables and the continued impact of a strong U.S. dollar, but it continues to trend toward the target range.

Total Company

Pension Plan Contributions and Strategy. Our strategy is to reduce the risk of our funded defined benefit pension plans, including minimizing the volatility of the value of our pension assets relative to pension liabilities and the need for unplanned use of capital resources to fund the plans. The strategy reduces balance sheet, cash flow, and income exposures and, in turn, reduces our risk profile. The key elements of this strategy include:

- Limiting liability growth in our defined benefit plans by closing participation to new participants;
- Reducing plan deficits through discretionary cash contributions;
- Progressively re-balancing assets to more fixed income investments, with a target asset allocation of about 80% fixed income investments and 20% growth assets, which will provide a better matching of plan assets to the characteristics of the liabilities, thereby reducing our net exposure; and
- Taking other strategic actions to reduce pension liabilities.

Worldwide, our defined benefit pension plans were underfunded by $8.9 billion at December 31, 2016, a deterioration of $700 million from December 31, 2015, due to lower discount rates partially offset by asset returns and contributions. Of the $8.9 billion underfunded status at year-end 2016, $5.9 billion, or about 66%, is associated with our unfunded plans.

The U.S. weighted-average discount rate decreased 24 basis points to 4.03% at year-end 2016 from 4.27% at year-end 2015. The non-U.S. weighted average discount rate decreased 76 basis points to 2.44% at year-end 2016 from 3.20% at year-end 2015.
Asset returns in 2016 for our U.S. plans were 8.6% reflecting fixed income gains as interest rates fell. The fixed income mix in our U.S. plans at year-end 2016 was 75%, two percentage points lower than year-end 2015. Asset returns for our non-U.S. plans were 14%, reflecting fixed income gains and favorable exchange. The fixed income mix in our non-U.S. plans at year-end 2016 was 76%, two percentage points higher than year-end 2015.

In 2016, consistent with our plan, we contributed $1.2 billion to our global funded pension plans (most of which were mandatory contributions), an increase of $100 million compared with 2015. During 2017, we expect to contribute $1 billion from Automotive cash to our global funded pension plans (most of which are mandatory contributions). We also expect to make about $300 million of benefit payments to participants in unfunded plans, for a combined total of $1.3 billion. Based on current assumptions and regulations, we do not expect to have a legal requirement to fund our major U.S. plans in 2017. After 2017, we expect contributions to our global funded plans of about $1 billion per year, limited to ongoing service cost. While full funding and de-risking will be dependent on many factors, including future global interest rates, based on our present assumptions we expect our global funded pension plans will be fully funded in 2018.

For a detailed discussion of our pension plans, see Note 13 of the Notes to the Financial Statements.

Return on Invested Capital. We analyze total company performance using a Return on Invested Capital ("ROIC") financial metric based on an after-tax rolling five-year average basis, which we believe is appropriate given our industry's product and investment cycles. The following table contains the calculation of our ROIC for the years shown:

CREDIT RATINGS

Our short-term and long-term debt is rated by four credit rating agencies designated as nationally recognized statistical rating organizations ("NRSROs") by the U.S. Securities and Exchange Commission:

- DBRS Limited ("DBRS");
- Fitch, Inc. ("Fitch");
- Moody's Investors Service, Inc. ("Moody's"); and
- Standard & Poor's Ratings Services, a division of McGraw Hill Financial ("S&P").

In several markets, locally-recognized rating agencies also rate us. A credit rating reflects an assessment by the rating agency of the credit risk associated with a corporate entity or particular securities issued by that entity. Rating agencies' ratings of us are based on information provided by us and other sources. Credit ratings are not recommendations to buy, sell, or hold securities, and are subject to revision or withdrawal at any time by the assigning rating agency. Each rating agency may have different criteria for evaluating company risk and, therefore, ratings should be evaluated independently for each rating agency.

In the first half of 2016, Ford and Ford Credit received rating upgrades from each of these NRSROs. The following chart summarizes certain of the credit ratings and outlook presently assigned by these four NRSROs:

NRSRO RATINGS

	Ford			Ford Credit			NRSROs
	Issuer Default / Corporate / Issuer Rating	Long-Term Senior Unsecured	Outlook / Trend	Long-Term Senior Unsecured	Short-Term Unsecured	Outlook / Trend	Minimum Long-Term Investment Grade Rating
DBRS	BBB	BBB	Stable	BBB	R-2M	Stable	BBB (low)
Fitch	BBB	BBB	Stable	BBB	F2	Stable	BBB-
Moody's	N/A	Baa2	Stable	Baa2	P-2	Stable	Baa3
S&P	BBB	BBB	Stable	BBB	A-2	Stable	BBB-

2017 INDUSTRY AND GDP PLANNING ASSUMPTIONS

Based on the current environment, our industry and GDP planning assumptions for 2017 include the following:

Overall, we expect growth in GDP globally and in all major markets shown above. Similarly, we expect growth in industry volume globally and in all major markets shown above, except the United States. Industry volume in the United States is expected to decline but remain strong.

PRODUCTION VOLUMES

Our full year 2016 production volumes and first quarter 2017 forecast production volumes for our Automotive business units are as follows (in thousands):

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

OUTLOOK

2017 Company Guidance

Based on the current economic environment, our Company guidance for 2017 includes the following:

After a strong 2016, we expect to deliver another good year in 2017. The total Company outlook shown above is in line with expectations set out at our Investor Day in September 2016.

We are making substantial progress on expanding our business, from a strong, healthy automotive company to one that will be even stronger and bigger as we become an auto and mobility company in the future.

Our 2017 outlook by business unit is as follows:

We expect profits in North America and Europe to be lower than 2016, while we expect to see improvements in results in South America, Middle East & Africa, and Asia Pacific. Results for Ford Credit and All Other are expected to be lower than 2016.

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

Risk Factors

Statements included or incorporated by reference herein may constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are based on expectations, forecasts, and assumptions by our management and involve a number of risks, uncertainties, and other factors that could cause actual results to differ materially from those stated, including, without limitation:

- Decline in industry sales volume, particularly in the United States, Europe, or China, due to financial crisis, recession, geopolitical events, or other factors;
- Lower-than-anticipated market acceptance of Ford's new or existing products or services, or failure to achieve expected growth;
- Market shift away from sales of larger, more profitable vehicles beyond Ford's current planning assumption, particularly in the United States;
- Continued or increased price competition resulting from industry excess capacity, currency fluctuations, or other factors;
- Fluctuations in foreign currency exchange rates, commodity prices, and interest rates;
- Adverse effects resulting from economic, geopolitical, protectionist trade policies, or other events;
- Work stoppages at Ford or supplier facilities or other limitations on production (whether as a result of labor disputes, natural or man-made disasters, tight credit markets or other financial distress, production constraints or difficulties, or other factors);
- Single-source supply of components or materials;
- Labor or other constraints on Ford's ability to maintain competitive cost structure;
- Substantial pension and other postretirement liabilities impairing liquidity or financial condition;
- Worse-than-assumed economic and demographic experience for pension and other postretirement benefit plans (e.g., discount rates or investment returns);
- Restriction on use of tax attributes from tax law "ownership change;"
- The discovery of defects in vehicles resulting in delays in new model launches, recall campaigns, or increased warranty costs;
- Increased safety, emissions, fuel economy, or other regulations resulting in higher costs, cash expenditures, and/or sales restrictions;
- Unusual or significant litigation, governmental investigations, or adverse publicity arising out of alleged defects in products, perceived environmental impacts, or otherwise;
- Adverse effects on results from a decrease in or cessation or clawback of government incentives related to investments;
- Cybersecurity risks to operational systems, security systems, or infrastructure owned by Ford, Ford Credit, or a third-party vendor or supplier;
- Failure of financial institutions to fulfill commitments under committed credit and liquidity facilities;
- Inability of Ford Credit to access debt, securitization, or derivative markets around the world at competitive rates or in sufficient amounts, due to credit rating downgrades, market volatility, market disruption, regulatory requirements, or other factors;
- Higher-than-expected credit losses, lower-than-anticipated residual values, or higher-than-expected return volumes for leased vehicles;
- Increased competition from banks, financial institutions, or other third parties seeking to increase their share of financing Ford vehicles; and
- New or increased credit regulations, consumer or data protection regulations, or other regulations resulting in higher costs and/or additional financing restrictions.

We cannot be certain that any expectation, forecast, or assumption made in preparing forward-looking statements will prove accurate, or that any projection will be realized. It is to be expected that there may be differences between projected and actual results. Our forward-looking statements speak only as of the date of their initial issuance, and we do not undertake any obligation to update or revise publicly any forward-looking statement, whether as a result of new information, future events, or otherwise. For additional discussion, see “Item 1A. Risk Factors” above.

NON-GAAP FINANCIAL MEASURE RECONCILIATIONS

The following charts show our Non-GAAP financial measure reconciliations for: Adjusted Pre-Tax Profit, Adjusted Earnings Per Share, Adjusted Effective Tax Rate, and Ford Credit Managed Receivables. The GAAP reconciliation for Ford Credit Managed Leverage can be found in the Financial Services Segment section of "Liquidity and Capital Resources."

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

2016 SUPPLEMENTAL FINANCIAL INFORMATION

The tables below provide supplemental consolidating financial information. The data is presented by our reportable segments, Automotive and Financial Services. All Other, Special Items, and Adjustments include our operating segments that did not meet the quantitative threshold to qualify as a reportable segment, special items (which primarily consists of our pension and OPEB remeasurement gains and losses), eliminations of intersegment transactions, and deferred tax netting.

Selected Income Statement Information. The following table provides supplemental income statement information, by segment (in millions):

	For the year ended December 31, 2016			
	Automotive	Financial Services	All Other, Special Items, & Adjustments	Consolidated
Revenues	$ 141,546	$ 10,253	$ 1	$ 151,800
Total costs and expenses	135,158	8,904	3,622	147,684
Interest expense on Automotive debt	—	—	894	894
Other income/(loss), net	1,287	438	69	1,794
Equity in net income of affiliated companies	1,747	33	—	1,780
Income/(loss) before income taxes	9,422	1,820	(4,446)	6,796
Provision for/(Benefit from) income taxes	3,109	505	(1,425)	2,189
Net income/(loss)	$ 6,313	$ 1,315	$ (3,021)	$ 4,607

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

Selected Balance Sheet Information. The following tables provide supplemental balance sheet information, by segment (in millions):

	December 31, 2016			
Assets	Automotive	Financial Services	All Other, Special Items, & Adjustments	Consolidated
Cash and cash equivalents	$7,820	$8,077	$ 8	$ 15,905
Marketable securities	19,642	3,280	—	22,922
Financial Services finance receivables, net	—	46,266	—	46,266
Trade and other receivables, less allowances	4,457	6,645	—	11,102
Inventories	8,898	—	—	8,898
Other assets	2,328	1,040	—	3,368
Receivable from other segments	7	784	(791)	—
Total current assets	43,152	66,092	(783)	108,461
Financial Services finance receivables, net	—	49,924	—	49,924
Net investment in operating leases	1,620	27,209	—	28,829
Net property	31,916	156	—	32,072
Equity in net assets of affiliated companies	3,136	153	15	3,304
Deferred income taxes	13,112	206	(3,613)	9,705
Other assets	3,993	1,617	46	5,656
Receivable from other segments	—	895	(895)	—
Total assets	$96,929	$146,252	$ (5,230)	$ 237,951
Liabilities				
Payables	$20,239	$1,057	$—	$21,296
Other liabilities and deferred revenue	18,193	1,120	3	19,316
Automotive debt payable within one year	2,685	—	—	2,685
Financial Services debt payable within one year	—	46,984	—	46,984
Payable to other segments	784	—	(784)	—
Total current liabilities	41,901	49,161	(781)	90,281
Other liabilities and deferred revenue	23,414	972	9	24,395
Automotive long-term debt	13,222	—	—	13,222
Financial Services long-term debt	—	80,079	—	80,079
Deferred income taxes	199	4,105	(3,613)	691
Payable to other segments	895	—	(895)	—
Total liabilities	$79,631	$134,317	$(5,280)	$208,668

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

Selected Cash Flow Information. The following tables provide supplemental cash flow information, by segment (in millions):

	For the year ended December 31, 2016			
Cash flows from operating activities	Automotive	Financial Services	All Other, Special Items, & Adjustments	Consolidated
Net income	$6,313	$1,315	$(3,021)	$4,607
Depreciation and tooling amortization	4,667	4,356	—	9,023
Other amortization	175	(481)	—	(306)
Provision for credit and insurance losses	—	672	—	672
Pension and OPEB expense	2,667	—	—	2,667
Equity investment (earnings)/losses in excess of dividends received	(148)	(30)	—	(178)
Foreign currency adjustments	297	(14)	—	283
Net (gain)/loss on changes in investments in affiliates	(139)	—	—	(139)
Stock compensation	200	10	—	210
Net Change in wholesale and other receivables	—	(1,449)	—	(1,449)
Provision for deferred income taxes	634	844	—	1,478
Decrease/(Increase) in intersegment receivables/payables	540	(543)	3	—
Decrease/(Increase) in accounts receivable and other assets	(2,516)	(339)	—	(2,855)
Decrease/(Increase) in inventory	(815)	—	—	(815)
Increase/(Decrease) in accounts payable and accrued and other liabilities	6,176	414	5	6,595
Other	(2,934)	(73)	3,006	(1)
Interest supplements and residual value support to Financial Services	(4,072)	4,072	—	—
Net cash provided by/(used in) operating activities	11,045	$8,754	$(7)	$19,792
Reconciling Adjustments to Automotive Segment Operating Cash Flows*				
Automotive capital spending	(6,947)			
Net cash flows from non-designated derivatives	610			
Funded pension contributions	1,155			
Separation payments	336			
Other	186			
Automotive Segment Operating Cash Flows	$6,385			

* We measure and evaluate our Automotive segment operating cash flow on a different basis than Net cash provided by/(used in) operating activities in our consolidated statement of cash flows. Automotive segment operating cash flow includes additional elements management considers to be related to our Automotive operating activities, primarily capital spending and non-designated derivatives, and excludes outflows for funded pension contributions, separation payments, and other items that are considered operating cash flows under U.S. GAAP. The table above quantifies the reconciling adjustments to Net cash provided by/(used in) operating activities for the period ended December 31, 2016.

Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations (Continued)

	For the year ended December 31, 2016			
Cash flows from investing activities	Automotive	Financial Services	All Other, Special Items, & Adjustments	Consolidated
Capital spending	$(6,947)	$(45)	$ —	$ (6,992)
Acquisitions of finance receivables and operating leases	—	(56,007)	—	(56,007)
Collections of finance receivables and operating leases	—	38,834	—	38,834
Purchases of equity and debt securities	(24,133)	(7,289)	(6)	(31,428)
Sales and maturities of equity and debt securities	22,598	6,756	—	29,354
Settlements of derivatives	610	215	—	825
Other	171	(60)	(49)	62
Investing activity (to)/from other segments	80	—	(80)	—
Net cash provided by/(used in) investing activities	$(7,621)	$(17,596)	$ (135)	$ (25,352)

Cash flows from financing activities				
Cash dividends	$(3,376)	$—	$—	$(3,376)
Purchases of Common Stock	(145)	—	—	(145)
Net changes in short-term debt	404	3,460	—	3,864
Proceeds from issuance of other debt	3,153	42,808	—	45,961
Principal payments on other debt	(1,053)	(37,744)	—	(38,797)
Other	53	(102)	—	(49)
Financing activity to/(from) other segments	—	(150)	150	—
Net cash provided by/(used in) financing activities	$(964)	$8,272	$150	$7,458
Effect of exchange rate changes on cash and cash equivalents	$(26)	$(239)	$—	$(265)

Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations (Continued)

CRITICAL ACCOUNTING ESTIMATES

We consider an accounting estimate to be critical if: 1) the accounting estimate requires us to make assumptions about matters that were highly uncertain at the time the accounting estimate was made, and 2) changes in the estimate that are reasonably likely to occur from period to period, or use of different estimates that we reasonably could have used in the current period, would have a material impact on our financial condition or results of operations.

Management has discussed the development and selection of these critical accounting estimates with the Audit Committee of our Board of Directors. In addition, there are other items within our financial statements that require estimation, but are not deemed critical as defined above. Changes in estimates used in these and other items could have a material impact on our financial statements.

Warranty and Field Service Actions

Nature of Estimates Required. We provide warranties on the products we sell. Separately, we also periodically perform field service actions related to safety recalls, emission recalls, and other product campaigns. Pursuant to these warranties and field service actions, we will repair, replace or adjust all parts on a vehicle that are defective in factory-supplied materials or workmanship. We accrue the estimated cost of both basic warranty coverages and field service actions at the time of sale.

Assumptions and Approach Used. We establish estimates for warranty and field service action obligations using a patterned estimation model. We use historical information regarding the nature, frequency, and average cost of claims for each vehicle line by model year. We reevaluate our estimate of warranty and field service obligations on a regular basis. Experience has shown that initial data for any given model year may be volatile; therefore, our process relies on long-term historical averages until sufficient data are available. As actual experience becomes available, we use the data to modify the historical averages in order to ensure that the estimate is within the range of likely outcomes. We then compare the resulting accruals with present spending rates to ensure that the balances are adequate to meet expected future obligations. Based on this data, we revise our estimates as necessary. Warranty coverages vary; therefore, our warranty accruals vary depending upon the type of product and the geographic location of its sale for specific periods of time and/or mileage. Field service actions are distinguishable from warranties in that they may occur in periods beyond the basic warranty coverage period. Our best estimate of the obligation related to field service actions includes expected future payments.

Due to the uncertainty and potential volatility of these factors, changes in our assumptions could materially affect our financial condition and results of operations. See Note 24 of the Notes to the Financial Statements for information regarding warranty and product recall related costs.

Pensions and Other Postretirement Employee Benefits

Nature of Estimates Required. The estimation of our defined benefit pension and OPEB plan obligations and expenses requires that we make use of estimates of the present value of the projected future payments to all participants, taking into consideration the likelihood of potential future events such as demographic experience and health care cost increases. Plan obligations and expenses are based on existing retirement plan provisions. No assumption is made regarding any potential future changes to benefit provisions beyond those to which we are presently committed (e.g., in existing labor contracts).

Assumptions and Approach Used. The assumptions used in developing the required estimates include the following key factors:

- Discount rates. Our discount rate assumption is based primarily on the results of a cash flow matching analysis, which matches the future cash outflows for each major plan to a yield curve based on high-quality bonds specific to the country of the plan. Benefit payments are discounted at the rates on the curve to determine the year-end obligations.

Beginning in 2016, we changed the approach used to estimate the service and interest components of net periodic benefit cost for pension and OPEB for plans that utilize a yield curve approach. With this refinement, we measure service and interest costs by applying the specific spot rates along that yield curve to the relevant projected cash flows for each component. We believe this approach provides a more precise measurement of service and interest costs. This refinement has no effect on the measurement of our plan obligations or on full year pension and OPEB expense as lower service and interest costs recorded quarterly are offset in the fourth quarter remeasurement. We have accounted for this as a change in accounting estimate and accordingly, have accounted for it on a prospective basis.

- Expected long-term rate of return on plan assets. Our expected long-term rate of return considers various sources, primarily inputs from a range of advisors for capital market returns, inflation, bond yields, and other variables, adjusted for specific aspects of our investment strategy by plan. Historical returns also are considered where appropriate. The assumption is based on consideration of all inputs, with a focus on long-term trends to avoid short-term market influences.

- Salary growth. Our salary growth assumption reflects our actual experience, long-term outlook, and assumed inflation.

- Inflation. Our inflation assumption is based on an evaluation of external market indicators, including real gross domestic product growth and central bank inflation targets.

- Expected contributions. Our expected amount and timing of contributions are based on an assessment of minimum requirements, cash availability, and other considerations (e.g., funded status, avoidance of regulatory premiums and levies, and tax efficiency).

- Retirement rates. Retirement rates are developed to reflect actual and projected plan experience.

- Mortality rates. Mortality rates are developed to reflect actual and projected plan experience.

- Health care cost trends. Our health care cost trend assumptions are developed based on historical cost data, the near-term outlook, and an assessment of likely long-term trends.

Assumptions are set at each year-end and are generally not changed during the year unless there is a major plan event such as a significant curtailment or settlement that would trigger a plan remeasurement.

See Note 13 of the Notes to the Financial Statements for more information regarding pension and OPEB costs and assumptions.

Pension Plans

Effect of Actual Results. The year-end 2016 weighted average discount rate was 4.03% for U.S. plans and 2.44% for non-U.S. plans, reflecting decreases of 24 and 76 basis points, respectively, compared with year-end 2015. In 2016, the U.S. actual return on assets was 8.6%, which was higher than the expected long-term rate of return of 6.75%. Non-U.S. actual return on assets was 14%, which was higher than the expected long-term rate of return of 5.56%. In total, these differences, in addition to demographic and other updates, resulted in a net loss of $2.8 billion which has been recognized within net periodic benefit cost and reported as a special item.

For 2017, the expected long-term rate of return on assets is 6.75% for U.S. plans unchanged from 2016, and 5.19% for non-U.S. plans, down 37 basis points compared with a year ago, primarily reflecting lower consensus on capital market return expectations from advisors.

De-risking Strategy. We employ a broad global de-risking strategy which increases the matching characteristics of our assets relative to our obligation as funded status improves. Changes in interest rates (which directly influence changes in discount rates), in addition to other factors, have a significant impact on the value of our pension obligation and fixed income asset portfolio. As we de-risk our plans and increase the allocation to fixed income investments over time, we expect the funded status sensitivity to changes in interest rates will be significantly reduced. Changes in interest rates should result in offsetting effects in the value of our pension obligation and the value of the fixed income asset portfolio.

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

Sensitivity Analysis. The December 31, 2016 pension funded status and 2017 expense are affected by year-end 2016 assumptions. Sensitivities to these assumptions may be asymmetric and are specific to the time periods noted. The effects of changes in the factors which generally have the largest impact on year-end funded status and pension expense are discussed below.

Discount rates and interest rates have the largest impact on our obligations and fixed income assets. The table below estimates the impact on our funded status of an increase/decrease in discount rates and interest rates (in millions):

	Basis Point	Increase/(Decrease) in December 31, 2016 Funded Status	
Factor	Change	U.S. Plans	Non-U.S. Plans
Discount rate - obligation	+/- 100 bps.	$4,700/$(5,700)	$4,500/$(5,900)
Interest rate - fixed income assets	+/- 100	(4,100)/5,000	(2,700)/3,500
Net impact on funded status		$600/$(700)	$1,800/$(2,400)

The fixed income asset sensitivity shown excludes other fixed income return components (e.g., changes in credit spreads, bond coupon and active management excess returns), and growth asset returns. Other factors that impact net funded status (e.g., contributions) are not reflected.

Interest rates and the expected long-term rate of return on assets have the largest impact on pension expense. These assumptions are generally set at each year-end for expense recorded throughout the following year. The table below estimates the impact on pension expense of a higher/lower assumption for these factors (in millions):

	Basis Point	Increase/(Decrease) in 2016 Expense	
Factor	Change	U.S. Plans	Non-U.S. Plans
Interest rate - service cost and interest cost	+/- 25 bps.	$30/$(30)	$10/$(10)
Expected long-term rate of return on assets	+/- 25	(100)/100	(60)/60

The impact of changing multiple factors simultaneously cannot be calculated by combining the individual sensitivities. The sensitivity of pension expense to an increase in discount rates assumptions may not be linear.

Other Postretirement Employee Benefits

Effect of Actual Results. The weighted average discount rate used to determine the benefit obligation for worldwide OPEB plans at December 31, 2015 was 4.23%, compared with 4% at December 31, 2016, resulting in a worldwide loss of about $200 million which has been recognized within net periodic benefit cost and reported as a special item.

Sensitivity Analysis. Discount rates and interest rates have the largest impact on our OPEB obligation and expense. The table below estimates the impact on 2017 pension expense of higher/lower assumptions for these factors (in millions):

		Worldwide OPEB	
Factor	Basis Point Change	(Increase)/Decrease 2016 YE Obligation	Increase/(Decrease) 2017 Expense
Discount rate - obligation	+/- 100 bps.	$600/$(800)	N/A
Interest rate - service cost and interest cost	+/- 25	N/A	$5/$(5)

Income Taxes

Nature of Estimates Required. We must make estimates and apply judgment in determining the provision for income taxes for financial reporting purposes. We make these estimates and judgments primarily in the following areas: (i) the calculation of tax credits, (ii) the calculation of differences in the timing of recognition of revenue and expense for tax and financial statement purposes that will ultimately be reported in tax returns, as well as (iii) the calculation of interest and penalties related to uncertain tax positions. Changes in these estimates and judgments may result in a material increase or decrease to our tax provision, which would be recorded in the period in which the change occurs.

Assumptions and Approach Used. We are subject to the income tax laws and regulations of the many jurisdictions in which we operate. These tax laws and regulations are complex and involve uncertainties in the application to our facts and circumstances that may be open to interpretation. We recognize benefits for these uncertain tax positions based upon a process that requires judgment regarding the technical application of the laws, regulations, and various related judicial opinions. If, in our judgment, it is more likely than not that the uncertain tax position will be settled favorably to us, we estimate an amount that ultimately will be realized. This process is inherently subjective, since it requires our assessment of the probability of future outcomes. We evaluate these uncertain tax positions on a quarterly basis, including consideration of changes in facts and circumstances, such as new regulations or recent judicial opinions, as well as the status of audit activities by taxing authorities. Changes to our estimate of the amount to be realized are recorded in our provision for income taxes during the period in which the change occurred.

We must also assess the likelihood that we will be able to recover our deferred tax assets against future sources of taxable income. GAAP requires a reduction of the carrying amount of deferred tax assets by recording a valuation allowance if, based on all available evidence, it is more likely than not (defined as a likelihood of more than 50%) that all or a portion of such assets will not be realized.

We presently believe that a valuation allowance of $909 million is required, primarily related to deferred tax assets in various non-U.S. operations. We believe that we ultimately will recover the remaining $9 billion of deferred tax assets. We have assessed recoverability of these assets, and concluded that no valuation allowance is required.

For additional information regarding income taxes, see Note 21 of the Notes to the Financial Statements.

Allowance for Credit Losses

The allowance for credit losses represents Ford Credit's estimate of the probable credit loss inherent in finance receivables and operating leases as of the balance sheet date. The adequacy of Ford Credit's allowance for credit losses is assessed quarterly and the assumptions and models used in establishing the allowance are evaluated regularly. Because credit losses can vary substantially over time, estimating credit losses requires a number of assumptions about matters that are uncertain. See Note 8 of the Notes to the Financial Statements for more information regarding allowance for credit losses.

Nature of Estimates Required. Ford Credit estimates the probable credit losses inherent in finance receivables and operating leases based on several factors.

Consumer Portfolio. Ford Credit estimates the allowance for credit losses on consumer receivables and on operating leases using a combination of measurement models and management judgment. The models consider factors such as historical trends in credit losses and recoveries (including key metrics such as delinquencies, repossessions, and bankruptcies), the composition of Ford Credit's present portfolio (including vehicle brand, term, risk evaluation, and new/used vehicles), trends in historical used vehicle values, and economic conditions. Estimates from these models rely on historical information and may not fully reflect losses inherent in the present portfolio. Therefore, Ford Credit may adjust the estimate to reflect management judgment regarding observable changes in recent economic trends and conditions, portfolio composition, and other relevant factors.

Assumptions Used. Ford Credit's allowance for credit losses is based on assumptions regarding:

- Frequency. The number of finance receivables and operating lease contracts that are expected to default over the loss emergence period, measured as repossessions; repossession ratio reflects the number of finance receivables and operating lease contracts that we expect will default over a period of time divided by the average number of contracts outstanding; and

- Loss severity. The expected difference between the amount a customer owes when the finance contract is charged off and the amount received, net of expenses, from selling the repossessed vehicle.

Collective Allowance for Credit Losses. The collective allowance is evaluated primarily using a collective loss-to-receivables ("LTR") model that, based on historical experience, indicates credit losses have been incurred in the portfolio even though the particular accounts that are uncollectible cannot be specifically identified. The LTR model is based on the most recent years of history. Each LTR is calculated by dividing credit losses by average finance receivables or average operating leases, excluding unearned interest supplements and allowance for credit losses. An average LTR is calculated for each product and multiplied by the end-of-period balances for that given product.

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

Ford Credit's largest markets also use a loss projection model to estimate losses inherent in the portfolio. The loss projection model applies recent monthly performance metrics, stratified by contract type (retail or lease), contract term (e.g., 60-month), and risk rating to Ford Credit's active portfolio to estimate the losses that have been incurred.

The loss emergence period ("LEP") is an assumption within Ford Credit's models and represents the average amount of time between when a loss event first occurs to when it is charged off. This time period starts when the consumer begins to experience financial difficulty. It is evidenced, typically through delinquency, before eventually resulting in a charge-off. The LEP is a multiplier in the calculation of the collective consumer allowance for credit losses.

For accounts greater than 120 days past due, the uncollectible portion is charged off, such that the remaining recorded investment is equal to the estimated fair value of the collateral less costs to sell.

Specific Allowance for Impaired Receivables. Consumer receivables involved in Troubled Debt Restructurings are specifically assessed for impairment. A specific allowance is estimated based on the present value of the expected future cash flows of the receivable discounted at the contract's original effective interest rate or the fair value of any collateral adjusted for estimated costs to sell.

After establishing the collective and specific allowance for credit losses, if Ford Credit management believes the allowance does not reflect all losses inherent in the portfolio due to changes in recent economic trends and conditions, or other relevant factors, an adjustment is made based on management judgment.

Sensitivity Analysis. Changes in the assumptions used to derive frequency and severity would affect the allowance for credit losses. The effect of the indicated increase/decrease in the assumptions for Ford Credit's U.S. Ford and Lincoln brand retail financing and operating lease portfolio is as follows (in millions, except for percentages):

Assumption	Change	Increase/(Decrease)
Frequency - repossession ratio	+/- 0.1 pct. pt.	$49/$(49)
Loss severity per unit	+/- 1.0%	5/(5)

Non-Consumer Portfolio. Ford Credit estimates the allowance for credit losses for non-consumer receivables based on historical LTR ratios, expected future cash flows, and the fair value of collateral.

Collective Allowance for Credit Losses. Ford Credit estimates an allowance for non-consumer receivables that are not specifically identified as impaired using a LTR model for each financing product based on historical experience. This LTR is an average of the most recent historical experience and is calculated consistent with the consumer receivables LTR approach. All accounts that are specifically identified as impaired are excluded from the calculation of the non-specific or collective allowance.

Specific Allowance for Impaired Receivables. Dealer financing is evaluated by segmenting individual loans by the risk characteristics of the loan (such as the amount of the loan, the nature of the collateral, and the financial status of the debtor). The loans are analyzed to determine whether individual loans are impaired, and a specific allowance is estimated based on the present value of the expected future cash flows of the receivable discounted at the loan's original effective interest rate or the fair value of the collateral adjusted for estimated costs to sell.

After establishing the collective and specific allowance for credit losses, if Ford Credit management believes the allowance does not reflect all losses inherent in the portfolio due to changes in recent economic trends and conditions, or other relevant factors, an adjustment is made based on management judgment.

Changes in Ford Credit's assumptions affect the Financial Services interest, operating, and other expenses on our income statement and the allowance for credit losses contained within Financial Services finance receivables, net and

Net investment in operating leases on our balance sheet.

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

Accumulated Depreciation on Vehicles Subject to Operating Leases

Accumulated depreciation on vehicles subject to operating leases reduces the value of the leased vehicles in Ford Credit's operating lease portfolio from their original acquisition value to their expected residual value at the end of the lease term.

Ford Credit monitors residual values each month, and it reviews the adequacy of accumulated depreciation on a quarterly basis. If Ford Credit believes that the expected residual values for its vehicles have changed, it revises depreciation to ensure that net investment in operating leases (equal to the acquisition value of the vehicles less accumulated depreciation) will be adjusted to reflect Ford Credit's revised estimate of the expected residual value at the end of the lease term. Such adjustments to depreciation expense would result in a change in the depreciation rates of the vehicles subject to operating leases and are recorded prospectively on a straight-line basis.

Each lease customer has the option to buy the leased vehicle at the end of the lease or to return the vehicle to the dealer.

Nature of Estimates Required. Each operating lease in Ford Credit's portfolio represents a vehicle it owns that has been leased to a customer. At the time Ford Credit purchases a lease, it establishes an expected residual value for the vehicle. Ford Credit estimates the expected residual value by evaluating recent auction values, return volumes for its leased vehicles, industrywide used vehicle prices, marketing incentive plans, and vehicle quality data.

Assumptions Used. Ford Credit's accumulated depreciation on vehicles subject to operating leases is based on assumptions regarding:

- Auction value. Ford Credit's projection of the market value of the vehicles when sold at the end of the lease; and
- Return volume. Ford Credit's projection of the number of vehicles that will be returned at lease-end.

See Note 7 of the Notes to the Financial Statements for more information regarding accumulated depreciation on vehicles subject to operating leases.

Sensitivity Analysis. For returned vehicles, Ford Credit faces a risk that the amount it obtains from the vehicle sold at auction will be less than its estimate of the expected residual value for the vehicle. The effect of the indicated increase/decrease in the assumptions for Ford Credit's U.S. Ford and Lincoln brand operating lease portfolio is as follows (in millions, except for percentages):

Assumption	Percentage Change	Increase/(Decrease)
Future auction values	+/- 1.0	$(120)/$120
Return volumes	+/- 1.0	15/(15)

The impact of the change in assumptions on future auction values and return volumes would increase or decrease accumulated supplemental depreciation and depreciation expense over the remaining terms of the operating leases. Adjustments to the amount of accumulated supplemental depreciation on operating leases would be reflected on our balance sheet as Net investment in operating leases and on the income statement in Financial Services interest, operating, and other expenses.

ACCOUNTING STANDARDS ISSUED BUT NOT YET ADOPTED

The Financial Accounting Standards Board ("FASB") has issued the following standards, which are not expected to have a material impact (with the exception of standards 2016-02, 2016-09, and 2016-13) to our financial statements or financial statement disclosures:

Standard		Effective Date (a)
2017-03	Accounting Changes and Error Corrections and Investments - Equity Method and Joint Ventures	January 1, 2017
2016-17	Consolidation - Interests Held through Related Parties That Are under Common Control	January 1, 2017
2016-09	Stock Compensation - Improvements to Employee Share-Based Payment Accounting	January 1, 2017 (b)
2016-07	Equity Method and Joint Ventures - Simplifying the Transition to the Equity Method of Accounting	January 1, 2017
2016-06	Derivatives and Hedging - Contingent Put and Call Options in Debt Instruments	January 1, 2017
2016-05	Derivatives and Hedging - Effect of Derivative Contract Novations on Existing Hedge Accounting Relationships	January 1, 2017
2017-01	Business Combinations - Clarifying the Definition of a Business	January 1, 2018
2016-18	Statement of Cash Flows - Restricted Cash	January 1, 2018
2016-16	Income Taxes - Intra-Entity Transfers of Assets Other Than Inventory	January 1, 2018
2016-15	Statement of Cash Flows - Classification of Certain Cash Receipts and Cash Payments	January 1, 2018
2016-04	Extinguishments of Liabilities - Recognition of Breakage for Certain Prepaid Stored-Value Products	January 1, 2018
2016-01	Financial Instruments - Recognition and Measurement of Financial Assets and Financial Liabilities	January 1, 2018
2014-09	Revenue - Revenue from Contracts with Customers	January 1, 2018 (b) (c)
2016-02	Leases	January 1, 2019 (b)
2017-04	Goodwill and Other - Simplifying the Test for Goodwill Impairment	January 1, 2020
2016-13	Credit Losses - Measurement of Credit Losses on Financial Instruments	January 1, 2020 (b)

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(a) Early adoption for each of the standards, except standard 2016-01, is permitted.

(b) For additional information, see Note 3 of the Notes to the Financial Statements.

(c) The FASB has issued the following updates to the Revenue from Contracts with Customers standard: Accounting Standard Update ("ASU") 2015-14 (Deferral of the Effective Date), ASU 2016-08 (Principal versus Agent Considerations (Reporting Revenue Gross versus Net)), ASU 2016-10 (Identifying Performance Obligations and Licensing), and ASU 2016-12 (Narrow-Scope Improvements and Practical Expedients). We will adopt the new revenue guidance effective January 1, 2017.

Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations (Continued)

AGGREGATE CONTRACTUAL OBLIGATIONS

We are party to many contractual obligations involving commitments to make payments to third parties. Most of these are debt obligations incurred by our Financial Services segment. Long-term debt may have fixed or variable interest rates. For long-term debt with variable-rate interest, we estimate the future interest payments based on projected market interest rates for various floating-rate benchmarks received from third parties. In addition, as part of our normal business practices, we enter into contracts with suppliers for purchases of certain raw materials, components, and services to facilitate adequate supply of these materials and services. These arrangements may contain fixed or minimum quantity purchase requirements. “Purchase obligations” are defined as off-balance sheet agreements to purchase goods or services that are enforceable and legally binding on the Company and that specify all significant terms.

The table below summarizes our contractual obligations as of December 31, 2016 (in millions):

	Payments Due by Period				
	2017	2018 - 2019	2020 - 2021	2022 and Thereafter	Total
Non-Financial Services					
On-balance sheet					
Long-term debt (a)	$1,389	$2,241	$1,682	$ 9,573	$14,885
Interest payments relating to long-term debt	738	1,276	1,154	8,321	11,489
Capital leases (b)	32	103	17	8	160
Pension funding (c)	511	663	344	—	1,518
Off-balance sheet					
Purchase obligations	1,535	1,387	761	527	4,210
Operating leases	335	467	219	332	1,353
Total Non-Financial Services	4,540	6,137	4,177	18,761	33,615
Financial Services					
On-balance sheet					
Long-term debt (a)	31,655	45,363	23,485	11,176	111,679
Interest payments relating to long-term debt	2,543	3,394	1,730	1,176	8,843
Off-balance sheet					
Purchase obligations	13	9	2	—	24
Operating leases	7	10	6	8	31
Total Financial Services	34,218	48,776	25,223	12,360	120,577
Total Company	$38,758	$54,913	$29,400	$ 31,121	$154,192

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(a) Excludes unamortized debt discounts/premiums, debt issuance costs, and fair value adjustments.
(b) Includes interest payments of $9 million.
(c) Amounts represent our estimate of contractually obligated deficit contributions to U.K. and Ford-Werke plans. See Note 13 for further information regarding our expected 2017 pension contributions and funded status.

The amount of unrecognized tax benefits for 2016 of $1.6 billion (see Note 21 of the Notes to the Financial Statements for additional discussion) is excluded from the table above. Final settlement of a significant portion of these obligations will require bilateral tax agreements among us and various countries, the timing of which cannot reasonably be estimated.

For additional information regarding operating lease obligations, pension and OPEB obligations, and long-term debt, see Notes 7, 13, and 14, respectively, of the Notes to the Financial Statements.

ITEM 7A. Quantitative and Qualitative Disclosures About Market Risk

OVERVIEW

We are exposed to a variety of market and other risks, including the effects of changes in foreign currency exchange rates, commodity prices, and interest rates, as well as risks to availability of funding sources, hazard events, and specific asset risks.

These risks affect our Automotive and Financial Services segments differently. We monitor and manage these exposures as an integral part of our overall risk management program, which includes regular reports to a central management committee, the Global Risk Management Committee (“GRMC”). The GRMC is chaired by our Chief Financial Officer, and its members include our Treasurer, our Corporate Controller, and other members of senior management.

Our Automotive and Financial Services segments are exposed to liquidity risk, including the possibility of having to curtail business or being unable to meet financial obligations as they come due because funding sources may be reduced or become unavailable. Our plan is to maintain funding sources to ensure liquidity through a variety of economic or business cycles. As discussed in greater detail in Item 7, our funding sources include sales of receivables in securitizations and other structured financings, unsecured debt issuances, equity and equity-linked issuances, and bank borrowings.

We are exposed to a variety of insurable risks, such as loss or damage to property, liability claims, and employee injury. We protect against these risks through the purchase of commercial insurance that is designed to protect us above our self-insured retentions against events that could generate significant losses.

Direct responsibility for the execution of our market risk management strategies resides with our Treasurer’s Office and is governed by written policies and procedures. Separation of duties is maintained between the development and authorization of derivative trades, the transaction of derivatives, and the settlement of cash flows. Regular audits are conducted to ensure that appropriate controls are in place and that they remain effective. In addition, our market risk exposures and our use of derivatives to manage these exposures are approved by the GRMC, and reviewed by the Audit Committee of our Board of Directors.

In accordance with our corporate risk management policies, we use derivative instruments, when available, such as forward contracts, swaps and options that economically hedge certain exposures (foreign currency, commodity, and interest rates). We do not use derivative contracts for trading, market-making, or speculative purposes. In certain instances, we forgo hedge accounting, and in certain other instances, our derivatives do not qualify for hedge accounting. Either situation results in unrealized gains and losses that are recognized in income. For additional information on our derivatives, see Note 17 of the Notes to the Financial Statements.

The market and counterparty risks of our Automotive segment and Ford Credit are discussed and quantified below.

AUTOMOTIVE MARKET RISK

Our Automotive segment frequently has expenditures and receipts denominated in foreign currencies, including the following: purchases and sales of finished vehicles and production parts, debt and other payables, subsidiary dividends, and investments in foreign operations. These expenditures and receipts create exposures to changes in exchange rates. We also are exposed to changes in prices of commodities used in our Automotive segment and changes in interest rates.

Foreign currency risk, commodity risk, and interest rate risk are measured and quantified using a model to evaluate the sensitivity of market value to instantaneous, parallel shifts in rates and/or prices.

Foreign Currency Risk. Foreign currency risk is the possibility that our financial results could be better or worse than planned because of changes in currency exchange rates. Accordingly, our normal practice is to use derivative instruments, when available, to hedge our economic exposure with respect to forecasted revenues and costs, assets, liabilities, and firm commitments denominated in foreign currencies. In our hedging actions, we use derivative instruments commonly used by corporations to reduce foreign exchange risk (e.g., forward contracts).

The net fair value of foreign exchange forward contracts (including adjustments for credit risk), as of December 31, 2015, was an asset of $322 million compared with an asset of $528 million as of December 31, 2016. The potential decrease in fair value from a 10% adverse change in the underlying exchange rates, in U.S. dollar terms, would have been $2.2 billion at December 31, 2015, compared with $2.7 billion at December 31, 2016. The sensitivity analysis presented is hypothetical and assumes foreign exchange rate changes are instantaneous and adverse across all currencies. In reality, foreign exchange rates move in different magnitudes and at different times, and any changes in fair value would generally be offset by changes in the underlying exposure. See Note 17 of the Notes to the Financial Statements for more information regarding our foreign currency exchange contracts.

Commodity Price Risk. Commodity price risk is the possibility that our financial results could be better or worse than planned because of changes in the prices of commodities used in the production of motor vehicles, such as base metals (e.g., steel, copper, and aluminum), precious metals (e.g., palladium), energy (e.g., natural gas and electricity), and plastics/resins (e.g., polypropylene). Accordingly, our normal practice is to use derivative instruments, when available, to hedge the price risk with respect to forecasted purchases of those commodities that we can economically hedge (primarily base metals and precious metals). In our hedging actions, we use derivative instruments commonly used by corporations to reduce commodity price risk (e.g., financially settled forward contracts).

The net fair value of commodity forward contracts (including adjustments for credit risk) as of December 31, 2015 was a liability of $24 million compared with an asset of $5 million as of December 31, 2016. The potential decrease in fair value from a 10% adverse change in the underlying commodity prices, in U.S. dollar terms, would be $62 million at December 31, 2015, compared with $54 million at December 31, 2016.

In addition, our purchasing organization (with guidance from the GRMC as appropriate) negotiates contracts to ensure continuous supply of raw materials. In some cases, these contracts stipulate minimum purchase amounts and specific prices, and, therefore, play a role in managing price risk.

Interest Rate Risk. Interest rate risk relates to the gain or loss we could incur in our Automotive segment investment portfolios due to a change in interest rates. Our interest rate sensitivity analysis on the investment portfolios includes cash and cash equivalents and net marketable securities. At December 31, 2015, we had $23.6 billion in our Automotive segment investment portfolios, compared to $27.5 billion at December 31, 2016. We invest the portfolios in securities of various types and maturities, the value of which are subject to fluctuations in interest rates. The investment strategy is based on clearly defined risk and liquidity guidelines to maintain liquidity, minimize risk, and earn a reasonable return on the short-term investments. In investing our Automotive cash, safety of principal is the primary objective and risk-adjusted return is the secondary objective.

At any time, a rise in interest rates could have a material adverse impact on the fair value of our portfolios. Assuming a hypothetical increase in interest rates of one percentage point, the value of our portfolios would be reduced by about $186 million, as calculated as of December 31, 2015. This compares to $243 million, as calculated as of December 31, 2016. While these are our best estimates of the impact of the specified interest rate scenario, actual results could differ from those projected. The sensitivity analysis presented assumes interest rate changes are instantaneous, parallel shifts in the yield curve. In reality, interest rate changes of this magnitude are rarely instantaneous or parallel.

COUNTERPARTY RISK

Counterparty risk relates to the loss we could incur if an obligor or counterparty defaulted on an investment or a derivative contract. We enter into master agreements with counterparties that allow netting of certain exposures in order to manage this risk. Exposures primarily relate to investments in fixed income instruments and derivative contracts used for managing interest rate, foreign currency exchange rate, and commodity price risk. We, together with Ford Credit, establish exposure limits for each counterparty to minimize risk and provide counterparty diversification.

Our approach to managing counterparty risk is forward-looking and proactive, allowing us to take risk mitigation actions before risks become losses. Exposure limits are established based on our overall risk tolerance and estimated loss projections which are calculated from ratings-based historical default probabilities and market-based credit default swap ("CDS") spreads. The exposure limits are lower for lower-rated counterparties, counterparties that have relatively higher CDS spreads, and for longer-dated exposures. Our exposures are monitored on a regular basis and included in periodic reports to our Treasurer.

Substantially all of our counterparty exposures are with counterparties that have an investment grade rating. Investment grade is our guideline for counterparty minimum long-term ratings.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk (Continued)

FORD CREDIT MARKET RISK

Market risk for Ford Credit is the possibility that changes in interest and currency exchange rates will adversely affect cash flow and economic value.

Interest Rate Risk. Generally, Ford Credit's assets and the related debt have different re-pricing periods, and consequently, respond differently to changes in interest rates.

Ford Credit's assets consist primarily of fixed-rate retail installment sale and operating lease contracts and floating-rate wholesale receivables. Fixed-rate retail installment sale and operating lease contracts generally require customers to make equal monthly payments over the life of the contract. Wholesale receivables are originated to finance new and used vehicles held in dealers' inventory and generally require dealers to pay a floating rate.

Debt consists primarily of short- and long-term unsecured debt and securitization debt. Ford Credit's unsecured term debt instruments are principally fixed-rate and require fixed and equal interest payments over the life of the instrument and a single principal payment at maturity.

Ford Credit's interest rate risk management objective is to reduce volatility in its cash flows and volatility in its economic value from changes in interest rates based on an established risk tolerance that may vary by market.

Ford Credit uses economic value sensitivity analysis and re-pricing gap analysis to evaluate potential long-term effects of changes in interest rates. It then enters into interest rate swaps to convert portions of its floating-rate debt to fixed or its fixed-rate debt to floating to ensure that Ford Credit's exposure falls within the established tolerances. Ford Credit also uses pre-tax cash flow sensitivity analysis to monitor the level of near-term cash flow exposure. The pre-tax cash flow sensitivity analysis measures the changes in expected cash flows associated with Ford Credit's interest-rate-sensitive assets, liabilities, and derivative financial instruments from hypothetical changes in interest rates over a twelve-month horizon. Ford Credit's Asset-Liability Committee reviews the re-pricing mismatch and exposure every month and approves interest rate swaps required to maintain exposure within approved thresholds prior to execution.

To provide a quantitative measure of the sensitivity of its pre-tax cash flow to changes in interest rates, Ford Credit uses interest rate scenarios that assume a hypothetical, instantaneous increase or decrease of one percentage point in all interest rates across all maturities (a "parallel shift"), as well as a base case that assumes that all interest rates remain constant at existing levels. In reality, interest rate changes are rarely instantaneous or parallel and rates could move more or less than the one percentage point assumed in Ford Credit's analysis. As a result, the actual impact to pre-tax cash flow could be higher or lower than the results detailed in the table below. These interest rate scenarios are purely hypothetical and do not represent Ford Credit's view of future interest rate movements.

Under these interest rate scenarios, Ford Credit expects more assets than debt and liabilities to re-price in the next twelve months. Other things being equal, this means that during a period of rising interest rates, the interest earned on Ford Credit's assets will increase more than the interest paid on Ford Credit's debt, thereby initially increasing Ford Credit's pre-tax cash flow. During a period of falling interest rates, Ford Credit would expect its pre-tax cash flow to initially decrease. Ford Credit's pre-tax cash flow sensitivity to interest rate movement is highlighted in the table below.

Pre-tax cash flow sensitivity at December 31 was as follows (in millions):

Pre-Tax Cash Flow Sensitivity	2015	2016
One percentage point instantaneous increase in interest rates	$ 7	$ 21
One percentage point instantaneous decrease in interest rates (a)	(7)	(21)

(a) Pre-tax cash flow sensitivity given a one percentage point decrease in interest rates requires an assumption of negative interest rates in markets where existing interest rates are below one percent.

While the sensitivity analysis presented is Ford Credit's best estimate of the impacts of the specified assumed interest rate scenarios, its actual results could differ from those projected. The model Ford Credit uses to conduct this analysis is heavily dependent on assumptions. Embedded in the model are assumptions regarding the reinvestment of maturing asset principal, refinancing of maturing debt, replacement of maturing derivatives, exercise of options embedded in debt and derivatives, and predicted repayment of retail installment sale and lease contracts ahead of contractual maturity. Ford Credit's repayment projections ahead of contractual maturity are based on historical experience. If interest rates or other factors change, Ford Credit's actual prepayment experience could be different than projected.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk (Continued)

Foreign Currency Risk. Ford Credit's policy is to minimize exposure to changes in currency exchange rates. To meet funding objectives, Ford Credit borrows in a variety of currencies, principally U.S. dollars, Canadian dollars, euros, pound sterling, and renminbi. Ford Credit faces exposure to currency exchange rates if a mismatch exists between the currency of receivables and the currency of the debt funding those receivables. When possible, receivables are funded with debt in the same currency, minimizing exposure to exchange rate movements. When a different currency is used, Ford Credit may use foreign currency swaps and foreign currency forwards to convert substantially all of its foreign currency debt obligations to the local country currency of the receivables. As a result of this policy, Ford Credit believes its market risk exposure, relating to changes in currency exchange rates at December 31, 2016, is insignificant.

Derivative Fair Values. The net fair value of Ford Credit's derivative financial instruments at December 31, 2015 was an asset of $681 million, compared to an asset of $743 million at December 31, 2016.

ITEM 8. Financial Statements and Supplementary Data.

The Report of Independent Registered Public Accounting Firm, our Financial Statements, the accompanying Notes to the Financial Statements, and the Financial Statement Schedule that are filed as part of this Report are listed under "Item 15. Exhibits and Financial Statement Schedules" and are set forth beginning on page FS-1 immediately following the signature pages of this Report.

Selected quarterly financial data for 2015 and 2016 are provided in Note 23 of the Notes to the Financial Statements.

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. Mark Fields, our Chief Executive Officer ("CEO"), and Bob Shanks, our Chief Financial Officer ("CFO"), have performed an evaluation of the Company's disclosure controls and procedures, as that term is defined in Rule 13a-15(e) of the Securities Exchange Act of 1934, as amended ("Exchange Act"), as of December 31, 2016, and each has concluded that such disclosure controls and procedures are effective to ensure that information required to be disclosed in our periodic reports filed under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified by SEC rules and forms, and that such information is accumulated and communicated to the CEO and CFO to allow timely decisions regarding required disclosures.

Management's Report on Internal Control Over Financial Reporting. Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). The Company's internal control over financial reporting is a process designed 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.

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

Under the supervision and with the participation of our management, including our CEO and CFO, we conducted an assessment of the effectiveness of our internal control over financial reporting as of December 31, 2016. The assessment was based on criteria established in the framework Internal Control - Integrated Framework (2013), issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment, management concluded that our internal control over financial reporting was effective as of December 31, 2016.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2016 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in its report included herein.

Changes in Internal Control over Financial Reporting. There were no changes in internal control over financial reporting during the quarter ended December 31, 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. Other Information.

None.

PART III.

ITEM 10. Directors, Executive Officers of Ford, and Corporate Governance.

The information required by Item 10 regarding our directors is incorporated by reference from the information under the captions “Election of Directors,” “Section 16(a) Beneficial Ownership Reporting Compliance,” and “Beneficial Stock Ownership” in our Proxy Statement. The information required by Item 10 regarding our executive officers appears as Item 4A under Part I of this Report. The information required by Item 10 regarding an audit committee financial expert is incorporated by reference from the information under the caption “Corporate Governance – Audit Committee Financial Expert and Auditor Rotation” in our Proxy Statement. The information required by Item 10 regarding the members of our Audit Committee of the Board of Directors is incorporated by reference from the information under the captions “Proxy Summary,” “Corporate Governance – Board Committee Functions,” “Audit Committee Financial Expert and Auditor Rotation,” and “Proposal 1 – Election of Directors” in our Proxy Statement. The information required by Item 10 regarding the Audit Committee’s review and discussion of the audited financial statements is incorporated by reference from information under the caption “Audit Committee Report” in our Proxy Statement. The information required by Item 10 regarding our codes of ethics is incorporated by reference from the information under the caption “Corporate Governance – Codes of Ethics” in our Proxy Statement. In addition, we have included in Item 1 instructions for how to access our codes of ethics on our website and our Internet address. Amendments to, and waivers granted under, our Code of Ethics for Senior Financial Personnel, if any, will be posted to our website as well.

ITEM 11. Executive Compensation.

The information required by Item 11 is incorporated by reference from the information under the following captions in our Proxy Statement: “Director Compensation in 2016,” “Compensation Discussion and Analysis,” “Compensation Committee Report,” “Compensation Committee Interlocks and Insider Participation,” “Compensation of Executive Officers,” “Summary Compensation Table,” “Grants of Plan-Based Awards in 2016,” “Outstanding Equity Awards at 2016 Fiscal Year-End,” “Option Exercises and Stock Vested in 2016,” “Pension Benefits in 2016,” “Nonqualified Deferred Compensation in 2016,” and “Potential Payments Upon Termination or Change in Control.”

ITEM 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The information required by Item 12 is incorporated by reference from the information under the captions “Equity Compensation Plan Information” and “Corporate Governance – Beneficial Stock Ownership” in our Proxy Statement.

ITEM 13. Certain Relationships and Related Transactions, and Director Independence.

The information required by Item 13 is incorporated by reference from the information under the captions “Certain Relationships and Related Party Transactions” and “Corporate Governance – Independence of Directors and Relevant Facts and Circumstances” in our Proxy Statement.

ITEM 14. Principal Accounting Fees and Services.

The information required by Item 14 is incorporated by reference from the information under the caption “Audit Committee Fees” in our Proxy Statement.

PART IV.

ITEM 15. Exhibits and Financial Statement Schedules.

(a) 1. Financial Statements – Ford Motor Company and Subsidiaries

The following are contained in this 2016 Form 10-K Report:

- Report of Independent Registered Public Accounting Firm.
- Consolidated Income Statement for the years ended December 31, 2014, 2015, and 2016.
- Consolidated Statement of Comprehensive Income for the years ended December 31, 2014, 2015, and 2016.
- Consolidated Balance Sheet at December 31, 2015 and 2016.
- Consolidated Statement of Cash Flows for the years ended December 31, 2014, 2015, and 2016.
- Consolidated Statement of Equity for the years ended December 31, 2014, 2015, and 2016.
- Notes to the Financial Statements.

The Report of Independent Registered Public Accounting Firm, the Consolidated Financial Statements, and the Notes to the Financial Statements listed above are filed as part of this Report and are set forth beginning on page FS-1 immediately following the signature pages of this Report.

(a) 2. Financial Statement Schedules

Designation	Description
Schedule II	Valuation and Qualifying Accounts

Schedule II is filed as part of this Report and is set forth on page FSS-1 immediately following the Notes to the Financial Statements referred to above. The other schedules are omitted because they are not applicable, the information required to be contained in them is disclosed elsewhere on our Consolidated Financial Statements or the amounts involved are not sufficient to require submission.

(a) 3. Exhibits

Designation	Description	Method of Filing
Exhibit 3-A	Restated Certificate of Incorporation, dated August 2, 2000.	Filed as Exhibit 3-A to our Annual Report on Form 10-K for the year ended December 31, 2000.*
Exhibit 3-A-1	Certificate of Designation of Series A Junior Participating Preferred Stock filed on September 11, 2009.	Filed as Exhibit 3.1 to our Current Report on Form 8-K filed September 11, 2009.*
Exhibit 3-B	By-laws.	Filed as Exhibit 3.2 to our Form 8-A/A filed on September 11, 2015.*
Exhibit 4-A	Tax Benefit Preservation Plan (“TBPP”) dated September 11, 2009 between Ford Motor Company and Computershare Trust Company, N.A.	Filed as Exhibit 4.1 to our Current Report on Form 8-K filed September 11, 2009.*
Exhibit 4-A-1	Amendment No. 1 to TBPP dated September 11, 2012.	Filed as Exhibit 4 to our Current Report on Form 8-K filed September 12, 2012.*

Exhibit 4-A-2	Amendment No. 2 to TBPP dated September 9, 2015.	Filed as Exhibit 4.3 to our Current Report on Form 8-K filed September 11, 2015.*
Exhibit 10-A	Executive Separation Allowance Plan as amended and restated effective as of January 1, 2012**	Filed as Exhibit 10-A to our Annual Report on Form 10-K for the year ended December 31, 2012.*
Exhibit 10-B	Deferred Compensation Plan for Non-Employee Directors, as amended and restated as of January 1, 2012.**	Filed as Exhibit 10-B to our Annual Report on Form 10-K for the year ended December 31, 2011.*
Exhibit 10-C	2014 Stock Plan for Non-Employee Directors**	Filed as Exhibit 10-C to our Annual Report on Form 10-K for the year ended December 31, 2013.*
Exhibit 10-D	Benefit Equalization Plan, as amended and restated as of January 1, 2012.**	Filed as Exhibit 10-C to our Annual Report on Form 10-K for the year ended December 31, 2012.*
Exhibit 10-E	Description of financial counseling services provided to certain executives.**	Filed as Exhibit 10-F to our Annual Report on Form 10-K for the year ended December 31, 2002.*

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Designation	Description	Method of Filing
Exhibit 10-F	Supplemental Executive Retirement Plan, amended and restated effective as of January 1, 2013.**	Filed as Exhibit 10-E to our Annual Report on Form 10-K for the year ended December 31, 2012.*
Exhibit 10-F-1	Defined Contribution Supplemental Executive Retirement Plan, effective January 1, 2013.**	Filed as Exhibit 10-E-1 to our Annual Report on Form 10-K for the year ended December 31, 2012.*
Exhibit 10-G	Description of Director Compensation as of July 13, 2006.**	Filed as Exhibit 10-G-3 to our Quarterly Report on Form 10-Q for the quarter ended September 30, 2006.*
Exhibit 10-G-1	Amendment to Description of Director Compensation as of February 8, 2012.**	Filed as Exhibit 10-F-3 to our Annual Report on Form 10-K for the year ended December 31, 2011.*
Exhibit 10-G-2	Amendment to Description of Director Compensation as of July 1, 2013.**	Filed as Exhibit 10-G-2 to our Annual Report on Form 10-K for the year ended December 31, 2013.*
Exhibit 10-G-3	Amendment to Description of Director Compensation as of January 1, 2017.**	Filed with this Report.
Exhibit 10-H	2008 Long-Term Incentive Plan.**	Filed as Exhibit 10.1 to our Quarterly Report on Form 10-Q for the quarter ended June 30, 2008.*
Exhibit 10-I	Description of Matching Gift Program and Vehicle Evaluation Program for Non-Employee Directors.**	Filed as Exhibit 10-I to our Annual Report on Form 10-K/A for the year ended December 31, 2005.*
Exhibit 10-J	Non-Employee Directors Life Insurance and Optional Retirement Plan as amended and restated as of December 31, 2010.**	Filed as Exhibit 10-I to our Annual Report on Form 10-K for the year ended December 31, 2010.*
Exhibit 10-K	Description of Non-Employee Directors Accidental Death, Dismemberment and Permanent Total Disablement Indemnity.**	Filed as Exhibit 10-S to our Annual Report on Form 10-K for the year ended December 31, 1992.*
Exhibit 10-K-1	Description of Amendment to Basic Life Insurance and Accidental Death & Dismemberment Insurance.**	Filed as Exhibit 10-K-1 to our Annual Report on Form 10-K for the year ended December 31, 2013.*
Exhibit 10-L	Description of Compensation Arrangements for Mark Fields.**	Filed as Exhibit 10-L to our Annual Report on Form 10-K for the year ended December 31, 2014.*
Exhibit 10-M	Select Retirement Plan, amended and restated effective as of January 1, 2014.**	Filed as Exhibit 10-M to our Annual Report on Form 10-K for the year ended December 31, 2013.*
Exhibit 10-N	Deferred Compensation Plan, as amended and restated as of December 31, 2010.**	Filed as Exhibit 10-M to our Annual Report on Form 10-K for the year ended December 31, 2010.*
Exhibit 10-N-1	Suspension of Open Enrollment in Deferred Compensation Plan.**	Filed as Exhibit 10-M-1 to our Annual Report on Form 10-K for the year ended December 31, 2009.*
Exhibit 10-O	Annual Incentive Compensation Plan, as amended and restated as of March 1, 2008.**	Filed as Exhibit 10.2 to our Quarterly Report on Form 10-Q for the quarter ended June 30, 2008.*
Exhibit 10-O-1	Amendment to the Ford Motor Company Annual Incentive Compensation Plan (effective as of	Filed as Exhibit 10-N-1 to our Annual Report on Form 10-K for the year ended

	December 31, 2008).**	December 31, 2008.*
Exhibit 10-O-2	Annual Incentive Compensation Plan Metrics for 2015.**	Filed as Exhibit 10-O-5 to our Annual Report on Form 10-K for the year ended December 31, 2014.*
Exhibit 10-O-3	Annual Incentive Compensation Plan Metrics for 2016.**	Filed as Exhibit 10-O-4 to our Annual Report on Form 10-K for the year ended December 31, 2015.*
Exhibit 10-O-4	Annual Incentive Compensation Plan Metrics for 2017.**	Filed with this Report.
Exhibit 10-O-5	Performance-Based Restricted Stock Unit Metrics for 2012.**	Filed as Exhibit 10-N-9 to our Annual Report on Form 10-K for the year ended December 31, 2011.*
Exhibit 10-O-6	Performance-Based Restricted Stock Unit Metrics for 2013.**	Filed as Exhibit 10-N-9 to our Annual Report on Form 10-K for the year ended December 31, 2012.*
Exhibit 10-O-7	Performance-Based Restricted Stock Unit Metrics for 2014.**	Filed as Exhibit 10-O-9 to our Annual Report on Form 10-K for the year ended December 31, 2013.*
Exhibit 10-O-8	Performance-Based Restricted Stock Unit Metrics for 2015.**	Filed as Exhibit 10-O-11 to our Annual Report on Form 10-K for the year ended December 31, 2014.*
Exhibit 10-O-9	Performance-Based Restricted Stock Unit Metrics for 2016.**	Filed as Exhibit 10-O-9 to our Annual Report on Form 10-K for the year ended December 31, 2015.*
Exhibit 10-O-10	Performance-Based Restricted Stock Unit Metrics for 2017.**	Filed with this Report.
Exhibit 10-O-11	Executive Compensation Recoupment Policy.**	Filed as Exhibit 10-N-8 to our Annual Report on Form 10-K for the year ended December 31, 2010.*
Exhibit 10-O-12	Incremental Bonus Description.**	Filed as Exhibit 10-N-9 to our Annual Report on Form 10-K for the year ended December 31, 2010.*
Exhibit 10-P	1998 Long-Term Incentive Plan, as amended and restated effective as of January 1, 2003.**	Filed as Exhibit 10-R to our Annual Report on Form 10-K for the year ended December 31, 2002.*
Exhibit 10-P-1	Amendment to Ford Motor Company 1998 Long-Term Incentive Plan (effective as of January 1, 2006).**	Filed as Exhibit 10-P-1 to our Annual Report on Form 10-K/A for the year ended December 31, 2005.*
Exhibit 10-P-2	Form of Stock Option Agreement (NQO) with Terms and Conditions.**	Filed as Exhibit 10-P-2 to our Annual Report on Form 10-K/A for the year ended December 31, 2005.*
Exhibit 10-P-3	Form of Stock Option (NQO) Terms and Conditions for 2008 Long-Term Incentive Plan.**	Filed as Exhibit 10-O-3 to our Annual Report on Form 10-K for the year ended December 31, 2008.*
Exhibit 10-P-4	Form of Stock Option (NQO) Agreement for 2008 Long-Term Incentive Plan.**	Filed as Exhibit 10-O-4 to our Annual Report on Form 10-K for the year ended December 31, 2008.*

Designation	Description	Method of Filing
Exhibit 10-P-5	Form of Stock Option Agreement (ISO) with Terms and Conditions.**	Filed as Exhibit 10-P-3 to our Annual Report on Form 10-K/A for the year ended December 31, 2005.*
Exhibit 10-P-6	Form of Stock Option (ISO) Terms and Conditions for 2008 Long-Term Incentive Plan.**	Filed as Exhibit 10-O-6 to our Annual Report on Form 10-K for the year ended December 31, 2008.*
Exhibit 10-P-7	Form of Stock Option Agreement (ISO) for 2008 Long-Term Incentive Plan.**	Filed as Exhibit 10-O-7 to our Annual Report on Form 10-K for the year ended December 31, 2008.*
Exhibit 10-P-8	Form of Stock Option Agreement (U.K. NQO) with Terms and Conditions.**	Filed as Exhibit 10-P-4 to our Annual Report on Form 10-K/A for the year ended December 31, 2005.*
Exhibit 10-P-9	Form of Stock Option (U.K.) Terms and Conditions for 2008 Long-Term Incentive Plan.**	Filed as Exhibit 10-O-9 to our Annual Report on Form 10-K for the year ended December 31, 2009.*
Exhibit 10-P-10	Form of Stock Option Agreement (U.K.) for 2008 Long-Term Incentive Plan.**	Filed as Exhibit 10-O-10 to our Annual Report on Form 10-K for the year ended December 31, 2009.*
Exhibit 10-P-11	Form of Restricted Stock Grant Letter.**	Filed as Exhibit 10-O-14 to our Annual Report on Form 10-K for the year ended December 31, 2008.*
Exhibit 10-P-12	Form of Restricted Stock Grant Letter as of January 1, 2011.**	Filed as Exhibit 10-O-12 to our Annual Report on Form 10-K for the year ended December 31, 2010.*
Exhibit 10-P-13	Form of Final Award Notification Letter for Performance-Based Restricted Stock Units.**	Filed as Exhibit 10-P-13 to our Annual Report on Form 10-K for the year ended December 31, 2015.*
Exhibit 10-P-14	Form of Performance-Based Restricted Stock Unit Opportunity Letter (2008 Long-Term Incentive Plan).**	Filed as Exhibit 10-P-14 to our Annual Report on Form 10-K for the year ended December 31, 2015.*
Exhibit 10-P-15	2008 Long-Term Incentive Plan Restricted Stock Unit Agreement.**	Filed as Exhibit 10-O-22 to our Annual Report on Form 10-K for the year ended December 31, 2008.*
Exhibit 10-P-16	2008 Long-Term Incentive Plan Restricted Stock Unit Terms and Conditions.**	Filed as Exhibit 10-P-16 to our Annual Report on Form 10-K for the year ended December 31, 2015.*
Exhibit 10-P-17	Form of Final Award Agreement for Performance-Based Restricted Stock Units under 2008 Long-Term Incentive Plan.**	Filed as Exhibit 10-O-26 to our Annual Report on Form 10-K for the year ended December 31, 2008.*
Exhibit 10-P-18	Form of Final Award Terms and Conditions for Performance-Based Restricted Stock Units under 2008 Long-Term Incentive Plan.**	Filed as Exhibit 10-P-18 to our Annual Report on Form 10-K for the year ended December 31, 2015.*
Exhibit 10-P-19	Form of Notification Letter for Time-Based Restricted Stock Units.**	Filed as Exhibit 10-P-19 to our Annual Report on Form 10-K for the year ended December 31, 2015.*
Exhibit 10-Q	Agreement dated January 13, 1999 between Ford Motor Company and Edsel B. Ford II.**	Filed as Exhibit 10-X to our Annual Report on Form 10-K for the year ended December 31, 1998.*

Exhibit 10-Q-1	Amendment dated May 5, 2010 to the Consulting Agreement between Ford Motor Company and Edsel B. Ford II.**	Filed as Exhibit 10.3 to our Quarterly Report on Form 10-Q for the quarter ended March 31, 2010.*
Exhibit 10-Q-2	Amendment dated January 1, 2012 to the Consulting Agreement between Ford Motor Company and Edsel B. Ford II.**	Filed as Exhibit 10-P-2 to our Annual Report on Form 10-K for the year ended December 31, 2011.*
Exhibit 10-R	Amended and Restated Relationship Agreement dated April 30, 2015 between Ford Motor Company and Ford Motor Credit Company LLC.	Filed as Exhibit 10.2 to our Current Report on Form 8-K filed May 1, 2015.*
Exhibit 10-S	Form of Trade Secrets/Non-Compete Statement between Ford and certain of its Executive Officers.**	Filed as Exhibit 10-V to our Annual Report on Form 10-K for the year ended December 31, 2003.*
Exhibit 10-T	Arrangement between Ford Motor Company and William C. Ford, Jr., dated February 25, 2009.**	Filed as Exhibit 10-V to our Annual Report on Form 10-K for the year ended December 31, 2008.*
Exhibit 10-U	2015 Incentive Compensation Grants - Exclusion of Pension & OPEB Accounting Change.**	Filed as Exhibit 10-U to our Annual Report on Form 10-K for the year ended December 31, 2015.*
Exhibit 10-V	Description of Company Practices regarding Club Memberships for Executives.**	Filed as Exhibit 10-BB to our Annual Report on Form 10-K for the year ended December 31, 2006.*
Exhibit 10-W	Accession Agreement between Ford Motor Company and James D. Farley, Jr. as of October 9, 2007.**	Filed as Exhibit 10-W to our Annual Report on Form 10-K for the year ended December 31, 2012.*
Exhibit 10-W-1	Form of James D. Farley, Jr. Agreement Amendment, effective as of October 12, 2008.**	Filed as Exhibit 10-W-1 to our Annual Report on Form 10-K for the year ended December 31, 2012.*
Exhibit 10-X	Amended and Restated Credit Agreement dated as of November 24, 2009.	Filed as Exhibit 99.2 to our Current Report on Form 8-K filed November 25, 2009.*
Exhibit 10-X-1	Seventh Amendment dated as of March 15, 2012 to our Credit Agreement dated as of December 15, 2006, as amended and restated as of November 24, 2009, and as further amended.	Filed as Exhibit 99.2 to our Current Report on Form 8-K filed March 15, 2012.*
Exhibit 10-X-2	Ninth Amendment dated as of April 30, 2013 to our Credit Agreement dated as of December 15, 2006, as amended and restated as of November 24, 2009, and as further amended.	Filed as Exhibit 10 to our Quarterly Report on Form 10-Q for the quarter ended March 31, 2013.*
Exhibit 10-X-3	Tenth Amendment dated as of April 30, 2014 to our Credit Agreement dated as of December 15, 2006, as amended and restated as of November 24, 2009, and as further amended.	Filed as Exhibit 10.1 to our Quarterly Report on Form 10-Q for the quarter ended March 31, 2014.*

Designation	Description	Method of Filing
Exhibit 10-X-4	Eleventh Amendment dated as of April 30, 2015 to our Credit Agreement dated as of December 15, 2006, as amended and restated as of November 24, 2009, as amended and restated as of April 30, 2014, and as further amended, including the Third Amended and Restated Credit Agreement.	Filed as Exhibit 10.1 to our Current Report on Form 8-K filed May 1, 2015.*
Exhibit 10-X-5	Twelfth Amendment dated as of April 29, 2016 to our Credit Agreement dated as of December 15, 2006, as amended and restated as of November 24, 2009, as amended and restated as of April 30, 2014, and as further amended and restated as of April 30, 2015.	Filed as Exhibit 10 to our Current Report on Form 8-K filed April 29, 2016.*
Exhibit 10-Y	Loan Arrangement and Reimbursement Agreement between Ford Motor Company and the U.S. Department of Energy dated as of September 16, 2009.	Filed as Exhibit 10.1 to our Current Report on Form 8-K filed September 22, 2009.*
Exhibit 10-Z	Note Purchase Agreement dated as of September 16, 2009 among the Federal Financing Bank, Ford Motor Company, and the U.S. Secretary of Energy.	Filed as Exhibit 10.2 to our Current Report on Form 8-K filed September 22, 2009.*
Exhibit 12	Calculation of Ratio of Earnings to Fixed Charges.	Filed with this Report.
Exhibit 21	List of Subsidiaries of Ford as of January 31, 2017.	Filed with this Report.
Exhibit 23	Consent of Independent Registered Public Accounting Firm.	Filed with this Report.
Exhibit 24	Powers of Attorney.	Filed with this Report.
Exhibit 31.1	Rule 15d-14(a) Certification of CEO.	Filed with this Report.
Exhibit 31.2	Rule 15d-14(a) Certification of CFO.	Filed with this Report.
Exhibit 32.1	Section 1350 Certification of CEO.	Furnished with this Report.
Exhibit 32.2	Section 1350 Certification of CFO.	Furnished with this Report.
Exhibit 101.INS	XBRL Instance Document.	***
Exhibit 101.SCH	XBRL Taxonomy Extension Schema Document.	***
Exhibit 101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.	***
Exhibit 101.LAB	XBRL Taxonomy Extension Label Linkbase Document.	***
Exhibit 101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.	***
Exhibit 101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.	***

* Incorporated by reference as an exhibit to this Report (file number reference 1-3950, unless otherwise indicated).
** Management contract or compensatory plan or arrangement.
*** Submitted electronically with this Report in accordance with the provisions of Regulation S-T.

Instruments defining the rights of holders of certain issues of long-term debt of Ford and of certain consolidated subsidiaries and of any unconsolidated subsidiary, for which financial statements are required to be filed with this Report, have not been filed as exhibits to this Report because the authorized principal amount of any one of such issues does not exceed 10% of the total assets of Ford and our subsidiaries on a consolidated basis. Ford agrees to furnish a copy of each of such instrument to the Securities and Exchange Commission upon request.

ITEM 16. Form 10-K Summary.

None.

SIGNATURE

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, Ford has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized.

FORD MOTOR COMPANY

By: /s/ John Lawler
John Lawler, Vice President and Controller
(principal accounting officer)

Date: February 9, 2017

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this Report has been signed below by the following persons on behalf of Ford and in the capacities on the date indicated:

Signature	Title	Date
WILLIAM CLAY FORD, JR.* William Clay Ford, Jr.	Director, Chairman of the Board, Executive Chairman, Chair of the Office of the Chairman and Chief Executive, and Chair of the Finance Committee	February 9, 2017
MARK FIELDS*	Director, President and Chief Executive Officer	February 9, 2017
Mark Fields	(principal executive officer)	
STEPHEN G. BUTLER* Stephen G. Butler	Director and Chair of the Audit Committee	February 9, 2017
KIMBERLY A. CASIANO* Kimberly A. Casiano	Director	February 9, 2017
ANTHONY F. EARLEY, JR.* Anthony F. Earley, Jr.	Director and Chair of the Compensation Committee	February 9, 2017
EDSEL B. FORD II*	Director	February 9, 2017
Edsel B. Ford II		
JAMES H. HANCE, JR.* James H. Hance, Jr.	Director	February 9, 2017
WILLIAM W. HELMAN IV* William W. Helman IV	Director and Chair of the Sustainability and Innovation Committee	February 9, 2017

JON M. HUNTSMAN, JR.* Jon M. Huntsman, Jr.	Director	February 9, 2017
WILLIAM E. KENNARD* William E. Kennard	Director	February 9, 2017
JOHN C. LECHLEITER* John C. Lechleiter	Director	February 9, 2017

Signature	Title	Date
ELLEN R. MARRAM* Ellen R. Marram	Director	February 9, 2017
GERALD L. SHAHEEN* Gerald L. Shaheen	Director and Chair of the Nominating and Governance Committee	February 9, 2017
JOHN L. THORNTON* John L. Thornton	Director	February 9, 2017
JOHN S. WEINBERG* John S. Weinberg	Director	February 9, 2017
BOB SHANKS* Bob Shanks	Executive Vice President and Chief Financial Officer (principal financial officer)	February 9, 2017
JOHN T. LAWLER* John T. Lawler	Vice President and Controller (principal accounting officer)	February 9, 2017
*By: /s/ JONATHAN E. OSGOOD Jonathan E. Osgood Attorney-in-Fact		February 9, 2017

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of
Ford Motor Company

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of income, comprehensive income, equity and cash flows present fairly, in all material respects, the financial position of Ford Motor Company and its subsidiaries at December 31, 2016 and December 31, 2015, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the index appearing under Item 15(a)(2) presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements and the financial statement schedule, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on these financial statements, on the financial statement schedule, and on the Company's internal control over financial reporting based on our integrated 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 audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed 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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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 its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP
Detroit, Michigan
February 9, 2017

FS-1

FORD MOTOR COMPANY AND SUBSIDIARIES
CONSOLIDATED INCOME STATEMENT
(in millions, except per share amounts)

	For the years ended December 31,		
	2014	2015	2016
Revenues			
Automotive	$135,782	$140,566	$141,546
Financial Services	8,295	8,992	10,253
Other	—	—	1
Total revenues	144,077	149,558	151,800
Costs and expenses			
Cost of sales	125,025	124,041	126,584
Selling, administrative, and other expenses	11,842	10,502	12,196
Financial Services interest, operating, and other expenses	6,878	7,368	8,904
Total costs and expenses	143,745	141,911	147,684
Interest expense on Automotive debt	797	773	894
Non-Financial Services interest income and other income/(loss), net (Note 19)	76	1,188	1,356
Financial Services other income/(loss), net (Note 19)	348	372	438
Equity in net income of affiliated companies	1,275	1,818	1,780
Income before income taxes	1,234	10,252	6,796
Provision for/(Benefit from) income taxes (Note 21)	4	2,881	2,189
Net income	1,230	7,371	4,607
Less: Income/(Loss) attributable to noncontrolling interests	(1)	(2)	11
Net income attributable to Ford Motor Company	$1,231	$7,373	$4,596
EARNINGS PER SHARE ATTRIBUTABLE TO FORD MOTOR COMPANY COMMON AND CLASS B STOCK (Note 22)			
Basic income	$0.31	$1.86	$1.16
Diluted income	0.31	1.84	1.15
Cash dividends declared	0.50	0.60	0.85

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME
(in millions)

	For the years ended December 31,		
	2014	2015	2016
Net income	$ 1,230	$ 7,371	$ 4,607
Other comprehensive income/(loss), net of tax (Note 18)			
Foreign currency translation	(36)	(1,132)	(1,024)
Marketable securities	—	(6)	(8)
	(182)	227	219

Derivative instruments			
Pension and other postretirement benefits	(23)	(81)	56
Total other comprehensive income/(loss), net of tax	(241)	(992)	(757)
Comprehensive income	989	6,379	3,850
Less: Comprehensive income/(loss) attributable to noncontrolling interests	—	(2)	10
Comprehensive income attributable to Ford Motor Company	$ 989	$ 6,381	$ 3,840

The accompanying notes are part of the financial statements.

FORD MOTOR COMPANY AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEET
(in millions)

	December 31, 2015	December 31, 2016
ASSETS		
Cash and cash equivalents (Note 5)	$ 14,272	$ 15,905
Marketable securities (Note 5)	20,904	22,922
Financial Services finance receivables, net (Note 6)	45,137	46,266
Trade and other receivables, less allowances of $372 and $392	11,042	11,102
Inventories (Note 9)	8,319	8,898
Other assets	2,913	3,368
Total current assets	102,587	108,461
Financial Services finance receivables, net (Note 6)	45,554	49,924
Net investment in operating leases (Note 7)	27,093	28,829
Net property (Note 11)	30,163	32,072
Equity in net assets of affiliated companies (Note 10)	3,224	3,304
Deferred income taxes (Note 21)	11,509	9,705
Other assets	4,795	5,656
Total assets	$ 224,925	$ 237,951
LIABILITIES		
Payables	$ 20,272	$ 21,296
Other liabilities and deferred revenue (Note 12)	19,089	19,316
Automotive debt payable within one year (Note 14)	1,779	2,685
Financial Services debt payable within one year (Note 14)	41,196	46,984
Total current liabilities	82,336	90,281
Other liabilities and deferred revenue (Note 12)	23,457	24,395
Automotive long-term debt (Note 14)	11,060	13,222
Financial Services long-term debt (Note 14)	78,819	80,079
Deferred income taxes (Note 21)	502	691
Total liabilities	196,174	208,668
Redeemable noncontrolling interest (Note 15)	94	96
EQUITY		
Capital stock (Note 22)		
Common Stock, par value $.01 per share (3,976 million shares issued of 6 billion authorized)	40	40
Class B Stock, par value $.01 per share (71 million shares issued of 530 million authorized)	1	1
Capital in excess of par value of stock	21,421	21,630
Retained earnings	14,414	15,634
Accumulated other comprehensive income/(loss) (Note 18)	(6,257)	(7,013)
Treasury stock	(977)	(1,122)
Total equity attributable to Ford Motor Company	28,642	29,170
Equity attributable to noncontrolling interests	15	17

Total equity	28,657	29,187
Total liabilities and equity	$ 224,925	$ 237,951

The following table includes assets to be used to settle liabilities of the consolidated variable interest entities ("VIEs"). These assets and liabilities are included in the consolidated balance sheet above. See Note 16 for additional information on our VIEs.

	December 31, 2015	December 31, 2016
ASSETS		
Cash and cash equivalents	$ 3,949	$ 3,047
Financial Services finance receivables, net	45,902	50,857
Net investment in operating leases	13,309	11,761
Other assets	85	25
LIABILITIES		
Other liabilities and deferred revenue	$ 19	$ 5
Debt	43,086	43,730

The accompanying notes are part of the financial statements.

FORD MOTOR COMPANY AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF CASH FLOWS
(in millions)

	For the years ended December 31,		
	2014	2015	2016
Cash flows from operating activities			
Net income	$1,230	$7,371	$4,607
Depreciation and tooling amortization	7,385	7,993	9,023
Other amortization	38	(27)	(306)
Provision for credit and insurance losses	305	418	672
Pension and other postretirement employee benefits ("OPEB") expense	4,429	512	2,667
Equity investment (earnings)/losses in excess of dividends received	189	(333)	(178)
Foreign currency adjustments	825	710	283
Net (gain)/loss on changes in investments in affiliates	798	(42)	(139)
Stock compensation	180	199	210
Net change in wholesale and other receivables	(2,208)	(5,090)	(1,449)
Provision for deferred income taxes	(94)	2,120	1,478
Decrease/(Increase) in accounts receivable and other assets	(2,896)	(3,563)	(2,855)
Decrease/(Increase) in inventory	(936)	(1,155)	(815)
Increase/(Decrease) in accounts payable and accrued and other liabilities	5,729	7,758	6,595
Other	(467)	(701)	(1)
Net cash provided by/(used in) operating activities	14,507	16,170	19,792
Cash flows from investing activities			
Capital spending	(7,463)	(7,196)	(6,992)
Acquisitions of finance receivables and operating leases	(51,673)	(57,217)	(56,007)
Collections of finance receivables and operating leases	36,497	38,130	38,834
Purchases of equity and debt securities	(48,694)	(41,279)	(31,428)
Sales and maturities of equity and debt securities	50,264	40,766	29,354
Change related to Venezuelan operations	(477)	—	—
Settlements of derivatives	281	134	825
Other	141	500	62
Net cash provided by/(used in) investing activities	(21,124)	(26,162)	(25,352)
Cash flows from financing activities			
Cash dividends	(1,952)	(2,380)	(3,376)
Purchases of Common Stock	(1,964)	(129)	(145)
Net changes in short-term debt	(3,870)	1,646	3,864
Proceeds from issuance of other debt	40,043	48,860	45,961
Principal payments on other debt	(28,859)	(33,358)	(38,797)
Other	25	(317)	(49)
Net cash provided by/(used in) financing activities	3,423	14,322	7,458
Effect of exchange rate changes on cash and cash equivalents	(517)	(815)	(265)
Net increase/(decrease) in cash and cash equivalents	$(3,711)	$3,515	$1,633
Cash and cash equivalents at January 1	$14,468	$10,757	$14,272
Net increase/(decrease) in cash and cash equivalents	(3,711)	3,515	1,633
Cash and cash equivalents at December 31	$10,757	$14,272	$15,905

The accompanying notes are part of the financial statements.

FORD MOTOR COMPANY AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF EQUITY
(in millions)

	Equity Attributable to Ford Motor Company							
	Capital Stock	Cap. in Excess of Par Value of Stock	Retained Earnings/(Accumulated Deficit)	Accumulated Other Comprehensive Income/(Loss) (Note 18)	Treasury Stock	Total	Equity Attributable to Non-controlling Interests	Total Equity
Balance at December 31, 2013	$40	$21,422	$ 10,208	$ (5,024)	$(506)	$26,140	$ 33	$26,173
Net income	—	—	1,231	—	—	1,231	(1)	1,230
Other comprehensive income/(loss), net of tax	—	—	—	(241)	—	(241)	1	(240)
Common stock issued (including share-based compensation impacts)	—	314	—	—	—	314	—	314
Treasury stock/other	—	(647)	(65)	—	(342)	(1,054)	(4)	(1,058)
Cash dividends declared	—	—	(1,952)	—	—	(1,952)	(2)	(1,954)
Balance at December 31, 2014	$40	$21,089	$ 9,422	$ (5,265)	$(848)	$24,438	$ 27	$24,465
Balance at December 31, 2014	$40	$21,089	$ 9,422	$ (5,265)	$(848)	$24,438	$ 27	$24,465
Net income	—	—	7,373	—	—	7,373	(2)	7,371
Other comprehensive income/(loss), net of tax	—	—	—	(992)	—	(992)	—	(992)
Common stock issued (including share-based compensation impacts)	1	332	—	—	—	333	—	333
Treasury stock/other	—	—	(1)	—	(129)	(130)	(4)	(134)
Cash dividends declared	—	—	(2,380)	—	—	(2,380)	(6)	(2,386)
Balance at December 31, 2015	$41	$21,421	$ 14,414	$ (6,257)	$(977)	$28,642	$ 15	$28,657
Balance at December 31, 2015	$41	$21,421	$ 14,414	$ (6,257)	$(977)	$28,642	$ 15	$28,657
Net income	—	—	4,596	—	—	4,596	11	4,607
Other comprehensive income/(loss), net of tax	—	—	—	(756)	—	(756)	(1)	(757)
Common stock issued (including share-based compensation impacts)	—	209	—	—	—	209	—	209
Treasury stock/other	—	—	—	—	(145)	(145)	(3)	(148)
Cash dividends declared	—	—	(3,376)	—	—	(3,376)	(5)	(3,381)
Balance at December 31, 2016	$41	$21,630	$ 15,634	$ (7,013)	$(1,122)	$29,170	$ 17	$29,187

The accompanying notes are part of the financial statements.

FORD MOTOR COMPANY AND SUBSIDIARIES
NOTES TO THE FINANCIAL STATEMENTS

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FORD MOTOR COMPANY AND SUBSIDIARIES
NOTES TO THE FINANCIAL STATEMENTS

NOTE 1. PRESENTATION

For purposes of this report, “Ford,” the “Company,” “we,” “our,” “us,” or similar references mean Ford Motor Company, our consolidated subsidiaries, and our consolidated VIEs of which we are the primary beneficiary, unless the context requires otherwise. Our financial statements are presented in accordance with U.S. generally accepted accounting principles (“GAAP”).

Effective December 31, 2014, we began reporting the results of our wholly-owned Venezuelan subsidiary using the cost method of accounting. This change resulted in a fourth quarter 2014 one-time pre-tax charge of $800 million in Non-Financial Services interest income and other income/(loss), net.

Change in presentation. Our core Automotive business includes the designing, manufacturing, marketing, and servicing of a full line of Ford cars, trucks, SUVs, and electrified vehicles, as well as Lincoln luxury vehicles. We provide vehicle-related financing and leasing activities through Ford Motor Credit Company LLC (“Ford Credit”). At the same time, we are pursuing emerging opportunities in connectivity, mobility, autonomous vehicles, the customer experience, and data and analytics.

Prior to the second quarter of 2016, we presented our financial statements on both a consolidated basis and on a “sector” basis for our Automotive and Financial Services sectors. With our expansion into mobility services, including the formation in March 2016 of the Ford Smart Mobility LLC subsidiary, we reevaluated our disclosures and concluded we should eliminate our two-sector financial presentation and, reflecting the manner in which our Chief Operating Decision Maker manages our business, changed our segment presentation beginning with the second quarter of 2016 to be Automotive, Financial Services, and All Other. See Note 4 for a description of our segment presentation.

In addition, as a result of the elimination of our two-sector financial presentation, at June 30, 2016 we changed the presentation of our consolidated balance sheet and certain notes to the consolidated financial statements to classify our assets and liabilities as current or non-current. We reclassified certain prior year amounts in our consolidated financial statements to conform to the current year presentation.

Certain Transactions Between Automotive Segment and Financial Services Segment

Intersegment transactions occur in the ordinary course of business. Additional detail regarding certain transactions and the effect on each segment at December 31 was as follows (in billions):

	2015		2016	
	Automotive	Financial Services	Automotive	Financial Services
Trade and other receivables (a)		$ 5.4		$ 6.1
Unearned interest supplements and residual support (b)		(4.5)		(5.3)
Dealer financing and other financing receivables (c)		0.8		0.7
Net investment in operating leases (d)		0.7		0.9
Intersegment receivables/(payables) (e)	$(1.1)	1.1	$(1.7)	1.7

(a) Automotive receivables (generated primarily from vehicle and parts sales to third parties) sold to Ford Credit.
(b) Automotive segment pays amounts to Ford Credit at the point of retail financing or lease origination which represent interest supplements and residual support.
(c) Receivables with entities that are consolidated subsidiaries of Ford.
(d)

Sale-leaseback agreement between Automotive and Financial Services relating primarily to vehicles that we lease to our employees.

(e) Reflects amounts owed to Financial Services by Automotive (these amounts include the balances related to the Dealer financing and other financing receivables described above).

NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

For each accounting topic that is addressed in its own note, the description of the accounting policy may be found in the related note. Other significant accounting policies are described below.

Use of Estimates

The preparation of financial statements requires us to make estimates and assumptions that affect our results. Estimates are used to account for certain items such as marketing accruals, warranty costs, employee benefit programs, etc. Estimates are based on assumptions that we believe are reasonable under the circumstances. Due to the inherent uncertainty involved with estimates, actual results may differ.

Foreign Currency

We remeasure monetary assets and liabilities denominated in a currency that is different than a reporting entity's functional currency from the transactional currency to the legal entity's functional currency. The effect of this remeasurement process, and the results of our foreign currency hedging activities are reported in Cost of sales and Financial Services other income/(loss), net and were $(510) million, $(524) million, and $307 million, for the years ended 2014, 2015, and 2016, respectively.

Generally, our foreign subsidiaries use the local currency as their functional currency. We translate the assets and liabilities of our foreign subsidiaries from their respective functional currencies to U.S. dollars using end-of-period exchange rates. Changes in the carrying value of these assets and liabilities attributable to fluctuations in exchange rates are recognized in Foreign currency translation, a component of Other comprehensive income/(Ioss), net of tax. Upon sale or upon complete or substantially complete liquidation of an investment in a foreign subsidiary, the amount of accumulated foreign currency translation related to the entity is reclassified to income and recognized as part of the gain or loss on the investment.

Restricted Cash

Cash and cash equivalents that are restricted as to withdrawal or use under the terms of certain contractual agreements are recorded in Other assets in the non-current assets section of our consolidated balance sheet. Our Automotive segment restricted cash balances primarily include various escrow agreements related to legal, insurance, customs, and environmental matters. Our Financial Services segment restricted cash balances primarily include cash held to meet certain local governmental and regulatory reserve requirements and cash held under the terms of certain contractual agreements. Restricted cash does not include required minimum balances or cash securing debt issued through securitization transactions. The balance at December 31, 2015 and 2016 was immaterial.

Trade Receivables

Trade and other receivables consists primarily of Automotive segment receivables from contracts with customers for the sale of vehicles, parts, and accessories. Trade receivables initially are recorded at the transaction amount and are typically outstanding for less than 30 days. Each reporting period, we evaluate the collectability of the receivables and record an allowance for doubtful accounts representing our estimate of the probable losses. Additions to the allowance for doubtful accounts are made by recording charges to bad debt expense reported in Selling, administrative, and other expenses.

Net Intangible Assets

We capitalize and amortize our finite-lived intangible assets over their estimated useful lives. Indefinite-lived intangible assets are not amortized, but are tested for impairment annually or more frequently if events or circumstances indicate the assets may be impaired. Our intangible assets are comprised primarily of license and advertising agreements, land rights, patents, customer contracts, and technology. Our indefinite-lived intangibles were tested for impairment in 2015 and 2016 and no impairment was required.

The net carrying amount of our intangible assets was $124 million and $198 million at December 31, 2015 and 2016, respectively, and are reported in Other assets in the non-current assets section of our consolidated balance sheet.

FORD MOTOR COMPANY AND SUBSIDIARIES
NOTES TO THE FINANCIAL STATEMENTS

NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Long-Lived Asset Impairment

We test long-lived asset groups for recoverability when changes in circumstances indicate the carrying value may not be recoverable. Events that trigger a test for recoverability include material adverse changes in projected revenues and expenses, significant underperformance relative to historical and projected future operating results, significant negative industry or economic trends, and a significant adverse change in the manner in which an asset group is used or in its physical condition. When a triggering event occurs, a test for recoverability is performed, comparing projected undiscounted future cash flows to the carrying value of the asset group. If the test for recoverability identifies a possible impairment, the asset group's fair value is measured relying primarily on a discounted cash flow method. An impairment charge is recognized for the amount by which the carrying value of the asset group exceeds its estimated fair value. When an impairment loss is recognized for assets to be held and used, the adjusted carrying amount of those assets is depreciated over their remaining useful life. No impairment of long-lived assets was recorded in 2015 or 2016.

Goodwill

We perform annual testing of goodwill during the fourth quarter to determine whether any impairment has occurred. Goodwill impairment testing is also performed following an allocation of goodwill to a business to be disposed, or following a triggering event for the long-lived asset impairment test. To test for goodwill impairment, we assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If the qualitative assessment indicates a possible impairment, the carrying value of each reporting unit is compared with its fair value. Fair value is measured relying primarily on the income approach by applying a discounted cash flow method. Our goodwill balances were $6 million and $50 million at December 31, 2015 and 2016, respectively, and are reported in Other assets in the non-current assets section of our consolidated balance sheet. For the periods presented, we have not recorded any impairment.

Fair Value Measurements

Cash equivalents, marketable securities, and derivative financial instruments are remeasured and presented on our financial statements on a recurring basis at fair value, while other assets and liabilities are measured at fair value on a nonrecurring basis.

In measuring fair value, we use various valuation methods and prioritize the use of observable inputs. The use of observable and unobservable inputs and their significance in measuring fair value are reflected in our fair value hierarchy.

- Level 1 - inputs include quoted prices for identical instruments and are the most observable
- Level 2 - inputs include quoted prices for similar instruments and observable inputs such as interest rates, currency exchange rates, and yield curves
- Level 3 - inputs include data not observable in the market and reflect management judgment about the assumptions market participants would use in pricing the instruments

Transfers into and transfers out of the hierarchy levels are recognized as if they had taken place at the end of the reporting period.

Valuation Method

Cash and Cash Equivalents. Included in Cash and cash equivalents are highly liquid investments that are readily convertible to known amounts of cash and are subject to an insignificant risk of change in value due to interest rate, quoted price, or penalty on withdrawal. A debt security is classified as a cash equivalent if it meets these criteria and if it has a remaining time to maturity of three months or less from the date of acquisition. Amounts on deposit and available upon demand, or negotiated to provide for daily liquidity without penalty, are classified as Cash and cash equivalents. Time deposits, certificates of deposit, and money market accounts that meet the above criteria are reported at par value on our balance sheet.

NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Marketable Securities. Investments in securities with a maturity date greater than three months at the date of purchase and other securities for which there is more than an insignificant risk of change in value due to interest rate, quoted price, or penalty on withdrawal are classified as Marketable securities. We generally measure fair value using prices obtained from pricing services. Pricing methods and inputs to valuation models used by the pricing services depend on the security type (i.e., asset class). Where possible, fair values are generated using market inputs including quoted prices (the closing price in an exchange market), bid prices (the price at which a buyer stands ready to purchase), and other market information. For fixed income securities that are not actively traded, the pricing services use alternative methods to determine fair value for the securities, including quotes for similar fixed-income securities, matrix pricing, discounted cash flow using benchmark curves, or other factors. In certain cases, when market data are not available, we may use broker quotes to determine fair value.

An annual review is performed on the security prices received from our pricing services, which includes discussion and analysis of the inputs used by the pricing services to value our securities. We also compare the price of certain securities sold close to the quarter end to the price of the same security at the balance sheet date to ensure the reported fair value is reasonable.

Realized gains and losses and interest income on all of our marketable securities, and unrealized gains and losses on securities not classified as available for sale are recorded in Non-Financial Services interest income and other income/(loss), net and Financial Services other income/(loss), net. Unrealized gains and losses on available for sale securities are recognized in Unrealized gains and losses on securities, a component of Other comprehensive income/(loss), net of tax. Realized gains and losses and reclassifications of accumulated other comprehensive income into net income are measured using the specific identification method.

On a quarterly basis, we review our available for sale securities for impairment. If we conclude that any of these investments are impaired, we determine whether such impairment is other-than-temporary. Factors we consider to make such determination include the duration and severity of the impairment, the reason for the decline in value, and the potential recovery period and our intent to sell. If any impairment is considered other-than-temporary, we will write down the asset to its fair value and record the corresponding charge in Non-Financial Services interest income and other income/(loss), net.

Derivative Financial Instruments. Our derivatives are over-the-counter customized derivative transactions and are not exchange traded. We estimate the fair value of these instruments using industry-standard valuation models such as a discounted cash flow. These models project future cash flows and discount the future amounts to a present value using market-based expectations for interest rates, foreign exchange rates, commodity prices, and the contractual terms of the derivative instruments. The discount rate used is the relevant interbank deposit rate (e.g., LIBOR) plus an adjustment for non-performance risk. The adjustment reflects the full credit default swap ("CDS") spread applied to a net exposure, by counterparty, considering the master netting agreements and any posted collateral. We use our counterparty's CDS spread when we are in a net asset position and our own CDS spread when we are in a net liability position. In certain cases, market data is not available and we use broker quotes and models (e.g., Black-Scholes) to determine fair value. This includes situations where there is lack of liquidity for a particular currency or commodity, or when the instrument is longer dated.

Finance Receivables. We measure finance receivables at fair value for purposes of disclosure (see Note 6) using internal valuation models. These models project future cash flows of financing contracts based on scheduled contract payments (including principal and interest). The projected cash flows are discounted to present value based on assumptions regarding credit losses, pre-payment speed, and applicable spreads to approximate current rates. Our assumptions regarding pre-payment speed and credit losses are based on historical performance. The fair value of finance receivables is categorized within Level 3 of the hierarchy.

On a nonrecurring basis, we also measure at fair value retail contracts greater than 120 days past due or deemed to be uncollectible, and individual dealer loans probable of foreclosure. We use the fair value of collateral, adjusted for estimated costs to sell, to determine the fair value of our receivables. The collateral for a retail receivable is the vehicle financed, and for dealer loans is real estate or other property.

NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

The fair value of collateral for retail receivables is calculated by multiplying the outstanding receivable balances by the average recovery value percentage. The fair value of collateral for dealer loans is determined by reviewing various appraisals, which include total adjusted appraised value of land and improvements, alternate use appraised value, broker's opinion of value, and purchase offers.

Debt. We measure debt at fair value for purposes of disclosure (see Note 14) using quoted prices for our own debt with approximately the same remaining maturities. Where quoted prices are not available, we estimate fair value using discounted cash flows and market-based expectations for interest rates, credit risk, and the contractual terms of the debt instruments. For certain short-term debt with an original maturity date of one year or less, we assume that book value is a reasonable approximation of the debt's fair value. The fair value of debt is categorized within Level 2 of the hierarchy.

Employee Separation Actions and Exit and Disposal Activities

We record costs associated with voluntary separations at the time of employee acceptance, unless the acceptance requires explicit approval by the Company. We record costs associated with involuntary separation programs when management has approved the plan for separation, the affected employees are identified, and it is unlikely that actions required to complete the separation plan will change significantly. When a plan of separation requires approval by or consultation with the relevant labor organization or government, the costs are recorded after the required approval or consultation process is complete. Costs associated with benefits that are contingent on the employee continuing to provide service are accrued over the required service period.

Additionally, under certain labor agreements, we are required to pay transitional benefits to our employees who are idled. For employees who are temporarily idled, we expense the benefits on an as-incurred basis. For employees who are permanently idled, we expense all of the expected future benefit payments in the period when it is probable that the employees will be permanently idled. Our reserve balance for these future benefit payments to permanently idled employees takes into account several factors: the demographics of the population at each affected facility, redeployment alternatives, estimate of benefits to be paid, and recent experience relative to voluntary redeployments.

Revenue Recognition — Automotive Segment

Automotive revenue is generated primarily by sales of vehicles, parts, and accessories. Revenue is recorded when all risks and rewards of ownership are transferred to our customers (generally dealers and distributors). For the majority of our sales, this occurs when products are shipped from our manufacturing facilities. When we give our dealers the right to return eligible parts for credit, we reduce the related revenue for expected returns.

We sell vehicles to fleet customers, primarily daily rental car companies, subject to guaranteed repurchase options. These vehicles are accounted for as operating leases. At the time of sale, the proceeds are recorded as deferred revenue in Other liabilities and deferred revenue in the non-current liabilities section of our consolidated balance sheet. The difference between the proceeds and the guaranteed repurchase amount is recognized in Automotive revenues over the term of the lease using a straight line method. On average, leases remain outstanding for approximately one year. The cost of the vehicle is recorded in Net investment in operating leases on our consolidated balance sheet and the difference between the cost of the vehicle and the estimated auction value is depreciated in Cost of sales over the term of the lease. Proceeds from the sale of the vehicle at auction are recognized in Automotive revenues at the time of sale.

Revenue Recognition — Financial Services Segment

Financial Services revenue is generated primarily from interest on finance receivables (including direct financing leases). Interest is recognized using the interest method and includes the amortization of certain direct origination costs. Revenue from payments received on operating leases is recognized on a straight-line basis over the term of the lease. Revenue from interest on finance receivables and operating leases is discontinued at the time a receivable or account is determined to be uncollectible.

FORD MOTOR COMPANY AND SUBSIDIARIES
NOTES TO THE FINANCIAL STATEMENTS

NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Finance and Lease Incentives

We offer special financing and lease incentives to customers who choose to finance or lease Ford or Lincoln brand vehicles with Ford Credit. The estimated cost for these incentives is recorded as a reduction to Automotive revenues when the vehicle is sold to the dealer. Ford Credit records a reduction to the finance receivable or reduces the cost of the vehicle operating lease when it records the underlying finance contract and we transfer to it the amount of the incentive on behalf of the dealer's customer. See Note 1 for additional information regarding transactions between Automotive and Financial Services. The Financial Services segment recognized interest revenue of $1.4 billion, $1.3 billion, and $1.6 billion in 2014, 2015, and 2016, respectively, and lower depreciation of $1.3 billion, $1.5 billion, and $1.9 billion in 2014, 2015, and 2016, respectively associated with these incentives.

Sales and Marketing Incentives

Sales and marketing incentives generally are recognized as reductions in Automotive revenues. The incentives generally take the form of cash payments to dealers and dealers' customers. The reduction to revenue is accrued at the later of the date the related vehicle is sold or the date the incentive program is both approved and communicated. We generally estimate these accruals using incentive programs that are approved as of the balance sheet date and are expected to be effective at the beginning of the subsequent period.

Supplier Price Adjustments

We frequently negotiate price adjustments with our suppliers throughout a production cycle, even after receiving production material. These price adjustments relate to changes in design specification or other commercial terms such as economics, productivity, and competitive pricing. We recognize price adjustments when we reach final agreement with our suppliers. In general, we avoid direct price changes in consideration of future business; however, when these occur, our policy is to defer the financial statement impact of any such price change given explicitly in consideration of future business where guaranteed volumes are specified.

Raw Material Arrangements

We may, at times, negotiate prices for and facilitate the purchase of raw materials on behalf of our suppliers. These raw material arrangements, which take place independently of any purchase orders issued to our suppliers, are negotiated at arms' length and do not involve volume guarantees. When we pass the risks and rewards of ownership to our suppliers, including inventory risk, market price risk, and credit risk for the raw material, we record both the cost of the raw material and the income from the subsequent sale to the supplier in Cost of sales.

Government Incentives

We receive incentives from U.S. and non-U.S. governmental entities in the form of tax rebates or credits, grants, and loans. Government incentives are recorded in the financial statements in accordance with their purpose, either as a reduction of expense, a reduction of the cost of the capital investment, or other income. The benefit is recorded when all conditions attached to the incentive have been met and there is reasonable assurance of receipt.

Selected Other Costs

Engineering, research, and development expenses, primarily salaries, materials, and associated costs, are reported in Cost of sales; advertising costs are reported in Selling, administrative, and other expenses. Engineering, research, and development costs are expensed as incurred when performed internally or when performed by a supplier if we guarantee reimbursement. Advertising costs are expensed as incurred. Engineering, research, development, and advertising expenses for the years ended December 31 were as follows (in billions):

	2014	2015	2016
Engineering, research, and development	$ 6.7	$ 6.7	$ 7.3
Advertising	4.3	4.3	4.3

FORD MOTOR COMPANY AND SUBSIDIARIES
NOTES TO THE FINANCIAL STATEMENTS

NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Presentation of Sales and Sales-Related Taxes

We collect and remit taxes required by various governmental authorities that are both imposed on and concurrent with revenue-producing transactions between us and our customers. These taxes may include, but are not limited to, sales, use, value-added, and excise taxes. We report the collection of these taxes on a net basis (excluded from revenues).

NOTE 3. NEW ACCOUNTING STANDARDS

Adoption of New Accounting Standards

Accounting Standard Update ("ASU") 2015-17, Income Taxes - Balance Sheet Classification of Deferred Taxes. On April 1, 2016, we retrospectively adopted the new accounting standard which requires deferred tax assets and liabilities to be classified as non-current in the consolidated balance sheet. The impact of the change resulted in the classification of all deferred taxes as non-current.
We also adopted the following standards during 2016, none of which had a material impact to our financial statements or financial statement disclosures:

Standard		Effective Date
2015-16	Business Combinations - Simplifying the Accounting for Measurement-Period Adjustments	January 1, 2016
2015-09	Insurance - Disclosures about Short-Duration Contracts	January 1, 2016
2015-05	Internal-Use Software - Customer's Accounting for Fees Paid in a Cloud Computing Arrangement	January 1, 2016
2015-02	Consolidation - Amendments to the Consolidation Analysis	January 1, 2016
2015-01	Extraordinary and Unusual Items - Simplifying Income Statement Presentation by Eliminating the Concept of Extraordinary Items	January 1, 2016
2014-12	Stock Compensation - Accounting for Share-Based Payments When the Terms of an Award Provide That a Performance Target Could Be Achieved after the Requisite Service Period	January 1, 2016
2014-15	Going Concern - Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern	December 31, 2016

Accounting Standards Issued But Not Yet Adopted

The following represent the standards that will, or are expected to, result in a significant change in practice and/or have a significant financial impact to Ford.

ASU 2016-13, Credit Losses - Measurement of Credit Losses on Financial Instruments. In June 2016, the Financial Accounting Standards Board ("FASB") issued a new accounting standard which replaces the current incurred loss impairment method with a method that reflects expected credit losses. The new standard is effective as of January 1, 2020, and early adoption is permitted as of January 1, 2019. We are assessing the potential impact to our financial statements and disclosures.

ASU 2016-09, Stock Compensation - Improvements to Employee Share-Based Payment Accounting. In March 2016, the FASB issued a new accounting standard which simplifies accounting for share-based payment transactions, including income tax consequences and the classification of the tax impact on the statement of cash flows. We will adopt the standard effective January 1, 2017 by recognizing a one-time increase of about $500 million to retained earnings and deferred tax assets related to cumulative excess tax benefits previously unrecognized. We will also reclassify tax-related items from operating activities to financing activities on the consolidated statement of cash flows.

ASU 2016-02, Leases. In February 2016, the FASB issued a new accounting standard which provides guidance on the recognition, measurement, presentation, and disclosure of leases. The new standard supersedes present U.S. GAAP guidance on leases and requires substantially all leases to be reported on the balance sheet as right-of-use assets and lease liabilities, as well as additional disclosures. The new standard is effective as of January 1, 2019, and early adoption is permitted. We are assessing the potential impact to our financial statements and disclosures.

FORD MOTOR COMPANY AND SUBSIDIARIES
NOTES TO THE FINANCIAL STATEMENTS

NOTE 3. NEW ACCOUNTING STANDARDS (Continued)

ASU 2014-09, Revenue - Revenue from Contracts with Customers. In May 2014, the FASB issued a new accounting standard that requires recognition of revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which we expect to be entitled in exchange for those goods or services. The FASB has also issued several updates to ASU 2014-09. The new standard supersedes U.S. GAAP guidance on revenue recognition and requires the use of more estimates and judgments than the present standards. It also requires additional disclosures. We will adopt the new revenue guidance effective January 1, 2017, by recognizing the cumulative effect of initially applying the new standard as an increase to the opening balance of retained earnings. We expect this adjustment to be less than $100 million, with an immaterial impact to our net income on an ongoing basis. Adoption of the new standard will also result in changes in classification between Revenues, Cost of sales, Non-Financial Services interest income and other income/(loss), net, and Financial Services other income/(loss), net.

NOTE 4. SEGMENT INFORMATION

In conjunction with our expanded business model to become an automotive, financial services, and mobility company, beginning with the second quarter of 2016, we changed our reportable segment disclosures. Reflecting the manner in which our Chief Operating Decision Maker manages our businesses, including resource allocation and performance assessment, we have four operating segments that represent the primary businesses reported in our consolidated financial statements. These operating segments are: Automotive, Financial Services, Ford Smart Mobility LLC, and Central Treasury Operations.

Automotive and Financial Services comprise separate reportable segments. Ford Smart Mobility LLC and Central Treasury Operations did not meet the quantitative thresholds in this reporting period to qualify as reportable segments; therefore, these operating segments are combined and disclosed below as All Other. Prior-period amounts were adjusted retrospectively to reflect the change to our reportable segments.
Below is a description of our reportable segments and the business activities included in All Other.

Automotive Segment

Our Automotive segment primarily includes the sale of Ford and Lincoln brand vehicles, service parts, and accessories worldwide, together with the associated costs to develop, manufacture, distribute, and service the vehicles, parts, and accessories. The segment includes five regional business units: North America, South America, Europe, Middle East & Africa, and Asia Pacific.

Financial Services Segment

The Financial Services segment primarily includes our vehicle-related financing and leasing activities at Ford Credit.

All Other

All Other is a combination of two operating segments that did not meet the quantitative thresholds in this reporting period to qualify as reportable segments. All Other consists of our Central Treasury Operations (formerly Other Automotive) and Ford Smart Mobility LLC. The Central Treasury Operations segment is primarily engaged in decision making for investments, risk management activities, and providing financing for the Automotive segment. Interest income (excluding interest earned on our extended service contract portfolio that is included in our Automotive segment), interest expense, gains and losses on cash equivalents and marketable securities, and foreign exchange derivatives associated with intercompany lending, are included in the results of Central Treasury

Operations. The underlying assets and liabilities, primarily cash and cash equivalents, marketable securities, debt, and derivatives, remain with the Automotive segment.

Ford Smart Mobility LLC is a subsidiary formed to design, build, grow, and invest in emerging mobility services. Designed to compete like a start-up company, Ford Smart Mobility LLC will design and build mobility services on its own, and collaborate with start-ups and tech companies.

NOTE 4. SEGMENT INFORMATION (Continued)

Special Items

In addition, our results include Special items that consist of (i) pension and other postretirement employee benefits ("OPEB") remeasurement gains and losses, (ii) significant personnel and dealer-related costs stemming from our efforts to match production capacity and cost structure to market demand and changing model mix, and (iii) certain infrequent significant items that we generally do not consider to be indicative of our ongoing operating activities. Our management excludes these items from its review of the results of the operating segments for purposes of measuring segment profitability and allocating resources. Special items are presented as a separate reconciling item.

FORD MOTOR COMPANY AND SUBSIDIARIES
NOTES TO THE FINANCIAL STATEMENTS

NOTE 4. SEGMENT INFORMATION (Continued)

Key operating data for our business segments for the years ended or at December 31 were as follows (in millions):

	Automotive	Financial Services	All Other	Special Items	Adjustments	Total
2014						
Revenues	$ 135,782	$ 8,295	$ —	$ —	$ —	$ 144,077
Pre-tax results - income/(loss)	6,254	1,794	(755)	(6,059)	—	1,234
Depreciation and tooling amortization	4,252	3,133	—	—	—	7,385
Interest expense	—	2,699	797	—	—	3,496
Investment-related interest income	53	51	140	—	—	244
Equity in net income/(loss) of affiliated companies	1,575	29	—	(329)	—	1,275
Cash outflow for capital spending	7,360	103	—	—	—	7,463
Cash, cash equivalents, and marketable securities	21,702	9,448	—	—	—	31,150
Total assets	90,167	121,388	—	—		