GENERAL MOTORS

2018 ANNUAL REPORT

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, DC 20549-1004

Form 10-K

☑ ANNUAL REPORT PURSUANT TO SECTION 13	OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2018	
	OR
☐ TRANSITION REPORT PURSUANT TO SECTION 1934	ON 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF
For the transition period from to	
Commission	file number 001-34960
GENERAL MO	OTORS COMPANY
	rant as specified in its charter)
STATE OF DELAWARE	27-0756180
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
300 Renaissance Center, Detroit, Michigan (Address of principal executive offices)	48265-3000 (Zip Code)
Registrant's telepho	ne number, including area code
	13) 667-1500 irsuant to Section 12(b) of the Act:
Title of each class	Name of each exchange on which registered
Common Stock	New York Stock Exchange
Warrants (expiring July 10, 2019)	New York Stock Exchange
Securities registered pursu	ant to Section 12 (g) of the Act: None
Indicate by check mark if the registrant is a well-known seasoned is	ssuer, as defined in Rule 405 of the Securities Act. Yes 🗹 No 🗆
Indicate by check mark if the registrant is not required to file report	ts pursuant to Section 13 or Section 15(d) of the Act. Yes No
	orts required to be filed by Section 13 or 15(d) of the Securities Exchange Act of the registrant was required to file such reports), and (2) has been subject to such
	onically every Interactive Data File required to be submitted pursuant to Rule 405 months (or for such shorter period that the registrant was required to submit such
Indicate by check mark if disclosure of delinquent filers pursuant to and will not be contained, to the best of registrant's knowledge, in definition 10-K or any amendment to this Form 10-K. ✓	o Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, nitive proxy or information statements incorporated by reference in Part III of this
	filer, an accelerated filer, a non-accelerated filer, smaller reporting company or an filer," "accelerated filer," "smaller reporting company" and "emerging growth
	ler
If an emerging growth company, indicate by check mark if the regis any new or revised financial accounting standards provided pursuant to	strant has elected not to use the extended transition period for complying with to Section 13(a) of the Exchange Act. \Box
Indicate by check mark whether the registrant is a shell company (a	is defined in Rule 12b-2 of the Exchange Act). Yes 🔲 No 🗹
The aggregate market value of the voting stock held by non-affiliat directors and executive officers may be affiliates) was approximately	es of the registrant (assuming only for purposes of this computation that \$55.5 billion as of June 30, 2018.
As of January 25, 2019 there were 1,409,478,926 shares of commo	n stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement related to the Annual Stockholders Meeting to be filed subsequently are incorporated by reference into Part III of this Form 10-K.

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PART I

Item 1. Business

General Motors Company (sometimes referred to as we, our, us, ourselves, the Company, General Motors, or GM) was incorporated as a Delaware corporation in 2009. We design, build and sell trucks, crossovers, cars and automobile parts worldwide. We also provide automotive financing services through General Motors Financial Company, Inc. (GM Financial). Except for per share amounts or as otherwise specified, amounts presented within tables are stated in millions.

On July 31, 2017 we closed the sale of the Opel and Vauxhall businesses and certain other assets in Europe (the Opel/Vauxhall Business) to Peugeot, S.A. (PSA Group). On October 31, 2017 we closed the sale of the European financing subsidiaries and branches (the Fincos, and together with the Opel/Vauxhall Business, the European Business) to Banque PSA Finance S.A. and BNP Paribas Personal Finance S.A. The European Business is presented as discontinued operations in our consolidated financial statements for all periods presented. Unless otherwise indicated, information in this report relates to our continuing operations.

Automotive Our automotive operations meet the demands of our customers through our automotive segments: GM North America (GMNA) and GM International (GMI). GMNA meets the demands of customers in North America with vehicles developed, manufactured and/or marketed under the Buick, Cadillac, Chevrolet and GMC brands. GMI primarily meets the demands of customers outside North America with vehicles developed, manufactured and/or marketed under the Buick, Cadillac, Chevrolet, GMC and Holden brands. We also have equity ownership stakes in entities that meet the demands of customers in other countries, primarily in China, with vehicles developed, manufactured and/or marketed under the Baojun, Buick, Cadillac, Chevrolet, Jiefang and Wuling brands.

In addition to the vehicles we sell through our dealer network to retail customers, we also sell vehicles directly or through our dealer network to fleet customers, including daily rental car companies, commercial fleet customers, leasing companies and governments. Our customers can obtain a wide range of aftersale vehicle services and products through our dealer network, such as maintenance, light repairs, collision repairs, vehicle accessories and extended service warranties.

Competitive Position and Vehicle Sales The principal factors that determine consumer vehicle preferences in the markets in which we operate include overall vehicle design, price, quality, available options, safety, reliability, fuel economy and functionality. Market leadership in individual countries in which we compete varies widely.

We present both wholesale and total vehicle sales data to assist in the analysis of our revenue and our market share. Wholesale vehicle sales data consists of sales to GM's dealers and distributors as well as sales to the U.S. Government, and excludes vehicles sold by our joint ventures. Wholesale vehicle sales data correlates to our revenue recognized from the sale of vehicles, which is the largest component of Automotive net sales and revenue. In the year ended December 31, 2018 36% of our wholesale vehicle sales volume was generated outside the U.S. The following table summarizes wholesale vehicle sales by automotive segment (vehicles in thousands):

	Years Ended December 31,					
·	20	18	20	17	20	16
GMNA(a)	3,555	75.5%	3,511	73.5%	3,958	75.9%
GMI(b)	1,152	24.5%	1,267	26.5%	1,255	24.1%
Total	4,707	100.0%	4,778	100.0%	5,213	100.0%
Discontinued operations			696		1,199	

⁽a) Wholesale vehicle sales related to transactions with the European Business were insignificant for the years ended December 31, 2017 and 2016.

Total vehicle sales data represents: (1) retail sales (i.e., sales to consumers who purchase new vehicles from dealers or distributors); (2) fleet sales, such as sales to large and small businesses, governments, and daily rental car companies; and (3) vehicles used by dealers in their businesses, including courtesy transportation vehicles. Total vehicle sales data includes all sales by joint ventures on a total vehicle basis, not based on our percentage ownership interest in the joint venture. Certain joint venture agreements in China allow for the contractual right to report vehicle sales of non-GM trademarked vehicles by those joint ventures, which are included in the total vehicle sales we report for China. While total vehicle sales data does not correlate directly to the revenue we

⁽b) Wholesale vehicle sales include 131 and 128 vehicles related to transactions with the European Business for the years ended December 31, 2017 and 2016.

recognize during a particular period, we believe it is indicative of the underlying demand for our vehicles. Total vehicle sales data represents management's good faith estimate based on sales reported by GM's dealers, distributors, and joint ventures, commercially available data sources such as registration and insurance data, and internal estimates and forecasts when other data is not available.

The following table summarizes total industry vehicle sales and our related competitive position by geographic region (vehicles in thousands):

	Years Ended December 31,								
		2018			2017			2016	
	Industry	GM	Market Share	Industry	GM	Market Share	Industry	GM	Market Share
North America									
United States	17,694	2,954	16.7%	17,570	3,002	17.1%	17,886	3,043	17.0%
Other	3,835	536	14.0%	3,986	574	14.4%	3,993	587	14.7%
Total North America(a)	21,529	3,490	16.2%	21,556	3,576	16.6%	21,879	3,630	16.6%
Asia/Pacific, Middle East and Africa									
China(b)	26,466	3,645	13.8%	28,231	4,041	14.3%	28,274	3,914	13.8%
Other(c)	22,252	555	2.5%	21,287	629	3.0%	20,602	720	3.5%
Total Asia/Pacific, Middle East and Africa(a)	48,718	4,200	8.6%	49,518	4,670	9.4%	48,876	4,634	9.5%
South America									
Brazil	2,566	434	16.9%	2,239	394	17.6%	2,050	346	16.9%
Other	1,919	256	13.3%	1,928	275	14.3%	1,623	237	14.6%
Total South America(a)	4,485	690	15.4%	4,167	669	16.1%	3,673	583	15.9%
Total in GM markets	74,732	8,380	11.2%	75,241	8,915	11.8%	74,428	8,847	11.9%
Total Europe	19,045	4	%	19,190	685	3.6%	18,620	1,161	6.2%
Total Worldwide(d)	93,777	8,384	8.9%	94,431	9,600	10.2%	93,048	10,008	10.8%
United States									
Cars	5,361	560	10.4%	6,145	709	11.5%	6,897	890	12.9%
Trucks	5,361	1,360	25.4%	5,041	1,328	26.3%	4,911	1,325	27.0%
Crossovers	6,972	1,034	14.8%	6,384	965	15.1%	6,078	828	13.6%
Total United States	17,694	2,954	16.7%	17,570	3,002	17.1%	17,886	3,043	17.0%
China(b)									
SGMS		1,749			1,906			1,806	
SGMW and FAW-GM		1,896			2,135			2,108	
Total China	26,466	3,645	13.8%	28,231	4,041	14.3%	28,274	3,914	13.8%

⁽a) Sales of Opel/Vauxhall outside of Europe were insignificant in the years ended December 31, 2017 and 2016.

In the year ended December 31, 2018 we estimate we had the number one market share in each of North America and South America, and the number three market share in the Asia/Pacific, Middle East and Africa region, which included the number two market share in China. Refer to the Overview in Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) for discussion on changes in market share by region.

⁽b) Includes sales by the Automotive China JVs SAIC General Motors Sales Co., Ltd. (SGMS), SAIC GM Wuling Automobile Co., Ltd. (SGMW) and FAW-GM Light Duty Commercial Vehicle Co., Ltd. (FAW-GM). In the year ended December 31, 2016 wholesale volumes were used for Industry, GM and Market Share. Our total vehicle sales in China were 3,871 in the year ended December 31, 2016.

⁽c) Includes Industry and GM sales in India and South Africa where we ceased vehicle sales for those domestic markets as of December 31, 2017.

⁽d) Cuba, Iran, North Korea, Sudan and Syria are subject to broad economic sanctions. Accordingly these countries are excluded from industry sales data and corresponding calculation of market share.

As discussed above, total vehicle sales and market share data provided in the table above includes fleet vehicles. Certain fleet transactions, particularly sales to daily rental car companies, are generally less profitable than retail sales to end customers. Prior to January 1, 2018 a significant portion of the sales to daily rental car companies were recorded as operating leases under U.S. GAAP with no recognition of revenue at the date of initial delivery due to guaranteed repurchase obligations. Beginning January 1, 2018, a significant portion of the sales to daily rental car companies are recorded as sales at the time of delivery to daily rental car companies. The following table summarizes estimated fleet sales and those sales as a percentage of total vehicle sales (vehicles in thousands):

	Years Ended December 31,			
_	2018	2017	2016	
GMNA	740	691	707	
GMI	478	541	527	
Total fleet sales	1,218	1,232	1,234	
Fleet sales as a percentage of total vehicle sales	14.5%	13.8%	13.9%	

Product Pricing Several methods are used to promote our products, including the use of dealer, retail and fleet incentives such as customer rebates and finance rate support. The level of incentives is dependent upon the level of competition in the markets in which we operate and the level of demand for our products.

Cyclical Nature of Business Retail sales are cyclical and production varies from month to month. Vehicle model changeovers occur throughout the year as a result of new market entries. The market for vehicles depends in part on general economic conditions, credit availability and consumer spending.

Relationship with Dealers We market vehicles and automotive parts worldwide primarily through a network of independent authorized retail dealers. These outlets include distributors, dealers and authorized sales, service and parts outlets.

The following table summarizes the number of authorized dealerships:

	December 31, 2018	December 31, 2017	December 31, 2016
GMNA	4,793	4,809	4,857
GMI	7,716	7,641	8,598
Total	12,509	12,450	13,455

We and our joint ventures enter into a contract with each authorized dealer agreeing to sell to the dealer one or more specified product lines at wholesale prices and granting the dealer the right to sell those vehicles to retail customers from an approved location. Our dealers often offer more than one GM brand at a single dealership in a number of our markets. Authorized dealers offer parts, accessories, service and repairs for GM vehicles in the product lines that they sell using GM parts and accessories. Our dealers are authorized to service GM vehicles under our limited warranty program and those repairs are made only with GM parts. Our dealers generally provide their customers with access to credit or lease financing, vehicle insurance and extended service contracts provided by GM Financial and other financial institutions.

The quality of GM dealerships and our relationship with our dealers and distributors are critical to our success as dealers maintain the primary sales and service interface with the end consumer of our products. In addition to the terms of our contracts with our dealers, we are regulated by various country and state franchise laws and regulations that may supersede those contractual terms and impose specific regulatory requirements and standards for initiating dealer network changes, pursuing terminations for cause and other contractual matters

Research, Product and Business Development and Intellectual Property Costs for research, manufacturing engineering, product engineering and design and development activities relate primarily to developing new products or services or improving existing products or services, including activities related to vehicle and greenhouse gas (GHG) emissions control, improved fuel economy, electrification, autonomous vehicles, the safety of drivers and passengers, and urban mobility. Research and development expenses were \$7.8 billion, \$7.3 billion and \$6.6 billion in the years ended December 31, 2018, 2017 and 2016.

Product Development The Product Development organization is responsible for designing and integrating vehicle and propulsion components to maximize part sharing across multiple vehicle segments. Global teams in Design, Program Management, Component

& Subsystem Engineering, Product Integrity, Safety, Propulsion Systems and Purchasing & Supply Chain collaborate to meet customer requirements and maximize global economies of scale.

Our global vehicle architecture development is headquartered at our Global Technical Center in Warren, Michigan. Cross-segment part sharing is an essential enabler to optimize our current vehicle portfolio, as we expect that more than 75% of our global sales volume will come from five vehicle architectures by early next decade. We will continue to leverage our current architecture portfolio to accommodate our customers around the world while achieving our financial goals.

In November 2018 we announced plans to transform our product development and optimize our product portfolio. We are evolving our global product development workforce and processes to drive world-class levels of engineering in advanced technologies and to improve quality and speed to market.

Hybrid, Plug-In, Extended Range and Battery Electric Vehicles We are investing in multiple technologies offering increasing levels of vehicle electrification including eAssist, plug-in hybrid, full hybrid, extended range and zero emission battery electric vehicles that are part of our long-term strategy to reduce petroleum consumption and GHG emissions. We currently offer seven 2018 model year vehicles in the U.S. featuring some form of electrification and continue to develop plug-in hybrid electric vehicle technology and extended range electric vehicles such as the Chevrolet Bolt EV.

Car- and Ride-Sharing Maven is a shared vehicle marketplace that leverages a versatile software and operational platform to provide members with on-demand access to vehicles through two primary services, Maven Gig and Maven Car Sharing. Maven Gig allows members to access vehicles that can be used in ride-sharing and delivery with companies such as Uber Technologies Inc. and GrubHub Inc. Maven Car Sharing is a consumer service that provides on-demand access to Maven owned and peer-owned vehicles through a new peer-to-peer car-sharing offering. Maven is available in 24 cities across the U.S., Canada and Australia. Through December 31, 2018 Maven Gig and Maven Car Sharing have accumulated in aggregate over 171 million miles driven, 34 million all-electric miles driven and 247,000 reservations. Maven now has 190,000 members.

Autonomous Technology We see autonomous technology leading to a future of zero crashes, zero emissions and zero congestion, since more than 90% of crashes are caused by driver error, according to the National Highway Traffic Safety Administration (NHTSA). We are among the leaders in the industry with significant global real-world experience in delivering connectivity and advanced safety features that are the building blocks to more advanced automation features that are driving our leadership position in the development of autonomous technology. An example of advanced technology is Super Cruise, a driver assistance feature that enables hands-free driving on the highway, which will be expanded to all Cadillac models, with roll-out beginning in 2020.

We are actively testing autonomous vehicles in San Francisco, California; Scottsdale, Arizona; and Michigan. Gated by safety and regulation, we continue to make rapid progress toward commercialization of a network of on-demand autonomous vehicles in the U.S.

In January 2018 we revealed the Cruise AV, a production-intent self-driving vehicle that was engineered from the start to operate safely on its own, with no driver.

In May 2018 SoftBank Vision Fund (The Vision Fund) agreed to invest in GM Cruise, our global segment responsible for the development and commercialization of autonomous vehicle technology. In addition, in October 2018 we reached an agreement to work jointly with Honda Motor Co., Ltd (Honda) to fund and develop a shared autonomous vehicle (SAV) for GM Cruise that can serve a wide variety of use cases and be manufactured at high volume. For additional information on third-party investments in GM Cruise, refer to the Overview section of the Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A).

Alternative Fuel Vehicles We believe alternative fuels offer significant potential to reduce petroleum consumption and resulting GHG emissions in the transportation sector. By leveraging experience and capability developed around these technologies in our global operations we continue to develop FlexFuel vehicles that can run on ethanol-gasoline blend fuels as well as technologies that support compressed natural gas and liquefied petroleum gas (LPG).

We offer a variety of FlexFuel vehicles in the U.S. for the 2019 model year to retail and fleet customers capable of operating on gasoline, E85 ethanol or any combination of the two. In Brazil, a substantial majority of vehicles sold are FlexFuel vehicles capable of running on high ethanol blends. We also market FlexFuel vehicles in other global markets where biofuels are in the marketplace. We support the development of biodiesel blend fuels, which are alternative diesel fuels produced from renewable sources.

Hydrogen Fuel Cell Technology Another part of our long-term strategy to reduce petroleum consumption and GHG emissions is our commitment to the development of our hydrogen fuel cell technology. Our Chevrolet Equinox fuel cell electric vehicle demonstration programs, such as Project Driveway, have accumulated more than three million miles of real-world driving. These programs are helping us identify consumer and infrastructure needs to understand the business case for potential production of vehicles with this technology. We are exploring non-traditional automotive uses for fuel cells in several areas, including demonstrations with the U.S. Army and U.S. Navy.

We signed a co-development agreement and established a nonconsolidated JV with Honda in 2016 for a next-generation fuel cell system and hydrogen storage technologies, aiming for commercialization in the early 2020s. We expect the collaboration to succeed by sharing expertise, economies of scale and common sourcing strategies and building upon GM's and Honda's strengths as leaders in hydrogen fuel cell technology.

OnStar and Vehicle Connectivity OnStar, LLC (OnStar) provides subscription-based and complementary services to more than 20 million connected vehicles globally. OnStar provides connected safety, security and mobility solutions for retail and fleet customers, including automatic crash response, stolen vehicle assistance, roadside assistance, dealer maintenance notifications, remote door unlock, turn-by-turn navigation, vehicle location services, hands-free calling, Smart Driver and Marketplace. OnStar also offers additional connectivity packages that include remote vehicle access through a mobile application, on-demand vehicle diagnostics, connected navigation and 4G LTE wireless connectivity.

Intellectual Property We generate and hold a significant number of patents in a number of countries in connection with the operation of our business. While none of these patents are individually material to our business as a whole, these patents are important to our operations and continued technological development. We hold a number of trademarks and service marks that are very important to our identity and recognition in the marketplace.

Raw Materials, Services and Supplies We purchase a wide variety of raw materials, parts, supplies, energy, freight, transportation and other services from numerous suppliers to manufacture our products. The raw materials primarily include steel, aluminum, resins, copper, lead and platinum group metals. We have not experienced any significant shortages of raw materials and normally do not carry substantial inventories of such raw materials in excess of levels reasonably required to meet our production requirements. We continue to experience higher commodity costs and anticipate higher costs associated with tariffs.

In some instances, we purchase systems, components, parts and supplies from a single source and may be at an increased risk for supply disruptions. The inability or unwillingness of these sources to supply us with parts and supplies could have a material adverse effect on our production capacity. Combined purchases from our two largest suppliers have been approximately 12% of our total purchases in each of the years ended December 31, 2018, 2017 and 2016. Refer to Item 1A. Risk Factors for further discussion of these risks.

Environmental and Regulatory Matters

Automotive Emissions Control We are subject to laws and regulations that require us to control automotive emissions, including vehicle and engine exhaust emission standards, vehicle evaporative emission standards and onboard diagnostic (OBD) system requirements. Advanced OBD systems are used to identify and diagnose problems with emission control systems. Problems detected by the OBD system and other in-use compliance monitoring activities may increase warranty costs and the likelihood of recall. Emission and OBD requirements have become more stringent as a result of lower emission standards and new diagnostic requirements that have come into force in many markets around the world driven by policy priorities such as air quality, energy security and climate change, often with very little harmonization. While we believe all of our products are designed and manufactured in material compliance with substantially all vehicle emissions requirements, regulatory authorities may conduct ongoing evaluations of the emissions compliance of products from all manufacturers. This includes vehicle emissions testing, including CO₂ and nitrogen oxide emissions testing, and review of emission control designs and strategies.

The U.S. federal government, through the Environmental Protection Agency (EPA), imposes stringent exhaust and evaporative emission control requirements on vehicles sold in the U.S. The California Air Resources Board (CARB) likewise imposes stringent exhaust and evaporative emission standards, as well as the requirement that increasing percentages of Zero Emission Vehicle (ZEVs) must be sold in California. The Clean Air Act permits states that have areas with air quality compliance issues to adopt California emission standards in lieu of federal requirements. Thirteen states have adopted California emission standards, and ten of these have adopted the ZEV requirements. There is a possibility that additional U.S. jurisdictions could adopt California emissions and ZEV requirements in the future.

Although the EPA has not imposed ZEV requirements, the EPA and California's emissions control standards will likely increase the time and mileage periods over which manufacturers are responsible for a vehicle's emission performance. The Canadian federal government's vehicle emission requirements are generally aligned with the U.S. federal requirements. The Canadian province of Quebec has adopted ZEV requirements starting with the 2018 model year largely based on California program requirements.

Each model year we must obtain certification that our vehicles and heavy-duty engines will meet emission requirements of the EPA before we can sell vehicles in the U.S. and Canada, and of the CARB before we can sell vehicles in California and other states that have adopted the California emissions requirements.

China implemented the China 5 emission standard nationwide at the beginning of 2017. China 5 is more stringent than the previous program on all levels including overall emission requirements and the time and mileage period for which vehicles need to meet China 5 level performance. China will implement a unique China 6 emission standard that combines elements of both European and U.S. standards and includes more stringent emission requirements and increases the time and mileage periods over which manufacturers are responsible for a vehicle's emission performance. Nationwide implementation for new registrations is expected in July 2020 for China 6a and July 2023 for the more stringent China 6b standard. Localities can pull ahead China 6 requirements if certain criteria are met. The majority of cities that have announced plans to implement China 6 early have projected implementation in July 2019, but one city has indicated implementation in the three months ended March 31, 2019. For additional information, refer to Item 1A. Risk Factors.

In South America certain countries follow the U.S. test procedures, standards and OBD requirements and others follow the European Union test procedures, standards and OBD requirements with different levels of stringency. Brazil implemented national L6 standards for light diesel vehicles in 2012 and OBD installation for light diesel vehicles in 2015. L6 standards for light gasoline vehicles were implemented in 2015 for all models.

As a result of the sale of the Opel/Vauxhall Business, GM's vehicle presence in Europe is smaller, but GM may still be affected by actions taken by regulators related both to Opel/Vauxhall vehicles sold before the sale of the Opel/Vauxhall Business as well as to other vehicles GM continues to sell in Europe. In the European Union, increased scrutiny of compliance with emissions standards may result in changes to these standards, including implementation of "real world driving" emissions tests, as well as stricter interpretations or redefinition of these standards and more rigorous enforcement. For example, our former German subsidiary has participated in continuing discussions with German and European authorities concerning emissions control systems. For additional information, refer to Note 22 to our consolidated financial statements.

Automotive Fuel Economy In the U.S., the National Highway Traffic Safety Administration (NHTSA) promulgates and enforces Corporate Average Fuel Economy (CAFE) standards for three separate fleets: domestically produced cars, imported cars and light-duty trucks. Manufacturers are subject to substantial civil penalties if they fail to meet the applicable CAFE standard in any model year, after taking into account all available credits for the preceding five model years and expected credits for the three succeeding model years, including credits obtained from other manufacturers. In addition to federal CAFE, the EPA promulgates and enforces GHG emission standards, which are effectively fuel economy standards because the majority of vehicle GHG emissions are carbon dioxide emissions that are emitted in direct proportion to the amount of fuel burned by a vehicle. The EPA and NHTSA also regulate the fuel efficiency and GHG emissions of medium- and heavy-duty vehicles, imposing more stringent standards over time.

In Canada, light-duty and heavy-duty GHG regulations are currently patterned after the existing EPA GHG emission standards. However, with both the U.S. and Canadian governments reviewing potential changes to these existing regulations and the difference in each country's climate change policies, there is an increased risk that future Canadian light-duty GHG regulations may not be aligned with future EPA regulations. In addition, CARB has asserted the right to promulgate and enforce its own state GHG standards for motor vehicles, and other states have asserted the right to adopt the California standards. Until recently, CARB regulations have provided that compliance with the federal EPA light-duty GHG program is deemed to be in compliance with the California standards through the 2025 model year. However, on December 12, 2018 CARB amended this regulation to clarify that, in the event the EPA alters the GHG stringency by means of the now-pending EPA GHG rulemaking, compliance with the EPA's GHG emissions standards will no longer be deemed in compliance with CARB's requirements. As a result, depending on the outcome of the EPA GHG rulemaking and finality of CARB's regulatory amendment in the future GM might be required to meet California standards that are different than the EPA GHG standards.

China has two fuel economy requirements for passenger vehicles: an individual vehicle pass-fail type approval requirement and a fleet average fuel consumption requirement. With a focus on the fleet average program, the current China Phase 4 fleet fuel consumption requirement, which went into effect in 2016, is based on curb weight with full compliance to 5.0L/100 km required by 2020. China Phase 4 has continued subsidies for plug-in hybrid, battery electric and fuel cell vehicles. China Phase 5 is currently

being developed with a planned start in 2021 with full compliance to 4.0L/100km required by 2025. In addition, China has established the New Energy Vehicle (NEV) Mandate which will require passenger car manufacturers to produce a certain volume of plug-in hybrid, battery electric and fuel cell vehicles to generate "credits" equivalent to 10% in 2019 and 12% in 2020 against the internal combustion engine vehicle production volume. The number of credits per car is based on the level of electric range and energy efficiency. The NEV Mandate requirement for 2021 to 2025 currently is being developed with a goal of NEV volume reaching 20% of total vehicle volume in 2025.

Regulators in other jurisdictions have already adopted or are developing fuel economy or carbon dioxide regulations. If regulators in these jurisdictions seek to impose and enforce emission standards that are misaligned with market conditions, we may be forced to take various actions to increase market support programs for more fuel-efficient vehicles and curtail production of certain high-performance cars, trucks and sport utility vehicles (SUVs) in order to achieve compliance. We regularly evaluate our current and future product plans and strategies for compliance with fuel economy and GHG regulations.

Industrial Environmental Control Our operations are subject to a wide range of environmental protection laws including those regulating air emissions, water discharge, waste management and environmental cleanup. Certain environmental statutes require that responsible parties fund remediation actions regardless of fault, legality of original disposal or ownership of a disposal site. Under certain circumstances these laws impose joint and several liability as well as liability for related damages to natural resources.

To mitigate the effects of our worldwide operations on the environment, we are converting as many of our worldwide operations as practicable to landfill-free operations which reduces GHG emissions associated with waste disposal. At December 31, 2018, 75 (or approximately 50%) of our manufacturing operations and 61 of our non-manufacturing operations were landfill-free, including idled facilities. At our landfill-free manufacturing operations approximately 94% of waste materials are composted, reused, or recycled and approximately 5% are converted to energy at waste-to-energy facilities. In 2018 we estimate that our waste reduction program diverted 1.6 million metric tons of waste from landfill, resulting in approximately 6.9 million metric tons of GHG emissions avoided in global manufacturing operations, including construction, demolition and remediation wastes.

In addition to minimizing our impact on the environment, our landfill-free program and total waste reduction commitments generate revenue from the sale of production by-products, reduce our use of material, reduce our carbon footprint and help to reduce the risks and financial liabilities associated with waste disposal.

We continue to search for ways to increase our use of renewable energy, improve our energy efficiency and work to drive growth and scale of renewables. We are committed to meeting the electricity needs of our operations worldwide with renewable energy by 2050. At December 31, 2018 we had implemented projects or signed renewable energy contracts globally that had increased our total renewable energy capacity to over 400 megawatts, which represents approximately 20% of our global electricity use. In 2018, several wind farms totaling approximately 250 megawatts now match the load of GM facilities in Texas, Ohio and Indiana. We continue to seek opportunities for a diversified renewable energy portfolio including wind, solar, and landfill gas. In 2018 Energy Star certified one assembly plant in Canada through Natural Resources Canada and 17 buildings in the U.S. for superior energy management. We also met the EPA Energy Star Challenge for Industry (EPA Challenge) at eight additional sites globally by reducing energy intensity an average of 13% at these sites within 2.5 years. To meet the EPA Challenge, industrial sites must reduce energy intensity by 10% within a five year period. In total 75 GM-owned manufacturing sites have met the EPA Challenge, with many sites achieving the goal multiple times for a total of 137 recognitions. These efforts minimize our utility expenses and are part of our approach to addressing climate change through setting a GHG emissions reduction target, collecting accurate data, following our business plan to operate more efficiently and publicly reporting progress against our target.

Chemical Regulations We continually monitor the implementation of chemical regulations to maintain compliance and evaluate their effect on our business, suppliers and the automotive industry.

Globally, governmental agencies continue to introduce new legislation and regulations related to the selection and use of chemicals by mandating broad prohibitions or restrictions and implementing green chemistry, life cycle analysis and product stewardship initiatives. These initiatives give broad regulatory authority to ban or restrict the use of certain chemical substances and potentially affect automobile manufacturers' responsibilities for vehicle components at the end of a vehicle's life, as well as chemical selection for product development and manufacturing. Global treaties and initiatives such as the Stockholm, Basel and Rotterdam Conventions on Chemicals and Waste and the Minamata Convention on Mercury, are driving chemical regulations across signatory countries. In addition, more global jurisdictions are establishing substance standards with regard to Vehicle Interior Air Quality.

Chemical regulations are increasing in North America. In the U.S. the EPA is moving forward with risk analysis and management of high priority chemicals under the authority of the 2016 Lautenberg Chemical Safety for the 21st Century Act, and several U.S.

states have chemical management regulations that can affect vehicle design such as the California and Washington laws banning the use of copper in brake friction material. Chemical restrictions in Canada continue to progress rapidly as a result of Environment Canada's Chemical Management Plan to assess existing substances and implement risk management controls on any chemical deemed toxic.

China prohibits the use of several chemical substances in vehicles. There are also various regulations in China stipulating the requirements for chemical management. Among other things, these regulations catalogue and restrict the use and the import and export of various chemical substances. The failure of our joint venture partners or our suppliers to comply with these regulations could disrupt production in China or prevent our joint venture partners from selling the affected products in the China market.

These emerging regulations will potentially lead to increases in costs and supply chain complexity. We believe that we are materially in compliance with substantially all of these requirements or expect to be materially in compliance by the required dates.

Safety In the U.S. the National Traffic and Motor Vehicle Safety Act of 1966 prohibits the sale of any new vehicle or equipment in the U.S. that does not conform to applicable vehicle safety standards established by NHTSA. If we or NHTSA determine that either a vehicle or vehicle equipment does not comply with a safety standard or if a vehicle defect creates an unreasonable safety risk the manufacturer is required to notify owners and provide a remedy. We are required to report certain information relating to certain customer complaints, warranty claims, field reports and notices and claims involving property damage, injuries and fatalities in the U.S. and claims involving fatalities outside the U.S. We are also required to report certain information concerning safety recalls and other safety campaigns outside the U.S.

Outside the U.S. safety standards and recall regulations often have the same purpose as the U.S. standards but may differ in their requirements and test procedures, adding complexity to regulatory compliance.

Automotive Financing - GM Financial GM Financial is our global captive automotive finance company and our global provider of automobile finance solutions. GM Financial conducts its business in North America, South America and through joint ventures in China.

GM Financial provides retail loan and lease lending across the credit spectrum. Additionally, GM Financial offers commercial lending products to dealers including new and used vehicle inventory floorplan financing and dealer loans, that are loans to finance improvements to dealership facilities, to provide working capital, and to purchase and/or finance dealership real estate. Other commercial lending products include financing for parts and accessories, dealer fleets and storage centers.

In North America, GM Financial offers a sub-prime lending program. The program is primarily offered to consumers with a FICO score or its equivalent of less than 620 who have limited access to automobile financing through banks and credit unions and is expected to sustain a higher level of credit losses than prime lending.

GM Financial generally seeks to fund its operations in each country through local sources to minimize currency and country risk. GM Financial primarily finances its loan, lease and commercial origination volume through the use of secured and unsecured credit facilities, through securitization transactions and through the issuance of unsecured debt in public markets.

Employees At December 31, 2018 we employed 97,000 (56%) hourly employees and 76,000 (44%) salaried employees. At December 31, 2018 50,000 (49%) of our U.S. employees were represented by unions, a majority of which were represented by the International Union, United Automobile, Aerospace and Agriculture Implement Workers of America (UAW). The following table summarizes worldwide employment (in thousands):

	December 31, 2018
GMNA(a)	124
GMI	39
GM Financial	10
Total Worldwide	173
U.S Salaried	53
U.S Hourly.	50

(a) Includes GM Cruise

In November 2018 we announced our plan to transform our global workforce, which includes reducing our salaried staff in 2019 to ensure we have the right skill sets for today and the future, as well as 25% fewer executives to streamline decision making.

Executive Officers of the Registrant As of February 6, 2019 the names and ages of our executive officers and their positions with GM are as follows:

Name (Age)	Present GM Position (Effective Date)	Positions Held During the Past Five Years (Effective Date)
Mary T. Barra (57)	Chairman and Chief Executive Officer (2016)	Chief Executive Officer and Member of the Board of Directors (2014)
Alan S. Batey (55)	Executive Vice President and President, North America (2014)	
Alicia Boler-Davis (49)	Executive Vice President, Global Manufacturing (2016)	Senior Vice President, Global Connected Customer Experience (2014) Vice President, Global Quality and U.S. Customer Experience (2012)
Barry L. Engle (55)	Executive Vice President and President, GM International (2018)	Executive Vice President and President, South America (2015) Agility Fuel Systems, Chief Executive Officer (2011)
Craig B. Glidden (61)	Executive Vice President and General Counsel (2015)	LyondellBasell, Executive Vice President and Chief Legal Officer (2009)
Christopher T. Hatto (48)	Vice President, Controller and Chief Accounting Officer (2018)	Chief Financial Officer, U.S. Sales Operations (2016) Chief Financial Officer, Customer Care and Aftersales (2013)
Mark L. Reuss (55)	President (2019)	Executive Vice President and President, Global Product Development Group and Cadillac (2018) Executive Vice President, Global Product Development, Purchasing & Supply Chain (2014)
Dhivya Suryadevara (39)	Executive Vice President and Chief Financial Officer (2018)	Vice President Corporate Finance (2017) Vice President Finance and Treasurer (2015) Chief Executive Officer, GM Asset Management (2013)
Matthew Tsien (58)	Executive Vice President and President, GM China (2014)	

There are no family relationships between any of the officers named above and there is no arrangement or understanding between any of the officers named above and any other person pursuant to which he or she was selected as an officer. Each of the officers named above was elected by the Board of Directors to hold office until his or her successor is elected and qualified or until his or her earlier resignation or removal.

Website Access to Our Reports Our internet website address is www.gm.com. In addition to the information about us and our subsidiaries contained in this 2018 Form 10-K information about us can be found on our website including information on our corporate governance principles and practices. Our Investor Relations website at https://investor.gm.com contains a significant amount of information about us, including financial and other information for investors. We encourage investors to visit our website, as we frequently update and post new information about our company on our website and it is possible that this information could be deemed to be material information. Our website and information included in or linked to our website are not part of this 2018 Form 10-K.

Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (Exchange Act) are available free of charge through our website as soon as reasonably practicable after they are electronically filed with or furnished to the Securities and Exchange Commission (SEC).

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Item 1A. Risk Factors

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

If we do not deliver new products, services and customer experiences in response to increased competition in the automotive industry, our business could suffer. We believe that the automotive industry will continue to experience significant change in the coming years. In addition to our traditional competitors, we must also be responsive to the entrance of non-traditional participants in the automotive industry. Industry participants are disrupting the historic business model of our industry through the introduction of new technologies, products, services, and methods of travel and vehicle ownership. It is strategically significant that we lead the technological disruption occurring in our industry, including consumer adoption of electric vehicles and commercialization of autonomous vehicles in a rideshare environment. To successfully execute our long-term strategy, we must continue to develop new products and services, including products and services that are outside of our historically core business, such as autonomous and electric vehicles, digital services and transportation as a service. The process of designing and developing new technology, products and services is complex, costly, and uncertain and requires extensive capital investment and the ability to retain and recruit talent. There can be no assurance that advances in technology will occur in a timely or feasible way, or that others will not acquire similar or superior technologies sooner than we do or that we will acquire technologies on an exclusive basis or at a significant price advantage. If we do not adequately prepare for and respond to new kinds of technological innovations, market developments and changing customer needs, our sales, profitability and long-term competitiveness may be harmed.

Our ability to maintain profitability is dependent upon our ability to timely fund and introduce new and improved vehicle models that are able to attract a sufficient number of consumers. We operate in a very competitive industry with market participants routinely introducing new and improved vehicle models and features designed to meet rapidly evolving consumer expectations. Producing new and improved vehicle models preserving our reputation for designing, building and selling safe, high-quality cars and trucks is critical to our long-term profitability. Successful launches of our new vehicles are critical to our short-term profitability. It generally takes two years or more to design and develop a new vehicle, and a number of factors may lengthen that time period. Because of this product development cycle and the various elements that may contribute to consumers' acceptance of new vehicle designs, including competitors' product introductions, technological innovations, fuel prices, general economic conditions and changes in quality, safety, reliability and styling demands and preferences, an initial product concept or design may not result in a vehicle that generates sales in sufficient quantities and at high enough prices to be profitable. Our high proportion of fixed costs, both due to our significant investment in property, plant and equipment as well as other requirements of our collective bargaining agreements, which limit our flexibility to adjust personnel costs to changes in demands for our products, may further exacerbate the risks associated with incorrectly assessing demand for our vehicles.

Our profitability is dependent upon the success of SUVs and full-size pick-up trucks. While we offer a balanced portfolio of cars, crossovers, SUVs and trucks, we generally recognize higher profit margins on our SUVs and trucks. Our success is dependent upon our ability to sell higher margin vehicles in sufficient volumes. Any shift in consumer preferences toward smaller, more fuel-efficient vehicles, whether as a result of increases in the price of oil or any sustained shortage of oil, including as a result of global political instability or other reasons, could weaken the demand for our higher margin vehicles.

We may continue to restructure our operations in the U.S. and various other countries and initiate additional cost reduction actions, but we may not succeed in doing so. Since 2017, we have undertaken restructuring actions to lower our operating costs in response to difficult market and operating conditions in various parts of the world, including the U.S., Korea and Europe. As we continue to assess our performance throughout our regions, we may take additional restructuring actions to rationalize our operations, which may result in asset write-downs or impairments and reduce our profitability in the periods incurred. In addition, we are continuing to implement a number of operating effectiveness initiatives to improve productivity and reduce costs. For example, in late 2018, we announced certain transformation actions to drive significant cost efficiencies and realign our current manufacturing capacity and utilization in response to market-related volume declines in passenger cars. There is no guarantee that we will realize the anticipated savings or benefits from past or future restructuring and/or cost reduction actions in full or within the time periods we expect. In addition, these actions also subject us to increased risks of labor unrest or strikes, litigation, negative publicity and business disruption. Failure to realize anticipated savings or benefits from our restructuring and/or cost reduction actions could have a material adverse effect on our business, prospects, financial condition, liquidity, results of operations and cash flows.

Our electric vehicle strategy is dependent upon our ability to reduce the cost of manufacturing electric vehicles, as well as increased consumer adoption. We anticipate that the production and profitable sale of electric vehicles will become increasingly important to our business. Our inability to reduce the costs associated with the manufacture of battery-electric vehicles may negatively impact our earnings and financial condition. We currently benefit from certain government and economic incentives supporting the development of electric vehicles. The benefits from these incentives could be reduced, eliminated or exhausted, which may negatively affect our ability to sell electric vehicles at high enough prices to be profitable. In addition, our sale of electric vehicles is dependent upon consumer adoption, which could be impacted by numerous factors, including perceptions about electric vehicle features, quality, safety, performance and cost; perceptions about the limited range over which electric vehicles

may be driven on a single battery charge; high fuel-economy internal combustion engine vehicles; volatility in the cost of fuel; government regulations and economic incentives; and access to charging facilities.

Our autonomous vehicle strategy is dependent upon our ability to successfully mitigate unique technological, operational, and regulatory risks. In recent years, we announced significant investments in autonomous vehicle technologies, including in GM Cruise Holdings LLC (GM Cruise Holdings), our subsidiary that is responsible for the development and commercialization of autonomous vehicle technology. Our autonomous vehicle operations are capital intensive and subject to a variety of risks inherent with the development of new technologies, including: our ability to continue to develop self-driving software and hardware, such as LiDAR sensors and other components; access to sufficient capital, including with respect to additional Softbank funding that is subject to regulatory approval; risks related to the manufacture of purpose-built autonomous vehicles; and significant competition from both established automotive companies and technology companies, some of which may have more resources and capital to devote to autonomous vehicle technologies than we do. In addition, we face risks related to the commercial deployment of autonomous vehicles on our targeted timeline or at all, including consumer acceptance, achievement of adequate safety and other performance standards and compliance with uncertain, evolving and potentially conflicting federal and state regulations. To the extent accidents, cybersecurity breaches or other adverse events associated with our autonomous driving systems occur, we could be subject to liability, government scrutiny and further regulation. Any of the foregoing could materially and adversely affect our results of operations, financial condition and growth prospects.

Our business is highly dependent upon global automobile market sales volume, which can be volatile. Because we have a high proportion of relatively fixed structural costs, small changes in sales volume can have a disproportionately large effect on our profitability. A number of economic and market conditions drive changes in vehicle sales, including real estate values, the availability and prices of used vehicles, levels of unemployment, availability of affordable financing, fluctuations in the cost of fuel, consumer confidence, political unrest and global economic conditions. For a discussion of economic and market trends, see the Overview section of the MD&A. We cannot predict future economic and market conditions with certainty.

Our significant business in China subjects us to unique operational, competitive and regulatory risks. Maintaining a strong position in the Chinese market is a key component of our global growth strategy. Our business in China is subject to aggressive competition from many of the largest global manufacturers and numerous domestic manufacturers as well as non-traditional market participants, such as domestic technology companies. In addition, our success in China depends upon our ability to adequately address unique market and consumer preferences driven by advancements related to infotainment and other new technologies. Increased competition, increased U.S.-China trade restrictions and weakening economic conditions in China, among other things, may result in price reductions, reduced sales, profitability, and margins, and challenges to gain or hold market share. In addition to increased competition, Chinese regulators have announced aggressive "green" policy initiatives and quotas for the sale of electric vehicles, which have challenging lead times.

Certain risks and uncertainties of doing business in China are solely within the control of the Chinese government, and Chinese law regulates the scope of our foreign investments and business conducted within China. In order to maintain access to the Chinese market, we may be required to comply with significant technical and other regulatory requirements that are unique to the Chinese market, at times with challenging lead times to implement such requirements. These actions may increase the cost of doing business in China and reduce our profitability. In particular, the announced intention of several Chinese cities to implement new China 6 emissions regulations in July 2019 represents a risk for the sales of our Chinese joint ventures.

A significant amount of our operations are conducted by joint ventures that we cannot operate solely for our benefit. Many of our operations, primarily in China and Korea, are carried out by joint ventures. In joint ventures we share ownership and management of a company with one or more parties who may not have the same goals, strategies, priorities or resources as we do and may compete with us outside the joint venture. Joint ventures are intended to be operated for the equal benefit of all co-owners, rather than for our exclusive benefit. Operating a business as a joint venture often requires additional organizational formalities as well as time-consuming procedures for sharing information and making decisions that must further take into consideration our partners' interests. In joint ventures we are required to foster our relationships with our co-owners as well as promote the overall success of the joint venture, and if a co-owner changes, relationships deteriorate or strategic objectives diverge, our success in the joint venture may be materially adversely affected. The benefits from a successful joint venture are shared among the co-owners, therefore we do not receive all the benefits from our successful joint ventures. In addition, because we share ownership and management with one or more parties, we may have limited control over the actions of a joint venture, particularly when we own a minority interest. As a result, we may be unable to prevent misconduct or other violations of applicable laws by a joint venture. Moreover, a joint venture may not follow the same requirements regarding compliance, internal controls and internal control over financial reporting that we follow. To the extent another party makes decisions that negatively impact the joint venture or internal

control issues arise within the joint venture, we may have to take responsive or other actions or we may be subject to penalties, fines or other related actions for these activities.

The international scale and footprint of our operations exposes us to additional risks. We manufacture, sell and service products globally and rely upon a global supply chain to deliver the raw materials, components, systems and parts that we need to manufacture our products. Our global operations subject us to extensive domestic and foreign legal and regulatory requirements, and a variety of other political, economic and regulatory risks including: (1) changes in government leadership; (2) changes in labor, tax and other laws, regulations or government policies impacting our overall business model or practices or restricting our ability to manufacture, purchase or sell products consistent with market demand and our business objectives; (3) political pressures to change any aspect of our business model or practices or that impair our ability to source raw materials, services, components, systems and parts, or manufacture products on competitive terms in a manner consistent with our business objectives; (4) political instability or government controls over certain sectors; (5) political and economic tensions between governments and changes in international trade policies, including restrictions on the repatriation of dividends, especially between China and the U.S.; (6) more detailed inspections, new or higher tariffs, for example, on products imported into or exported from the U.S.; (7) new barriers to entry or domestic preference procurement requirements, including changes to, withdrawals from or impediments to implementing free trade agreements (for example, the North American Free Trade Agreement or its successor), or preferences of foreign nationals for domestically manufactured products; (8) changes in foreign currency exchange rates, particularly in Brazil and Argentina, and interest rates; (9) economic downturns in foreign countries or geographic regions where we have significant operations, or significant changes in conditions in the countries in which we operate; (10) differing local product preferences and product requirements, including government certification requirements related to, among other things, fuel economy, vehicle emissions and safety; (11) impact of compliance with U.S. and other foreign countries' export controls and economic sanctions; (12) liabilities resulting from U.S. and foreign laws and regulations, including, but not limited to, those related to the Foreign Corrupt Practices Act and certain other anti-corruption laws; (13) differing labor regulations, requirements and union relationships; (14) differing dealer and franchise regulations and relationships; and (15) difficulties in obtaining financing in foreign countries for local operations.

Any significant disruption at one of our manufacturing facilities could disrupt our production schedule. We assemble vehicles at various facilities around the world. Our facilities are typically designed to produce particular models for particular geographic markets. No single facility is designed to manufacture our full range of vehicles. In some cases, certain facilities produce products, systems, components and parts that disproportionately contribute a greater degree to our profitability than others. Should these or other facilities become unavailable either temporarily or permanently for any number of reasons, including labor disruptions or catastrophic weather events, the inability to manufacture at the affected facility may result in harm to our reputation, increased costs, lower revenues and the loss of customers. We may not be able to easily shift production to other facilities or to make up for lost production. Any new facility needed to replace an inoperable manufacturing facility would need to comply with the necessary regulatory requirements, need to satisfy our specialized manufacturing requirements and require specialized equipment.

In 2019, our collective bargaining agreement with the United Automobile Workers will expire, and we will negotiate a new agreement. In addition, in late 2018 we announced certain restructuring actions, which included among other things, a reduction in our workforce and the unallocation of products to certain manufacturing facilities in North America. As a result, we may be subject to an increased risk of strikes, work stoppages or other types of conflicts with labor unions and employees.

Any disruption in our suppliers' operations could disrupt our production schedule. Our automotive operations are dependent upon the continued ability of our suppliers to deliver the systems, components, raw materials and parts that we need to manufacture our products. Our use of "just-in-time" manufacturing processes allows us to maintain minimal inventory. As a result, our ability to maintain production is dependent upon our suppliers delivering sufficient quantities of systems, components, raw materials and parts on time to meet our production schedules. In some instances, we purchase systems, components, raw materials and parts that are ultimately derived from a single source and may be at an increased risk for supply disruptions. Any number of factors, including labor disruptions, catastrophic weather events, contractual or other disputes with suppliers, and supplier financial difficulties or solvency problems could disrupt our suppliers' operations and lead to uncertainty in our supply chain or cause supply disruptions for us which could, in turn, disrupt our operations, including the production of certain of our higher margin vehicles. If we experience supply disruptions, we may not be able to develop alternate sourcing quickly. Any disruption of our production schedule caused by an unexpected shortage of systems, components, raw materials or parts even for a relatively short period of time could cause us to alter production schedules or suspend production entirely.

High prices of raw materials or other inputs used by us and our suppliers could negatively impact our profitability. Increases in prices for raw materials or other inputs that we and our suppliers use in manufacturing products, systems, components and parts, such as steel, precious metals, or non-ferrous metals, including aluminum, copper and plastic, may lead to higher production costs for parts, components and vehicles. Changes in trade policies and tariffs, fluctuations in supply and demand, and other economic

and political factors may continue to create pricing pressure for raw materials and other inputs. This could, in turn, negatively impact our future profitability because we may not be able to pass all of those costs on to our customers or require our suppliers to absorb such costs.

We operate in a highly competitive industry that has excess manufacturing capacity and attempts by our competitors to sell more vehicles could have a significant negative effect on our vehicle pricing, market share and operating results. The global automotive industry is highly competitive and overall manufacturing capacity in the industry far exceeds demand. Many manufacturers have relatively high fixed labor costs as well as significant limitations on their ability to close facilities and reduce fixed costs. Many of our competitors have responded to these relatively high fixed costs by providing subsidized financing or leasing programs, offering marketing incentives or reducing vehicle prices. 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. Our competitors may also seek to benefit from economies of scale by consolidating or entering into other strategic agreements such as alliances intended to enhance their competitiveness.

Domestic manufacturers in lower cost countries, such as China and India, have become competitors in key emerging markets and announced their intention to export their products to established markets as a low-cost alternative to established entry-level automobiles. In addition, foreign governments may decide to implement tax and other policies that favor their domestic manufacturers at the expense of international manufacturers, including GM and its joint venture partners. These actions have had, and are expected to continue to have, a significant negative effect on our vehicle pricing, market share and operating results.

Competitors may independently develop products and services similar to ours, and there are no guarantees that GM's intellectual property rights would prevent competitors from independently developing or selling those products and services. There may be instances where, notwithstanding our intellectual property position, competitive products or services may impact the value of our brands and other intangible assets, and our business may be adversely affected. Moreover, although GM takes reasonable steps to maintain the confidentiality of GM proprietary information, there can be no assurance that such efforts will completely deter misappropriation or improper use of our technology. We sometimes face attempts to gain unauthorized access to our information technology networks and systems for the purpose of improperly acquiring our trade secrets or confidential business information. The theft or unauthorized use or publication of our trade secrets and other confidential business information as a result of such an incident could adversely affect our competitive position. In addition, we may be the target of enforcement of patents by third parties, including aggressive and opportunistic enforcement claims by non-practicing entities. Regardless of the merit of such claims, responding to infringement claims can be expensive and time-consuming. Although we have taken steps to mitigate such risks, if we are found to infringe any third-party rights, we could be required to pay substantial damages or we could be enjoined from offering some of our products and services.

Security breaches and other disruptions to information technology systems and networked products, including connected vehicles, owned or maintained by us, GM Financial, or third-party vendors or suppliers on our behalf, could interfere with our operations and could compromise the confidentiality of private customer data or our proprietary information. We rely upon information technology systems and manufacture networked products, some of which are managed by third-parties, to process, transmit and store electronic information, and to manage or support a variety of our business processes, activities and products. Additionally, we and GM Financial collect and store sensitive data, including intellectual property, proprietary business information, proprietary business information of our dealers and suppliers, as well as personally identifiable information of our customers and employees, in data centers and on information technology networks. The secure operation of these systems and products, and the processing and maintenance of the information processed by these systems and products, is critical to our business operations and strategy. Despite security measures and business continuity plans, these systems and products may be vulnerable to damage, disruptions or shutdowns caused by attacks by hackers, computer viruses, or breaches due to errors or malfeasance by employees, contractors and others who have access to these systems and products. The occurrence of any of these events could compromise the operational integrity of these systems and products. Similarly, such an occurrence could result in the compromise or loss of the information processed by these systems and products. Such events could result in, among other things, the loss of proprietary data, interruptions or delays in our business operations and damage to our reputation. In addition, such events could result in legal claims or proceedings, liability or regulatory penalties under laws protecting the privacy of personal information; disrupt operations; or reduce the competitive advantage we hope to derive from our investment in advanced technologies. We have experienced such events in the past and, although past events were immaterial, future events may occur and may be material.

Portions of our information technology systems also may experience interruptions, delays or cessations of service or produce errors due to regular maintenance efforts, such as systems integration or migration work that takes place from time to time. We may not be successful in implementing new systems and transitioning data, which could cause business disruptions and be more

expensive, time-consuming, disruptive and resource intensive. Such disruptions could adversely impact our ability to design, manufacture and sell products and services, and interrupt other business processes.

Security breaches and other disruptions of our in-vehicle systems could impact the safety of our customers and reduce confidence in GM and our products. Our vehicles contain complex information technology systems. These systems control various vehicle functions including engine, transmission, safety, steering, navigation, acceleration, braking, window and door lock functions. We have designed, implemented and tested security measures intended to prevent unauthorized access to these systems. However, hackers have reportedly attempted, and may attempt in the future, to gain unauthorized access to modify, alter and use such systems to gain control of, or to change, our vehicles' functionality, user interface and performance characteristics, or to gain access to data stored in or generated by the vehicle. Any unauthorized access to or control of our vehicles or their systems or any loss of data could impact the safety of our customers or result in legal claims or proceedings, liability or regulatory penalties. In addition, regardless of their veracity, reports of unauthorized access to our vehicles, their systems or data could negatively affect our brand and harm our business, prospects, financial condition and operating results.

Our enterprise data practices, including the collection, use, sharing, and security of the Personal Identifiable Information of our customers, employees, or suppliers are subject to increasingly complex, restrictive, and punitive regulations in all key market regions. Under these regulations, the failure to maintain compliant data practices could result in consumer complaints and regulatory inquiry, resulting in civil or criminal penalties, as well as brand impact or other harm to our business. In addition, increased consumer sensitivity to real or perceived failures in maintaining acceptable data practices could damage our reputation and deter current and potential users or customers from using our products and services. Because many of these laws are new, there is little clarity as to their interpretation, as well as a lack of precedent for the scope of enforcement. The cost of compliance with these laws and regulations will be high and is likely to increase in the future. For example, in Europe, the General Data Protection Regulation came into effect on May 25, 2018, and applies to all our ongoing operations in the EU. This regulation significantly increases the potential financial penalties for noncompliance, including possible fines of up to 4% of global annual turnover. Similar regulations are coming into effect in Brazil, China, and California.

Our operations and products are subject to extensive laws, governmental regulations and policies that can significantly increase our costs and affect how we do business. We are significantly affected by governmental regulations that can increase costs related to the production of our vehicles and affect our product portfolio, particularly regulations relating to emissions and fuel economy standards. Meeting or exceeding many of these regulations is costly and often technologically challenging, especially when standards may not be harmonized across jurisdictions. We anticipate that the number and extent of these and other regulations, laws and policies, and the related costs and changes to our product portfolio, may increase significantly in the future, primarily out of concern for the environment (including concerns about global climate change and its impact). These government regulatory requirements could significantly affect our plans for global product development and given the uncertainty surrounding enforcement and regulatory definitions and interpretations, may result in substantial costs, including civil or criminal penalties. In addition, an evolving but un-harmonized regulatory framework may limit or dictate the types of vehicles we sell and where we sell them, which can affect revenue. Refer to the "Environmental and Regulatory Matters" section of Item 1. Business for further information on these requirements. We also expect that manufacturers will continue to be subject to increased scrutiny from regulators globally.

We expect that to comply with current or even revised fuel economy and emission control requirements we will be required to sell a significant volume of electric vehicles, as well as develop and implement new technologies for conventional internal combustion engines, all at increased cost levels. There are limits on our ability to achieve fuel economy improvements over a given time frame, however. There is no assurance that we will be able to produce and sell vehicles that use such new technologies on a profitable basis or that our customers will purchase such vehicles in the quantities necessary for us to comply with these regulatory programs.

In the current uncertain regulatory framework, environmental liabilities for which we may be responsible and that are not reasonably estimable could be substantial. Alleged violations of safety, fuel economy or emissions standards could result in legal proceedings, the recall of one or more of our products, negotiated remedial actions, fines, restricted product offerings or a combination of any of those items. Any of these actions could have substantial adverse effects on our operations including facility idling, reduced employment, increased costs and loss of revenue.

Many of our advanced technologies, including autonomous vehicles, present novel issues with which domestic and foreign regulators have only limited experience and will be subject to evolving regulatory frameworks. Any current or future regulations in these areas could impact whether and how these technologies are designed and integrated into our products, and may ultimately subject us to increased costs and uncertainty.

We could be materially adversely affected by unusual or significant litigation, governmental investigations or other proceedings. We are subject to legal proceedings involving various issues, including product liability lawsuits, class action litigations alleging product defects, emissions litigation (both in the U.S. and elsewhere), stockholder litigation, labor litigation in various countries (including Korea and Brazil) and proceedings related to the Ignition Switch Recall. In addition, we are subject to governmental proceedings and investigations. A negative outcome in one or more of these legal proceedings could result in the imposition of damages, including punitive damages, substantial fines, significant reputational harm, civil lawsuits and criminal penalties, interruptions of business, modification of business practices, equitable remedies and other sanctions against us or our personnel as well as significant legal and other costs. In addition, we may become obligated to issue additional shares (Adjustment Shares) of up to 30 million shares of our common stock (subject to adjustment to take into account stock dividends, stock splits and other transactions) to the Motors Liquidation Company (MLC) GUC Trust (GUC Trust) under a provision of the Amended and Restated Master Sale and Purchase Agreement between us and General Motors Corporation and certain of its subsidiaries in the event that allowed general unsecured claims against the GUC Trust, as estimated by the United States Bankruptcy Court for the Southern District of New York (Bankruptcy Court), exceed \$35.0 billion. The GUC Trust stated in public filings that allowed general unsecured claims were approximately \$31.9 billion as of December 31, 2018. For a further discussion of these matters refer to Note 16 to our consolidated financial statements.

The costs and effect on our reputation of product safety recalls and alleged defects in products and services could materially adversely affect our business. Government safety standards require manufacturers to remedy certain product safety defects through recall campaigns. Under these standards, we could be subject to civil or criminal penalties or may incur various costs, including significant costs for free repairs. At present, the costs we incur in connection with these recalls typically include the cost of the part being replaced and labor to remove and replace the defective part. The costs to complete a recall could be exacerbated to the extent that such action relates to a global platform. Concerns about the safety of our products, including advanced technologies like autonomous, whether raised internally or by regulators or consumer advocates, and whether or not based on scientific evidence or supported by data, can result in product delays, recalls, lost sales, governmental investigations, regulatory action, private claims, lawsuits and settlements, and reputational damage. These circumstances can also result in damage to brand image, brand equity and consumer trust in the Company's products and ability to lead the disruption occurring in the automotive industry.

We currently source a variety of systems, components, raw materials and parts from third parties. From time to time these items may have performance or quality issues that could harm our reputation and cause us to incur significant costs.

We may incur additional tax expense or become subject to additional tax exposure. We are subject to the tax laws and regulations of the U.S. and numerous other jurisdictions in which we do business. Many judgments are required in determining our worldwide provision for income taxes and other tax liabilities, and we are regularly under audit by the U.S. Internal Revenue Service and other tax authorities, which may not agree with our tax positions. In addition, our tax liabilities are subject to other significant risks and uncertainties, including those arising from potential changes in laws and/or regulations in the countries in which we do business, the possibility of adverse determinations with respect to the application of existing laws, and changes in the valuation of our deferred tax assets and liabilities. Any unfavorable resolution of these and other uncertainties may have a significant adverse impact on our tax rate. For example, the impact of the U.S. Tax Cuts and Jobs Act of 2017 (the Tax Act), which was enacted on December 22, 2017, may differ from the Company's previously recorded amounts, possibly materially, due to potential changes in the Tax Act (including with respect to the regulations promulgated thereunder) or changes to its interpretation. If our tax expense were to increase, or if the ultimate determination of our taxes owed is for an amount in excess of amounts previously accrued, our operating results, cash flows and financial condition could be adversely affected.

We rely on GM Financial to provide financial services to our customers and dealers in North America, South America and Asia/Pacific. GM Financial faces a number of business, economic and financial risks that could impair its access to capital and negatively affect its business and operations, which in turn impede its ability to provide leasing and financing to customers and commercial lending to our dealers. Any reduction in GM Financial's ability to provide such financial services would negatively affect our efforts to support additional sales of our vehicles and expand our market penetration among customers and dealers.

The primary factors that could adversely affect GM Financial's business and operations and reduce its ability to provide financing services at competitive rates include the sufficiency, availability and cost of sources of financing, including credit facilities, securitization programs and secured and unsecured debt issuances; the performance of loans and leases in its portfolio, which could be materially affected by charge-offs, delinquencies and prepayments; wholesale auction values of used vehicles; higher than expected vehicle return rates and the residual value performance on vehicles GM Financial leases to customers; fluctuations in interest rates and currencies; and changes to regulation, supervision, enforcement and licensing across various jurisdictions.

Further, as an entity operating in the financial services sector, GM Financial is required to comply with a wide variety of laws and regulations that may be costly to adhere to and may affect our consolidated operating results. Compliance with these laws and regulations requires that GM Financial maintain forms, processes, procedures, controls and the infrastructure to support these requirements and these laws and regulations often create operational constraints both on GM Financial's ability to implement servicing procedures and on pricing. Laws in the financial services industry are designed primarily for the protection of consumers. The failure to comply with these laws could result in significant statutory civil and criminal penalties, monetary damages, attorneys' fees and costs, possible revocation of licenses and damage to reputation, brand and valued customer relationships.

Our defined benefit pension plans are currently underfunded and our pension funding requirements could increase significantly due to a reduction in funded status as a result of a variety of factors, including weak performance of financial markets, declining interest rates, changes in laws or regulations, changes in assumptions or investments that do not achieve adequate returns. Our employee benefit plans currently hold a significant amount of equity and fixed income securities. A detailed description of the investment funds and strategies and our potential funding requirements are disclosed in Note 15 to our consolidated financial statements, which also describes significant concentrations of risk to the plan investments.

Our future funding requirements for our U.S. defined benefit pension plans depend upon the future performance of assets placed in trusts for these plans, the level of interest rates used to determine funding levels, the level of benefits provided for by the plans and any changes in laws and regulations. Future funding requirements generally increase if the discount rate decreases or if actual asset returns are lower than expected asset returns, assuming other factors are held constant. We estimate future contributions to these plans using assumptions with respect to these and other items. Changes to those assumptions could have a significant effect on future contributions.

There are additional risks due to the complexity and magnitude of our investments. Examples include implementation of significant changes in investment policy, insufficient market liquidity in particular asset classes and the inability to quickly rebalance illiquid and long-term investments.

Factors which affect future funding requirements for our U.S. defined benefit plans generally affect the required funding for non-U.S. plans. Certain plans outside the U.S. do not have assets and therefore the obligation is funded as benefits are paid. If local legal authorities increase the minimum funding requirements for our non-U.S. plans, we could be required to contribute more funds.

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Item 1B. Unresolved Staff Comments

None

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Item 2. Properties

At December 31, 2018 we had over 100 locations in the U.S. (excluding our automotive financing operations and dealerships) which are primarily for manufacturing, assembly, distribution, warehousing, engineering and testing. We, our subsidiaries or associated companies in which we own an equity interest own most of these properties and/or lease a portion of these properties. Leased properties are primarily composed of warehouses and administration, engineering and sales offices.

We have manufacturing, assembly, distribution, office or warehousing operations in 33 countries, including equity interests in associated companies which perform manufacturing, assembly or distribution operations. The major facilities outside the U.S., which are principally vehicle manufacturing and assembly operations, are located in Argentina, Brazil, Canada, China, Colombia, Ecuador, Mexico, South Korea and Thailand.

In November 2018 we announced our plans to realign our manufacturing capacity in response to market-related volume declines in passenger cars.

GM Financial owns or leases facilities for administration and regional credit centers. GM Financial has 39 facilities, of which 26 are located in the U.S. The major facilities outside the U.S. are located in Brazil, Canada, China and Mexico.

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Item 3. Legal Proceedings

Refer to the discussion in the Litigation-Related Liability and Tax Administrative Matters section in Note 16 to our consolidated financial statements for information relating to legal proceedings.

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Item 4. Mine Safety Disclosures

Not applicable

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PART II

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

Market Information Shares of our common stock are publicly traded on the New York Stock Exchange under the symbol "GM".

Holders At January 25, 2019 we had 1.4 billion issued and outstanding shares of common stock held by 501 holders of record.

Purchases of Equity Securities The following table summarizes our purchases of common stock in the three months ended December 31, 2018:

	Total Number of Shares Purchased(a)	Weighted Average Price Paid per Share	Total Number of Shares Purchased Under Announced Programs(b)	Approximate Dollar Value of Shares That May Yet be Purchased Under Announced Programs
October 1, 2018 through October 31, 2018	118,108	\$ 33.53	_	\$3.4 billion
November 1, 2018 through November 30, 2018	6,552	\$ 36.47	_	\$3.4 billion
December 1, 2018 through December 31, 2018	2,992,631	\$ 33.07	_	\$3.4 billion
Total	3,117,291	\$ 33.10		

⁽a) Shares purchased includes approximately three million shares purchased and held by GM Cruise Holdings to hedge its exposure to cash settled share-based awards issued to certain of its employees. In addition, shares purchased consist of shares retained by us for the payment of the exercise price upon the exercise of warrants and shares delivered by employees or directors to us for the payment of taxes resulting from issuance of common stock upon the vesting of Restricted Stock Units (RSUs), Performance Stock Units (PSUs) and Restricted Stock Awards (RSAs) relating to compensation plans. In June 2017 our shareholders approved the 2017 Long Term Incentive Plan which authorizes awards of stock options, stock appreciation rights, RSAs, RSUs, PSUs or other stock-based awards to selected employees, consultants, advisors, and non-employee Directors of the Company. Refer to Note 23 to our consolidated financial statements for additional details on employee stock incentive plans and Note 20 to our consolidated financial statements for additional details on warrants outstanding.

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⁽b) In January 2017 we announced that our Board of Directors had authorized the purchase of up to an additional \$5.0 billion of our common stock with no expiration date.

Item 6. Selected Financial Data

	\$ 8,075 \$ 330 \$ 9,269 \$ 9,590 \$ 4,522 \$ (a) \$ 5.66 \$ 0.23 \$ 6.12 \$ 6.09 \$ 2.00 \$ ns(a) \$ 5.58 \$ 0.22 \$ 6.00 \$ 5.89 \$ 1.99 \$ \$ 1.52 \$ 1.52 \$ 1.52 \$ 1.38 \$ 1.20 \$ \$ 227,339 \$ 212,482 \$ 221,690 \$ 194,338 \$ 177,31										
	2018		2017		2016		2015		2014		
Income Statement Data:											
Total net sales and revenue \$	147,049	\$	145,588	\$	149,184	\$	135,725	\$	137,958		
Income from continuing operations(a) \$	8,075	\$	330	\$	9,269	\$	9,590	\$	4,525		
Basic earnings per common share – continuing operations(a) $\$$	5.66	\$	0.23	\$	6.12	\$	6.09	\$	2.06		
Diluted earnings per common share – continuing operations(a) \$	5.58	\$	0.22	\$	6.00	\$	5.89	\$	1.95		
Dividends declared per common share \$	1.52	\$	1.52	\$	1.52	\$	1.38	\$	1.20		
Balance Sheet Data:											
Total assets(b)\$	227,339	\$	212,482	\$	221,690	\$	194,338	\$	177,311		
Automotive notes and loans payable \$	13,963	\$	13,502	\$	10,560	\$	8,535	\$	9,084		
GM Financial notes and loans payable \$	90,988	\$	80,717	\$	64,563	\$	45,479	\$	29,304		
Total equity	42,777	\$	36,200	\$	44,075	\$	40,323	\$	36,024		

⁽a) In the year ended December 31, 2018 we recorded charges of \$1.3 billion related to transformation activities including employee separation, accelerated depreciation and other charges, \$1.1 billion related to the closure of a facility and other restructuring actions in Korea, charges of \$0.4 billion for ignition switch related legal matters, and a non-recurring tax benefit of \$1.0 billion related to foreign earnings. In the year ended December 31, 2017 we recorded tax expense of \$7.3 billion related to U.S. tax reform legislation, \$2.3 billion related to the establishment of a valuation allowance against deferred tax assets that will no longer be realizable as a result of the sale of the Opel/Vauxhall Business, and charges of \$0.5 billion related to restructuring actions in India and South Africa. In the year ended December 31, 2015 we recorded the reversal of deferred tax asset valuation allowances of \$3.9 billion in Europe and recorded charges related to the Ignition Switch Recall Compensation Program (Compensation Program) and for various legal matters of approximately \$1.6 billion. In the year ended December 31, 2014 we recorded charges of approximately \$2.8 billion in Automotive and other cost of sales related to recall campaigns and courtesy transportation, a catch-up adjustment of \$0.9 billion related to the change in estimate for recall campaigns and a charge of \$0.4 billion related to the Compensation Program. In December 2014 we redeemed all of the remaining shares of our Series A Preferred Stock for \$3.9 billion, which reduced Income from continuing operations by \$0.8 billion.

(b) Total assets included assets held for sale of \$20.6 billion, \$20.0 billion, and \$17.8 billion at December 31, 2016, 2015 and 2014.

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

This Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) should be read in conjunction with the accompanying audited consolidated financial statements and notes. Forward-looking statements in this MD&A are not guarantees of future performance and may involve risks and uncertainties that could cause actual results to differ materially from those projected. Refer to the "Forward-Looking Statements" section of this MD&A and Item 1A. Risk Factors for a discussion of these risks and uncertainties.

Non-GAAP Measures Unless otherwise indicated, our non-GAAP measures discussed in this MD&A are related to our continuing operations and not our discontinued operations. Our non-GAAP measures include: earnings before interest and taxes (EBIT)-adjusted, presented net of noncontrolling interests; Core EBIT-adjusted; earnings per share (EPS)-diluted-adjusted; effective tax rate-adjusted (ETR-adjusted); return on invested capital-adjusted (ROIC-adjusted) and adjusted automotive free cash flow. Our calculation of these non-GAAP measures may not be comparable to similarly titled measures of other companies due to potential differences between companies in the method of calculation. As a result, the use of these non-GAAP measures has limitations and should not be considered superior to, in isolation from, or as a substitute for, related U.S. GAAP measures.

These non-GAAP measures allow management and investors to view operating trends, perform analytical comparisons and benchmark performance between periods and among geographic regions to understand operating performance without regard to items we do not consider a component of our core operating performance. Furthermore, these non-GAAP measures allow investors the opportunity to measure and monitor our performance against our externally communicated targets and evaluate the investment decisions being made by management to improve ROIC-adjusted. Management uses these measures in its financial, investment and operational decision-making processes, for internal reporting and as part of its forecasting and budgeting processes. Further, our Board of Directors uses certain of these and other measures as key metrics to determine management performance under our performance-based compensation plans. For these reasons we believe these non-GAAP measures are useful for our investors.

EBIT-adjusted EBIT-adjusted is presented net of noncontrolling interests and is used by management and can be used by investors to review our consolidated operating results because it excludes automotive interest income, automotive interest expense and income taxes as well as certain additional adjustments that are not considered part of our core operations. Examples of adjustments to EBIT include but are not limited to impairment charges on long-lived assets and other exit costs resulting from strategic shifts in our operations or discrete market and business conditions; costs arising from the ignition switch recall and related legal matters; and certain currency devaluations associated with hyperinflationary economies. For EBIT-adjusted and our other non-GAAP measures, once we have made an adjustment in the current period for an item, we will also adjust the related non-GAAP measure in any future periods in which there is an impact from the item.

Core EBIT-adjusted Core EBIT-adjusted is used by management and can be used by investors to review our core consolidated operating results. Core EBIT-adjusted begins with EBIT-adjusted and excludes the EBIT-adjusted results of GM Cruise. Prior to the three months ended June 30, 2018 Core EBIT-adjusted excluded the EBIT-adjusted results of autonomous vehicle operations, including GM Cruise, Maven and our investment in Lyft, Inc. (Lyft). The measure was changed to align with segment reporting. All periods presented have been recast to reflect the changes.

EPS-diluted-adjusted EPS-diluted-adjusted is used by management and can be used by investors to review our consolidated diluted EPS results on a consistent basis. EPS-diluted-adjusted is calculated as net income attributable to common stockholders-diluted less income (loss) from discontinued operations on an after-tax basis, adjustments noted above for EBIT-adjusted and certain income tax adjustments divided by weighted-average common shares outstanding-diluted. Examples of income tax adjustments include the establishment or reversal of significant deferred tax asset valuation allowances.

ETR-adjusted ETR-adjusted is used by management and can be used by investors to review the consolidated effective tax rate for our core operations on a consistent basis. ETR-adjusted is calculated as Income tax expense less the income tax related to the adjustments noted above for EBIT-adjusted and the income tax adjustments noted above for EPS-diluted-adjusted divided by Income before income taxes less adjustments.

ROIC-adjusted ROIC-adjusted is used by management and can be used by investors to review our investment and capital allocation decisions. We define ROIC-adjusted as EBIT-adjusted for the trailing four quarters divided by ROIC-adjusted average net assets, which is considered to be the average equity balances adjusted for average automotive debt and interest liabilities, exclusive of capital leases; average automotive net pension and other postretirement benefits (OPEB) liabilities; and average automotive net income tax assets during the same period. Adjustments to the average equity balances exclude assets and liabilities classified as either assets held for sale or liabilities held for sale.

Adjusted automotive free cash flow Adjusted automotive free cash flow is used by management and can be used by investors to review the liquidity of our automotive operations and to measure and monitor our performance against our capital allocation program and evaluate our automotive liquidity against the substantial cash requirements of our automotive operations. We measure adjusted automotive free cash flow as automotive operating cash flow from continuing operations less capital expenditures adjusted for management actions. Management actions can include voluntary events such as discretionary contributions to employee benefit plans or nonrecurring specific events such as a closure of a facility that are considered special for EBIT-adjusted purposes. Refer to the "Liquidity and Capital Resources" section of this MD&A for additional information.

The following table reconciles Net income (loss) attributable to stockholders under U.S. GAAP to EBIT-adjusted:

	Yo	31,	1,			
	2018	2017		2016		
Net income (loss) attributable to stockholders.	\$ 8,014	\$ (3,864)	\$	9,427		
Loss from discontinued operations, net of tax	70	4,212		1		
Income tax expense	474	11,533		2,739		
Automotive interest expense	655	575		563		
Automotive interest income.	(335)	(266)		(182)		
Adjustments						
Transformation activities(a)	1,327	_				
GMI restructuring(b)	1,138	540				
Ignition switch recall and related legal matters(c)	440	114		300		
Total adjustments	2,905	654		300		
EBIT-adjusted	\$ 11,783	\$ 12,844	\$	12,848		

⁽a) These adjustments were excluded because of a strategic decision to accelerate our transformation for the future to strengthen our core business, capitalize on the future of personal mobility, and drive significant cost efficiencies. The adjustments primarily consist of employee separation charges and accelerated depreciation.

The following table reconciles EBIT-adjusted to Core EBIT-adjusted:

	Years Ended December 31,											
		2018		2017		2016						
EBIT-adjusted(a)	\$	11,783	\$	12,844	\$	12,848						
EBIT loss-adjusted – GM Cruise		728		613		171						
Core EBIT-adjusted	\$	12,511	\$	13,457	\$	13,019						

⁽a) Refer to the reconciliation of Net income (loss) attributable to stockholders under U.S. GAAP to EBIT-adjusted within this section of the MD&A.

⁽b) These adjustments were excluded because of a strategic decision to rationalize our core operations by exiting or significantly reducing our presence in various international markets to focus resources on opportunities expected to deliver higher returns. The adjustments primarily consist of employee separation charges, asset impairments and supplier claims in the year ended December 31, 2018, all in Korea. The adjustment in the year ended December 31, 2017 primarily consists of asset impairments and other restructuring actions in India, South Africa and Venezuela.

⁽c) These adjustments were excluded because of the unique events associated with the ignition switch recall, which included various investigations, inquiries and complaints from constituents.

The following table reconciles diluted earnings (loss) per common share under U.S. GAAP to EPS-diluted-adjusted:

	Years Ended December 31,													
	20	18	201	17	20	16								
	Amount	Per Share	Amount	Per Share	Amount	Per Share								
Diluted earnings (loss) per common share	\$ 7,916	\$ 5.53	\$ (3,880)	\$ (2.60)	\$ 9,427	\$ 6.00								
Diluted loss per common share – discontinued operations	70	0.05	4,212	2.82	1	_								
Adjustments(a)	2,905	2.03	654	0.44	300	0.19								
Tax effect on adjustments(b)	(416)	(0.29)	(208)	(0.14)	(114)	(0.07)								
Tax adjustments(c)	(1,111)	(0.78)	9,099	6.10	_									
EPS-diluted-adjusted	\$ 9,364	\$ 6.54	\$ 9,877	\$ 6.62	\$ 9,614	\$ 6.12								

- (a) Refer to the reconciliation of Net income (loss) attributable to stockholders under U.S. GAAP to EBIT-adjusted within this section of the MD&A for adjustment details.
- (b) The tax effect of each adjustment is determined based on the tax laws and valuation allowance status of the jurisdiction to which the adjustment relates.
- (c) In the year ended December 31, 2018 the adjustment consists of: (1) a non-recurring tax benefit related to foreign earnings; and (2) tax effects related to U.S. tax reform legislation. In the year ended December 31, 2017 the adjustment consisted of the tax expense of \$7.3 billion related to U.S. tax reform legislation and the establishment of a valuation allowance against deferred tax assets of \$2.3 billion that are no longer realizable as a result of the sale of the Opel/Vauxhall Business, partially offset by tax benefits related to tax settlements. These adjustments were excluded because impacts of tax legislation and valuation allowances are not considered part of our core operations.

The following table reconciles our effective tax rate under U.S. GAAP to ETR-adjusted:

							Years E	nde	d Decembe	er 31,							
	2018							2	2017	_	2016						
	Income before income taxe			tax tpense	Effective tax rate		Income before ome taxes		Income tax expense	Effective tax rate		Income before ome taxes		ncome tax xpense	Effective tax rate		
Effective tax rate	\$	8,549	\$	474	5.5%	\$	11,863	\$	11,533	97.2%	\$	12,008	\$	2,739	22.8%		
Adjustments(a)		2,946		416			654		208			300		114			
Tax adjustments(b)				1,111					(9,099)					_			
ETR-adjusted	\$	11,495	\$	2,001	17.4%	\$	12,517	\$	2,642	21.1%	\$	12,308	\$	2,853	23.2%		

- (a) Refer to the reconciliation of Net income (loss) attributable to stockholders under U.S. GAAP to EBIT-adjusted within this section of the MD&A for adjustment details. Net income attributable to noncontrolling interests for these adjustments is included in the year ended December 31, 2018.
- (b) Refer to the reconciliation of diluted earnings (loss) per common share under U.S. GAAP to EPS-diluted-adjusted within this section of the MD&A for adjustment details.

We define return on equity (ROE) as Net income (loss) attributable to stockholders for the trailing four quarters divided by average equity for the same period. Management uses average equity to provide comparable amounts in the calculation of ROE. The following table summarizes the calculation of ROE (dollars in billions):

	Year	s End	led Decemb	er 31	,
	2018		2017		2016
Net income (loss) attributable to stockholders	\$ 8.0	\$	(3.9)	\$	9.4
Average equity(a)	\$ 37.4	\$	42.2	\$	43.6
ROE	21.4%		(9.2)%		21.6%

⁽a) Includes equity of noncontrolling interests where the corresponding earnings (loss) are included in Net income (loss) attributable to stockholders.

The following table summarizes the calculation of ROIC-adjusted (dollars in billions):

	\$ 11.8 \$ 12.8 \$ 12 \$ 37.4 \$ 42.2 \$ 43 14.4 11.6 \$9 18.3 21.0 22 (22.7) (29.3) (32			,		
	2018			2017		2016
EBIT-adjusted(a)	\$	11.8	\$	12.8	\$	12.8
Average equity(b)	\$	37.4	\$	42.2	\$	43.6
Add: Average automotive debt and interest liabilities (excluding capital leases)		14.4		11.6		9.9
Add: Average automotive net pension & OPEB liability		18.3		21.0		22.0
Less: Average automotive net income tax asset		(22.7)		(29.3)		(32.8)
ROIC-adjusted average net assets	\$	47.4	\$	45.5	\$	42.7
ROIC-adjusted		24.9%		28.2%		30.1%

⁽a) Refer to the reconciliation of Net income (loss) attributable to stockholders under U.S. GAAP to EBIT-adjusted within this section of the MD&A.

Overview Our management team has adopted a strategic plan to transform GM into the world's most valued automotive company. Our plan includes several major initiatives that we anticipate will redefine the future of personal mobility through our zero crashes, zero emissions, zero congestion vision while also strengthening the core of our business: earning customers for life by delivering winning vehicles, leading the industry in quality and safety and improving the customer ownership experience; leading in technology and innovation, including electrification, autonomous, data connectivity; growing our brands; making tough, strategic decisions about which markets and products in which we will invest and compete; building profitable adjacent businesses and targeting 10% core margins on an EBIT-adjusted basis.

In addition to our EBIT-adjusted margin improvement goal, through 2018 we fully realized our financial targets of \$6.5 billion in total annual operational and functional cost savings compared to 2014 costs.

For the year ending December 31, 2019 we expect EPS-diluted of between \$5.17 and \$6.00 and EPS-diluted-adjusted of between \$6.50 and \$7.00. The following table reconciles expected EPS-diluted under U.S. GAAP to expected EPS-diluted-adjusted and includes the future impact of the expected adjustment related to transformation activities:

	Dec	Year Ending ember 31, 2019
Diluted earnings per common share	\$	5.17-6.00
Adjustment – transformation activities		1.17-1.59
Tax effect on adjustment(a).		(0.17 - 0.26)
EPS-diluted-adjusted.	\$	6.50-7.00

⁽a) The tax effect of the adjustment is determined based on the tax laws and valuation allowance status of the jurisdiction to which the adjustment relates.

We face continuing market, operating and regulatory challenges in a number of countries across the globe due to, among other factors, weak economic conditions, competitive pressures, our product portfolio offerings, heightened emissions standards, foreign exchange volatility, rising materials prices, trade policy and political uncertainty. As a result of these conditions, we continue to strategically assess our performance and ability to achieve acceptable returns on our invested capital, as well as our cost structure in order to maintain a low breakeven point. Refer to Item 1A. Risk Factors for a discussion of these challenges. We expect transformation activities to drive approximately \$6.0 billion of annual cash savings by the end of 2020, resulting from reductions in Automotive and other cost of sales in our consolidated financial statements, as well as reduced capital expenditures. This target includes approximately \$4.5 billion of cost savings, to be achieved through staffing, manufacturing and product initiatives. As we continue to assess our performance and the needs of our evolving business, additional restructuring and rationalization actions could be required. These additional actions could give rise to future asset impairments or other charges which may have a material impact on our results of operations.

⁽b) Includes equity of noncontrolling interests where the corresponding earnings (loss) are included in EBIT-adjusted.

GMNA Industry sales in North America were 21.5 million units in the year ended December 31, 2018 representing a decrease of 0.1% compared to the corresponding period in 2017. U.S. industry sales were 17.7 million units in the year ended December 31, 2018.

Our total vehicle sales in the U.S., our largest market in North America, totaled 3.0 million units for market share of 16.7% in the year ended December 31, 2018 representing a decrease of 0.4 percentage points compared to the corresponding period in 2017. We continue to lead the U.S. industry in market share.

In November 2018 we announced plans to accelerate steps to improve our overall business performance including the reorganization of global product development staffs, the realignment of manufacturing capacity in response to market-related volume declines in passenger cars and a reduction of our salaried workforce. We recorded charges of \$1.2 billion in the year ended December 31, 2018 and expect to record additional charges of \$1.5 billion to \$2.0 billion in 2019. These charges are primarily considered special for EBIT-adjusted, EPS diluted-adjusted, and adjusted automotive free cash flow purposes.

We estimate GMNA's breakeven point at the U.S. industry level to be in the range of 10.0 to 11.0 million units. We expect to sustain a strong EBIT-adjusted margin in 2019 on continued strength of the U.S. industry light vehicle sales, favorable vehicle mix and continued focus on overall cost savings partially offset by higher costs associated with commodities and tariffs, as well as pricing pressures.

The UAW contract ratified in November 2015 expires in September 2019. For discussion of the risks related to a significant labor disruption at one of our facilities, refer to Item 1A. Risk Factors.

GMI Industry sales in China were 26.5 million units in the year ended December 31, 2018 representing a decrease of 6.3% compared to the corresponding period in 2017. Our total vehicle sales in China were 3.6 million units for a market share of 13.8% in the year ended December 31, 2018, representing a decrease of 0.5 percentage points compared to the corresponding period in 2017. We continue to see strength in sales of our Cadillac vehicles, and Chevrolet outperformed the passenger vehicle industry. Baojun and Wuling sales were impacted by the market slowdown in less developed cities and market shift away from mini commercial vehicles. Our Automotive China JVs generated equity income of \$2.0 billion in the year ended December 31, 2018. In 2019 we expect industry sales to remain relatively flat with a continuation of pricing pressures, a more challenging regulatory environment related to emissions, fuel consumption and new energy vehicles as well as a weaker Chinese Yuan against the U.S. Dollar, which will continue to put pressure on our operations in China. While we expect China equity income to be moderately down, we expect to sustain strong China equity income by focusing on improvements in vehicle mix, cost efficiencies, and downstream performance optimization.

Outside of China, many markets across the segment continue to improve, resulting in industry sales of 26.7 million units, representing an increase of 5.0% in the year ended December 31, 2018 compared to the corresponding period in 2017. This increase was due primarily to increases in India and Brazil. Our total vehicle sales were 1.2 million units for a market share of 4.7% in the year ended December 31, 2018, representing a decrease of 0.4 percentage points compared to the corresponding period in 2017.

In February 2018 we announced the closure of a facility and other restructuring actions in Korea. We recorded charges of \$1.1 billion consisting of \$0.6 billion in non-cash asset impairments and other charges and \$0.5 billion in employee separation charges in the year ended December 31, 2018. We incurred \$0.8 billion in cash outflows resulting from these Korea restructuring actions for employee separations and statutory pension payments in the year ended December 31, 2018. The charges are considered special for EBIT-adjusted, EPS-diluted-adjusted and adjusted automotive free cash flow reporting purposes. Refer to Note 18 to our consolidated financial statements for information related to these restructuring actions.

In connection with these restructuring actions, the Korea Development Bank (KDB) purchased approximately \$0.7 billion of GM Korea Company's (GM Korea) Class B Preferred Shares from GM Korea (GM Korea Preferred Shares) in 2018. In conjunction with the GM Korea Preferred Share issuance we agreed to provide GM Korea future funding, if needed, not to exceed \$2.8 billion through December 31, 2027, inclusive of \$2.0 billion of planned capital expenditures through 2027. The actions being taken to address GM Korea's financial and operational performance have and may continue to result in litigation, negative publicity, business disruption, and labor unrest. Refer to Note 20 to our consolidated financial statements for additional information.

GM Cruise In June 2018 GM Cruise Holdings issued \$0.9 billion of convertible preferred shares (GM Cruise Preferred Shares) to SoftBank Investments Holdings (UK) Limited (SoftBank). Immediately prior to the issuance of the GM Cruise Preferred Shares, we invested \$1.1 billion in GM Cruise Holdings. When GM Cruise's autonomous vehicles are ready for commercial deployment, SoftBank is obligated to purchase additional GM Cruise Preferred Shares for \$1.35 billion, subject to regulatory approval. All

proceeds are designated exclusively for working capital and general corporate purposes of GM Cruise. Refer to Note 20 to our consolidated financial statements for additional information.

In October 2018 GM Cruise Holdings issued \$0.75 billion of GM Cruise Holdings Class E Common Shares to Honda, representing 5.7% of the fully diluted equity of GM Cruise Holdings at closing. In addition, Honda agreed to contribute approximately \$2.0 billion primarily in the form of a long-term annual fee to GM Cruise Holdings for certain rights to use GM Cruise Holdings' trade names and trademarks and the exclusive right to partner with GM Cruise Holdings to develop, deploy and maintain a foreign market. The remaining contribution or funding will come in the form of shared development costs for a SAV that Honda, General Motors Holdings LLC and GM Cruise Holdings will jointly develop for deployment onto GM Cruise's autonomous vehicle network. All proceeds are designated exclusively for working capital and general corporate purposes of GM Cruise. Refer to Note 20 to our consolidated financial statements for additional information.

Corporate Beginning in 2012 through January 25, 2019, we purchased an aggregate of 510 million shares of our outstanding common stock for \$16.4 billion.

The ignition switch recall has led to various inquiries, investigations, subpoenas, requests for information and complaints from agencies or other representatives of U.S., federal, state and Canadian governments. In addition these and other recalls have resulted in a number of claims and lawsuits. Such lawsuits and investigations could in the future result in the imposition of material damages, fines, civil consent orders, civil and criminal penalties or other remedies. Refer to Note 16 to our consolidated financial statements for additional information.

Takata Matters In May 2016 NHTSA issued an amended consent order requiring Takata to file defect information reports (DIRs) for previously unrecalled front airbag inflators that contain phased-stabilized ammonium nitrate-based propellant without a moisture absorbing desiccant on a multi-year, risk-based schedule through 2019 impacting tens of millions of vehicles produced by numerous automotive manufacturers. NHTSA concluded that the likely root cause of the rupturing of the airbag inflators is a function of time, temperature cycling and environmental moisture.

Although we do not believe there is a safety defect at this time in any unrecalled GM vehicles within scope of the Takata DIRs, in cooperation with NHTSA we have filed Preliminary DIRs covering certain of our GMT900 vehicles, which are full-size pickup trucks and SUVs. We have also filed petitions for inconsequentiality with respect to the vehicles subject to those Preliminary DIRs. NHTSA has consolidated our petitions and will rule on them at the same time.

While these petitions have been pending, we have provided NHTSA with the results of our long-term studies and the studies performed by third-party experts, all of which form the basis for our determination that the inflators in these vehicles do not present an unreasonable risk to safety and that no repair should ultimately be required.

We believe these vehicles are currently performing as designed and our inflator aging studies and field data support the belief that the vehicles' unique design and integration mitigates against inflator propellant degradation and rupture risk. For example, the airbag inflators used in the vehicles are a variant engineered specifically for our vehicles, and include features such as greater venting, unique propellant wafer configurations, and machined steel end caps. The inflators are packaged in the instrument panel in such a way as to minimize exposure to moisture from the climate control system. Also, these vehicles have features that minimize the maximum temperature to which the inflator will be exposed, such as larger interior volumes and standard solar absorbing windshields and side glass.

Accordingly, no warranty provision has been made for any repair associated with our vehicles subject to the Preliminary DIRs and amended consent order. However, in the event we are ultimately obligated to repair the vehicles subject to current or future Takata DIRs under the amended consent order in the U.S., we estimate a reasonably possible impact to GM of approximately \$1.2 billion.

GM has recalled certain vehicles sold outside of the U.S. to replace Takata inflators in those vehicles. There are significant differences in vehicle and inflator design between the relevant vehicles sold internationally and those sold in the U.S. We continue to gather and analyze evidence about these inflators and to share our findings with regulators. Additional recalls, if any, could be material to our results of operations and cash flows. We continue to monitor the international situation.

Contingently Issuable Shares Under the Amended and Restated Master Sale and Purchase Agreement between us and MLC, GM may be obligated to issue Adjustment Shares of our common stock if allowed general unsecured claims against the GUC

Trust, as estimated by the Bankruptcy Court, exceed \$35.0 billion. Refer to Note 16 to our consolidated financial statements for a description of the contingently issuable Adjustment Shares.

Automotive Financing - GM Financial Summary and Outlook We believe that offering a comprehensive suite of financing products will generate incremental sales of our vehicles, drive incremental GM Financial earnings and help support our sales throughout various economic cycles. The expansion of GM Financial's leasing program results in increased exposure to residual values, which are heavily dependent on used vehicle prices. Used vehicle prices in 2018 held at similar levels as compared to 2017. We expect a decrease of 4% to 5% in 2019 compared to 2018, due primarily to continued increases in the industry supply of used vehicles. The following table summarizes the residual value as well as the number of units included in GM Financial equipment on operating leases, net by vehicle type (units in thousands):

]	December 31, 2018	<u> </u>]	7																																																															
	Residual Value		Units	Percentage	Res	idual Value	Units	Percentage																																																														
Cars	\$	4,884	379	22.3%	\$	5,701	450	27.2%																																																														
Trucks		7,299	296	17.4%		7,173	285	17.3%																																																														
Crossovers		15,057	917	53.8%		13,723	818	49.5%																																																														
SUVs		4,160	111	6.5%		3,809	99	6.0%																																																														
Total	\$	31,400	1,703	100.0%	\$ 30,406		\$ 30,406		\$ 30,406		\$ 30,406		\$ 30,406		\$ 30,406		\$ 30,406		\$ 30,406		\$ 30,406		\$ 30,406		\$ 30,406		\$ 30,406		\$ 30,406		\$ 30,406		\$ 30,406		\$ 30,406		\$ 30,406		\$ 30,406		\$ 30,406		\$ 30,406		\$ 30,406		\$ 30,406		\$ 30,406		\$ 30,406		\$ 30,406		6 \$ 30,406		\$ 30,406		\$ 30,406		\$ 30,406		\$ 30,40		% \$ 30,406		\$ 30,406		1,652	100.0%

During 2018 GM Financial continued to expand its prime lending programs in North America. Accordingly, GM Financial's retail penetration in North America increased to approximately 47% in the year ended December 31, 2018 from approximately 37% in 2017, due primarily to further alignment with GM and greater dealer engagement. GM Financial's prime loan originations as a percentage of total loan originations in North America increased to 72% in 2018 from 61% in 2017. In the year ended December 31, 2018 GM Financial's revenue consisted of leased vehicle income of 71%, retail finance charge income of 22%, and commercial finance charge income of 4%.

Consolidated Results We review changes in our results of operations under five categories: volume, mix, price, cost and other. Volume measures the impact of changes in wholesale vehicle volumes driven by industry volume, market share and changes in dealer stock levels. Mix measures the impact of changes to the regional portfolio due to product, model, trim, country and option penetration in current year wholesale vehicle volumes. Price measures the impact of changes related to Manufacturer's Suggested Retail Price and various sales allowances. Cost includes primarily: (1) material and freight; (2) manufacturing, engineering, advertising, administrative and selling and warranty expense; and (3) non-vehicle related activity. Other includes primarily foreign exchange and non-vehicle related automotive revenues as well as equity income or loss from our nonconsolidated affiliates. Refer to the regional sections of this MD&A for additional information. We adopted Accounting Standards Update (ASU) 2014-09, "Revenue from Contracts with Customers," as amended (ASU 2014-09) on a modified retrospective basis effective January 1, 2018. The impacts of the new standard are reflected in this MD&A. Refer to Note 2 of our consolidated financial statements or additional information.

Total Net Sales and Revenue

	Years Ended December 31,				Favorable/			Variance Due To								
	2018	2018 2017		(Unfavorable)		%	V	olume	Mix		Price		C	Other		
								(Dollars in bi			ı bill	ions)				
GMNA	\$ 113,792	\$	111,345	\$	2,447	2.2 %	\$	1.4	\$	(0.7)	\$	1.4	\$	0.3		
GMI	19,148		21,920		(2,772)	(12.6)%	\$	(1.7)	\$	(0.2)	\$	0.4	\$	(1.2)		
Corporate	203		342		(139)	(40.6)%							\$	(0.1)		
Automotive	133,143		133,607		(464)	(0.3)%	\$	(0.3)	\$	(0.9)	\$	1.8	\$	(1.0)		
GM Financial	14,016		12,151		1,865	15.3 %							\$	1.9		
Eliminations	(110)		(170)		60	35.3 %			\$	(0.1)			\$	0.1		
Total net sales and revenue	\$ 147,049	\$	145,588	\$	1,461	1.0 %	\$	(0.3)	\$	(0.9)	\$	1.8	\$	1.0		

	Years Ended	December 31,	Favorable/	Variance Due To								
	2017	2016	(Unfavorable)	%	Volume	Mix	Price	Other				
						(Dollars	in billions)					
GMNA	\$ 111,345	\$ 119,113	\$ (7,768) (6.5)%	\$ (12.2)	\$ 3.5	\$ 0.6	\$ 0.3				
GMI	21,920	20,943	977	4.7 %	\$ 0.2	\$ 0.2	\$ 0.6	\$ —				
Corporate	342	149	193	n.m.				\$ 0.2				
Automotive	133,607	140,205	(6,598	(4.7)%	\$ (12.0)	\$ 3.7	\$ 1.3	\$ 0.5				
GM Financial	12,151	8,983	3,168	35.3 %				\$ 3.2				
Eliminations	(170)	(4)	(166	n.m.				\$ (0.2)				
Total net sales and revenue	\$ 145,588	\$ 149,184	\$ (3,596	(2.4)%	\$ (12.0)	\$ 3.7	\$ 1.3	\$ 3.5				

n.m. = not meaningful

Automotive and Other Cost of Sales

	Y	Years Ended December 31,				. Favorable/			Variance Due To								
	Π	2018	2017		(Unfavorable)		%	Volume		Mix		Iix Cos		C	ther		
										(D	ollars in billions)						
GMNA	\$	99,445	\$	94,193	\$	(5,252)	(5.6)%	\$	(1.0)	\$	(0.9)	\$	(3.5)	\$	0.1		
GMI		20,418		21,478		1,060	4.9 %	\$	1.4	\$	0.3	\$	(1.2)	\$	0.5		
Corporate		178		129		(49)	(38.0)%			\$		\$	0.2	\$	(0.2)		
GM Cruise		715		592		(123)	(20.8)%					\$	(0.1)				
Eliminations		(100)		(163)		(63)	(38.7)%			\$	0.1	\$	(0.1)				
Total automotive and other cost of sales	\$	120,656	\$	116,229	\$	(4,427)	(3.8)%	\$	0.5	\$	(0.5)	\$	(4.8)	\$	0.4		

	Years Ended	December 31,	Favorable/					
	2017	2016	(Unfavorable)	%	Volume	Mix	Cost	Other
						(Dollars in l	oillions)	
GMNA	\$ 94,193	\$ 101,073	\$ 6,880	6.8 %	\$ 8.7	\$ (2.7) \$	5 1.1	\$ (0.3)
GMI	21,478	20,459	(1,019)	(5.0)%	\$ (0.1)	\$ (0.5)	(0.1)	\$ (0.3)
Corporate	129	85	(44)	(51.8)%		\$ - 5	(0.2)	\$ 0.2
GM Cruise	592	171	(421)	n.m.		9	(0.4)	
Eliminations	(163)	(4)	159	n.m.		9	0.2	\$ —
Total automotive and other cost of sales	\$ 116,229	\$ 121,784	\$ 5,555	4.6 %	\$ 8.6	\$ (3.1) \$	0.5	\$ (0.4)

n.m. = not meaningful

The most significant element of our Automotive and other cost of sales is material cost which makes up approximately twothirds of the total amount. The remaining portion includes labor costs, depreciation and amortization, engineering, freight and product warranty and recall campaigns.

Factors which most significantly influence a region's profitability are industry volume, market share, and the relative mix of vehicles (trucks, crossovers, cars) sold. Variable profit is a key indicator of product profitability. Variable profit is defined as revenue less material cost, freight, the variable component of manufacturing expense and warranty and recall-related costs. Vehicles with higher selling prices generally have higher variable profit. Refer to the regional sections of this MD&A for additional information on volume and mix

In the year ended December 31, 2018 unfavorable Cost was due primarily to: (1) increased raw material and freight costs related to carryover vehicles of \$1.3 billion; (2) charges of \$1.3 billion primarily related to employee separation charges and accelerated depreciation resulting from the transformation activities; (3) increased other costs of \$1.2 billion primarily related to manufacturing, engineering and warranty; (4) increased material and freight costs of \$1.2 billion related to vehicles launched within the last twelve

months incorporating significant exterior and/or interior changes (Majors); and (5) a net increase in charges of \$0.7 billion primarily related to asset impairments and employee separation charges in Korea in 2018, partially offset by restructuring actions in India and South Africa in 2017; partially offset by (6) favorable material performance of \$1.1 billion related to carryover vehicles. In the year ended December 31, 2018 favorable Other was due to the foreign currency effect resulting from the weakening of the Brazilian Real and other currencies, partially offset by the strengthening of various currencies against the U.S. Dollar.

In the year ended December 31, 2017 favorable Cost was due primarily to: (1) decreased warranty costs of \$1.4 billion; (2) decreased employee related costs of \$0.8 billion; (3) decreased material and freight costs of \$0.7 billion related to carryover vehicles; and (4) decreased restructuring costs related to UAW cash severance incentive program of \$0.2 billion in 2016 that did not recur in 2017; partially offset by (5) increased material and freight costs of \$1.4 billion related to Majors; (6) increased engineering costs of \$0.7 billion; and (7) charges of \$0.4 billion related to restructuring actions in India and South Africa. In the year ended December 31, 2017 unfavorable Other was due primarily to the foreign currency effect of \$0.4 billion due to the strengthening of the Brazilian Real and other currencies against the U.S. Dollar.

Automotive and Other Selling, General and Administrative Expense

	Years	End	led Decemb	er 3	1,	2	Year Endo 2018 vs. 2017 (2	Year End 017 vs. 2016	
	2018		2017		2016		vorable/ avorable)	%		vorable/ avorable)	0/0
Automotive and other selling, general and administrative expense	\$ 9,650	\$	9,570	\$	10,345	\$	(80)	(0.8)%	\$	775	7.5%

In the year ended December 31, 2018 Automotive and other selling, general and administrative expense increased due primarily to an increase in charges of \$0.3 billion for ignition switch related legal matters; partially offset by decreased advertising costs of \$0.3 billion.

In the year ended December 31, 2017 Automotive and other selling, general and administrative expense decreased due primarily to decreased advertising costs of \$0.4 billion and a decrease in net charges of \$0.2 billion for ignition switch related legal matters.

Interest Income and Other Non-operating Income, net

		Years	End	led Decemb	er 31	,	 Year Ei 2018 vs. 201		2	ided 6 Change	
	2	018		2017		2016	 vorable/ favorable)	%		orable/ worable)	%
Interest income and other non- operating income, net	\$	2,596	\$	1,645	\$	1,603	\$ 951	57.8%	\$	42	2.6%

In the year ended December 31, 2018 Interest income and other non-operating income, net increased due primarily to: (1) increased non-service pension and OPEB income of \$0.3 billion; (2) favorable revaluation of investments of \$0.3 billion; and (3) \$0.2 billion from licensing agreements.

Income Tax Expense

	Years	Enc	ded Decemb	er 31	Ι,	Year E 2018 vs. 201		Year Eı 2017 vs. 201			
	2018		2017		2016	vorable/ favorable)	%	 vorable/ favorable)	%		
Income tax expense	\$ 474	\$	11,533	\$	2,739	\$ 11,059	n.m.	\$ (8,794)	n.m.		

 $\overline{\text{n.m.}} = \text{not meaningful}$

In the year ended December 31, 2018 Income tax expense decreased due primarily to the absence of certain expense items which occurred in 2017, including \$7.3 billion of tax expense related to U.S. tax reform and \$2.3 billion of tax expense related to the recording of a valuation allowance on the sale of the Opel/Vauxhall Business, combined with the impact of a lower U.S. statutory tax rate and pre-tax income in 2018.

In the year ended December 31, 2017 Income tax expense increased due primarily to the \$7.3 billion tax expense related to U.S. tax reform legislation and the establishment of a \$2.3 billion valuation allowance related to the sale of Opel/Vauxhall Business, partially offset by tax benefits related to tax settlements and foreign earnings.

For the year ended December 31, 2018 our ETR-adjusted was 17.4%, and we expect an effective tax rate of between 16% and 18% for the year ending December 31, 2019.

Refer to Note 17 to our consolidated financial statements for additional information related to Income tax expense.

GM North America

	Years Ended	December 31,	F	avorable/					Va	rian	ce Due	То			
	2018	2017		nfavorable)	%	Vol	ume	N	Mix	P	rice	C	ost	O	ther
									(Dol	lars	in bill	ions)			
Total net sales and revenue	\$ 113,792	\$ 111,345	\$	2,447	2.2 %	\$	1.4	\$	(0.7)	\$	1.4			\$	0.3
EBIT-adjusted	\$ 10,769	\$ 11,889	\$	(1,120)	(9.4)%	\$	0.4	\$	(1.5)	\$	1.4	\$	(1.7)	\$	0.2
EBIT-adjusted margin	9.5%	10.7%		(1.2)%											
	(Ve	hicles in thousa	nds)												
Wholesale vehicle sales	3,555	3,511		44	1.3 %										
	W 70 1 11					ı			Va	nian	ce Due	т			
	Years Ended	December 31,	F	avorable/					va	Han	ce Due	2 10			
	2017	2016		Tavorable/ nfavorable)	%	Vol	ume	N	Mix		rice	_	ost	O	ther
					%	Vol	ume	N	Mix	P		С		O	ther
Total net sales and revenue.	2017				(6.5)%		2.2)	_	Mix	P lars	rice in bill	С		_	0.3
Total net sales and revenue EBIT-adjusted	\$ 111,345	2016	(U	nfavorable)		\$(1	2.2)	\$	Mix (Dol	P lars	rice in bill 0.6	C ions)		\$	
	\$ 111,345	2016 \$ 119,113	\$ \$	(7,768)	(6.5)%	\$(1	2.2)	\$	Mix (Dol 3.5	P lars	rice in bill 0.6	C ions)		\$	0.3
EBIT-adjusted	\$ 111,345 \$ 11,889 10.7%	\$119,113 \$12,388	\$ \$	(7,768) (499) 0.3%	(6.5)%	\$(1	2.2)	\$	Mix (Dol 3.5	P lars	rice in bill 0.6	C ions)		\$	0.3

GMNA Total Net Sales and Revenue In the year ended December 31, 2018 Total net sales and revenue increased due primarily to: (1) favorable pricing for Majors of \$1.9 billion, partially offset by unfavorable pricing for carryover vehicles of \$0.5 billion, inclusive of new revenue standard impacts; (2) increased net wholesale volumes due to an increase in sales of crossover and fleet vehicles, partially offset by a decrease in sales of passenger cars, planned downtime for full-size trucks and a decrease in sales of mid-size trucks; and (3) favorable Other due to increased sales of parts and accessories; partially offset by (4) unfavorable mix due to fleet customer, trim and other mix.

In the year ended December 31, 2017 Total net sales and revenue decreased due primarily to: (1) decreased net wholesale volumes associated with a decrease in Chevrolet passenger car sales and a decrease in off-lease rental car sales; partially offset by (2) favorable mix associated with a decrease in sales of Chevrolet passenger cars and decreased volumes of off-lease rental car sales; (3) favorable pricing for Majors of \$1.4 billion, partially offset by unfavorable pricing for carryover vehicles of \$0.8 billion; and (4) favorable Other due primarily to the foreign currency effect resulting from the strengthening of the Canadian Dollar against the U.S. Dollar.

GMNA EBIT-Adjusted The most significant factors which influence profitability are industry volume and market share. While not as significant as industry volume and market share, another factor affecting profitability is the relative mix of vehicles sold. Trucks, crossovers and cars sold currently have a variable profit of approximately 180%, 50% and 20% of our GMNA portfolio on a weighted-average basis.

In the year ended December 31, 2018 EBIT-adjusted decreased due primarily to: (1) unfavorable Cost due to increased vehicle content for Majors of \$1.3 billion and increased raw material and freight costs of \$1.1 billion, partially offset by favorable materials performance of \$1.0 billion related to carryover vehicles; and (2) unfavorable mix due to an increase in sales of crossover vehicles, fleet customer mix, trim and other mix, partially offset by decreased sales of passenger cars; partially offset by (3) favorable pricing; and (4) increased net wholesale volumes.

In the year ended December 31, 2017 EBIT-adjusted decreased due primarily to: (1) decreased net wholesale volumes; and (2) unfavorable Other due primarily to the foreign currency effect resulting from the weakening of the Mexican Peso against the U.S.

Dollar; partially offset by (3) favorable Cost including decreased warranty costs of \$1.4 billion, decreased material and freight costs related to carryover vehicles of \$0.7 billion, decreased other employee related costs of \$0.7 billion, decreased advertising costs of \$0.3 billion and decreased restructuring charges of \$0.2 billion related to the 2016 UAW cash severance incentive program, partially offset by increased material costs for Majors of \$1.3 billion and increased engineering costs of \$0.3 billion; (4) favorable mix; and (5) favorable pricing.

GM International

_	Y	ears Ended	Dec	ember 31,	I	avorable/	Variance Due To				To					
		2018		2017	(U	nfavorable)	%	Volu	ume]	Mix	P	rice	Cost	O	Other
-											(Doll	ars	in billi	ons)		
Total net sales and revenue	\$	19,148	\$	21,920	\$	(2,772)	(12.6)%	\$ (1.7)	\$	(0.2)	\$	0.4		\$	(1.2)
EBIT-adjusted	\$	423	\$	1,300	\$	(877)	(67.5)%	\$ (0.3)	\$	0.1	\$	0.4	\$ (0.1)	\$	(0.9)
EBIT-adjusted margin		2.2%		5.9%		(3.7)%										
Equity income — Automotive China	\$	1,981	\$	1,976	\$	5	0.3 %									
EBIT (loss)-adjusted — excluding Equity income	\$	(1,558)	\$	(676)	\$	(882)	n.m.									
		(Ve	hic	es in thousa	nds)											
Wholesale vehicle sales		1,152		1,267		(115)	(9.1)%									

n.m. = not meaningful

_	Y	ears Ended	Dec	ember 31,	F	avorable/		Variance Due To								
		2017		2016		nfavorable)	%	Vo	lume		Mix	P	rice	(Cost	Other
•								_			(Dol	ars	in bill	ions)	
Total net sales and revenue	\$	21,920	\$	20,943	\$	977	4.7%	\$	0.2	\$	0.2	\$	0.6			\$ —
EBIT-adjusted	\$	1,300	\$	767	\$	533	69.5%	\$		\$	(0.3)	\$	0.6	\$	0.3	\$ (0.2)
EBIT-adjusted margin		5.9%		3.7%		2.2%										
Equity income — Automotive China	\$	1,976	\$	1,973	\$	3	0.2%									
EBIT (loss)-adjusted — excluding Equity income	\$	(676)	\$	(1,206)	\$	530	43.9%									
		(Ve	hic	les in thousa	nds)											
Wholesale vehicle sales		1,267		1,255		12	1.0%									

The vehicle sales of our Automotive China JVs are not recorded in Total net sales and revenue. The results of our joint ventures are recorded in Equity income, which is included in EBIT-adjusted above.

GMI Total Net Sales and Revenue In the year ended December 31, 2018 Total net sales and revenue decreased due primarily to: (1) decreased wholesale volumes in Korea due to the closure of a facility, in Argentina primarily driven by lower industry volumes, and in Asia/Pacific due to the withdrawal from the Indian and South African markets in 2017, partially offset by an increase in Brazil primarily due to an increase in sales of the Chevrolet Onix, Tracker and Equinox; (2) unfavorable Other due primarily to the foreign currency effect resulting from the weakening of the Brazilian Real and Argentine Peso against the U.S. Dollar; partially offset by (3) favorable pricing related to carryover vehicles in Argentina and Brazil.

In the year ended December 31, 2017 Total net sales and revenue increased due primarily to: (1) favorable pricing related to carryover vehicles in Argentina and Brazil and in Egypt to mitigate the impact of the weakening Egyptian Pound against the U.S. Dollar; (2) favorable mix driven by the increased sales of Chevrolet Cruze in Brazil and Argentina; and (3) increased wholesale volumes associated with the Chevrolet Onix in Brazil and Argentina, partially offset by decreased wholesale volumes across multiple product lines in Asia/Pacific, the Middle East and Africa; (4) flat Other due primarily to the foreign currency effect resulting from the strengthening of the Brazilian Real and Korean Won against the U.S. Dollar, offset by the depreciation of the Argentine Peso and Egyptian Pound against the U.S. Dollar and decreased parts and accessories sales in the Middle East.

GMI EBIT-Adjusted In the year ended December 31, 2018 EBIT-adjusted decreased due primarily to: (1) decreased wholesale volumes; and (2) unfavorable Other due primarily to the foreign currency effect resulting from the weakening of the Argentine Peso and Brazilian Real against the U.S. Dollar; partially offset by (3) favorable pricing.

In the year ended December 31, 2017 EBIT-adjusted increased due primarily to: (1) favorable pricing; and (2) favorable Cost due to decreased employee related costs and selling, general and administrative expenses across the region; partially offset by (3) unfavorable mix driven by decreased high-margin sales in the Middle East.

We view the Chinese market as important to our global growth strategy and are employing a multi-brand strategy led by our Buick, Chevrolet and Cadillac brands. In the coming years we plan to leverage our global architectures to increase the number of product offerings under the Buick, Chevrolet and Cadillac brands in China and continue to grow our business under the local Baojun and Wuling brands, with Baojun focusing its expansion in less developed cities and markets. We operate in the Chinese market through a number of joint ventures and maintaining strong relationships with our joint venture partners is an important part of our China growth strategy.

The following table summarizes certain key operational and financial data for the Automotive China JVs (vehicles in thousands):

Years Ended December 31,

						,
	2018		2017			2016
Wholesale vehicles including vehicles exported to markets outside of China	4,030		4,1	140		4,013
Total net sales and revenue	\$ 50,316	\$	50,0	065	\$	47,150
Net income.	\$ 3,992	\$	3,9	984	\$	4,117
	Decembe	er 31,	2018	Dec	embe	er 31, 2017
Cash and cash equivalents	 \$	8	,609	\$		9,202
Debt	 \$		496	\$		381

GM Cruise

	Years Ended December 31,					51,	2	018 vs. 2017	Change	20	17 vs. 2016	Change
	2	018		2017		2016		avorable/ favorable)	%		orable/ avorable)	%
EBIT (loss)-adjusted	\$	(728)	\$	(613)	\$	(171)	\$	(115)	(18.8)%	\$	(442)	n.m.

n.m. = not meaningful

GM Cruise EBIT (Loss)-Adjusted In the years ended December 31, 2018 and 2017 EBIT (loss)-adjusted increased due primarily to increased engineering costs as we progress towards the commercialization of autonomous vehicles.

GM Financial

		Years F 2018		ded Decem	ber	31,	2	018 vs. 2017 Change			2017 vs. 2016 (Change
				2017		2016	Amount %		%		Amount	%
Total revenue	\$1	4,016	\$	12,151	\$	8,983	\$	1,865	15.3 %	\$	3,168	35.3%
Provision for loan losses	\$	642	\$	757	\$	644	\$	(115)	(15.2)%	\$	113	17.5%
Earnings before income taxes-adjusted	\$	1,893	\$	1,196	\$	763	\$	697	58.3 %	\$	433	56.7%
Average debt outstanding (dollars in billions)	\$	85.1	\$	74.9	\$	54.8	\$	10.2	13.5 %	\$	20.1	36.7%
Effective rate of interest paid		3.8%		3.4%		3.6%		0.4%			(0.2)%	

GM Financial Revenue In the year ended December 31, 2018 Total revenue increased due primarily to increased leased vehicle income of \$1.4 billion due to a larger lease portfolio and increased finance charge income of \$0.4 billion due to growth in the retail and commercial finance receivables portfolios.

In the year ended December 31, 2017 Total revenue increased due primarily to increased leased vehicle income of \$2.7 billion due to a larger lease portfolio and increased finance charge income of \$0.4 billion due to growth in the retail and commercial finance receivables portfolios.

GM Financial Earnings Before Income Taxes-Adjusted In the year ended December 31, 2018 Earnings before income taxes-adjusted increased due primarily to: (1) increased gains on sales of terminated leased vehicles of \$0.5 billion due to stronger than expected used vehicle prices; (2) increased net leased vehicle income of \$0.4 billion due to an increase in average balance of the lease portfolio; and (3) increased finance charge income of \$0.4 billion due to an increase in the average balance of the retail and commercial finance receivables portfolios; partially offset by (4) increased interest expense of \$0.7 billion due to an increase in average debt outstanding resulting from growth in the loan and lease portfolios as well as rising benchmark interest rates.

In the year ended December 31, 2017 Earnings before income taxes-adjusted increased due primarily to: (1) increased net leased vehicle income of \$0.8 billion due primarily to a larger lease portfolio; and (2) increased finance charge income; partially offset by (3) increased interest expense of \$0.6 billion due to an increase in average debt outstanding.

Liquidity and Capital Resources We believe that our current level of cash and cash equivalents, marketable securities and availability under our revolving credit facilities will be sufficient to meet our liquidity needs. We expect to have substantial cash requirements going forward which we plan to fund through total available liquidity and cash flows generated from operations and future debt issuances. We also maintain access to the capital markets and may issue debt or equity securities from time to time, which may provide an additional source of liquidity. Our future uses of cash, which may vary from time to time based on market conditions and other factors, are focused on three objectives: (1) reinvest in our business; (2) maintain a strong investment-grade balance sheet; and (3) return available cash to shareholders. Our known future material uses of cash include, among other possible demands: (1) capital expenditures of \$8.0 billion to \$9.0 billion in 2019 as well as payments for engineering and product development activities; (2) payments associated with previously announced vehicle recalls, the settlements of the multi-district litigation and any other recall-related contingencies; (3) payments to service debt and other long-term obligations, including discretionary and mandatory contributions to our pension plans; (4) dividend payments on our common stock that are declared by our Board of Directors; and (5) payments to purchase shares of our common stock authorized by our Board of Directors.

Our liquidity plans are subject to a number of risks and uncertainties, including those described in the "Forward-Looking Statements" section of this MD&A and Item 1A. Risk Factors, some of which are outside of our control.

We continue to monitor and evaluate opportunities to strengthen our competitive position over the long-term while maintaining a strong investment-grade balance sheet. These actions may include opportunistic payments to reduce our long-term obligations such as our pension plans, as well as the possibility of acquisitions, dispositions, investments with joint venture partners and strategic alliances that we believe would generate significant advantages and substantially strengthen our business. In September 2018, we used a portion of the net proceeds from the issuance of senior unsecured notes to pre-fund \$0.6 billion in certain mandatory contributions to our U.K. and Canada pension plans due in 2019 through 2021.

Our senior management evaluates our capital allocation program on an ongoing basis and recommends any modifications to the program to our Board of Directors, not less than once annually. Management reaffirmed and our Board of Directors approved the capital allocation program, which includes reinvesting in our business at an average target ROIC-adjusted rate of 20% or greater, maintaining a strong investment-grade balance sheet, including an average automotive target cash balance of \$18 billion, and returning available cash to shareholders.

As part of our capital allocation program, our Board of Directors authorized programs to purchase \$9.0 billion in aggregate of our common stock which were completed in the three months ended September 30, 2016 and 2017. We announced in January 2017 that our Board of Directors had authorized the purchase of up to an additional \$5.0 billion of our common stock with no expiration date, subsequent to completing the remaining portion of the previously announced programs. We completed \$1.6 billion of the \$5.0 billion program through December 31, 2018, which included \$0.1 billion purchased in the three months ended March 31, 2018 in conjunction with the sale of GM common stock by the UAW Retiree Medical Benefits Trust (New VEBA). From inception of the program in 2015 through January 25, 2019 we had purchased an aggregate of 302 million shares of our outstanding common stock under our common stock repurchase program for \$10.6 billion.

Automotive Liquidity Total available liquidity includes cash, cash equivalents, marketable securities and funds available under credit facilities. The amount of available liquidity is subject to intra-month and seasonal fluctuations and includes balances held by various business units and subsidiaries worldwide that are needed to fund their operations.

We manage our liquidity primarily at our treasury centers as well as at certain of our significant consolidated overseas subsidiaries. Approximately 90% of our cash and marketable securities were managed within North America and at our regional treasury centers at December 31, 2018. We have used and will continue to use other methods including intercompany loans to utilize these funds across our global operations as needed.

Our cash equivalents and marketable securities balances are primarily denominated in U.S. Dollars and include investments in U.S. government and agency obligations, foreign government securities, time deposits, corporate debt securities and mortgage and asset-backed securities. Our investment guidelines, which we may change from time to time, prescribe certain minimum credit worthiness thresholds and limit our exposures to any particular sector, asset class, issuance or security type. The majority of our current investments in debt securities are with A/A2 or better rated issuers.

We use credit facilities as a mechanism to provide additional flexibility in managing our global liquidity. At December 31, 2017 the total size of our credit facilities was \$14.5 billion, which consisted principally of our two primary revolving credit facilities. In April 2018 we amended and restated our two existing revolving credit facilities and entered into a third facility, increasing our aggregate borrowing capacity from \$14.5 billion to \$16.5 billion. These facilities consist of a 364-day, \$2.0 billion facility, a three-year, \$4.0 billion facility and a five-year, \$10.5 billion facility. The facilities are available to us as well as certain wholly-owned subsidiaries, including GM Financial. The three-year, \$4.0 billion facility allows for borrowings in U.S. Dollars and other currencies and includes a letter of credit sub-facility of \$1.1 billion. The five-year, \$10.5 billion facility allows for borrowings in U.S. Dollars and other currencies. The 364-day, \$2.0 billion facility allows for borrowing in U.S. Dollars only. We have allocated the 364-day, \$2.0 billion facility for exclusive use by GM Financial. Total automotive available credit under the facility remained unchanged at \$14.5 billion at December 31, 2018. In January 2019 we entered into a new three-year unsecured revolving credit facility with an initial borrowing capacity of \$3.0 billion, reducing to \$2.0 billion in July 2020. The facility will be used to fund costs related to the transformation activities announced in November 2018 and to provide additional financial flexibility.

We did not have any borrowings against our primary facilities, but had letters of credit outstanding under our sub-facility of \$0.3 billion and \$0.4 billion at December 31, 2018 and 2017. GM Financial did not have any borrowings against our credit facility designated for their exclusive use at December 31, 2018 or the remainder of our revolving credit facilities at December 31, 2018 and 2017. Refer to Note 13 to our consolidated financial statements for additional information on credit facilities. We had intercompany loans from GM Financial of \$0.6 billion and \$0.4 billion at December 31, 2018 and 2017, which consisted primarily of commercial loans to dealers we consolidate, and we had no intercompany loans to GM Financial. Refer to Note 5 of our consolidated financial statements for additional information.

In May 2018 we entered into an agreement with KDB to fund capital expenditure requirements of GM Korea. In the year ended December 31, 2018 KDB purchased \$0.7 billion of GM Korea Preferred Shares. Additionally we agreed to provide future funding to GM Korea if needed, not to exceed \$2.8 billion through December 31, 2027, inclusive of \$2.0 billion of planned capital expenditures through 2027. Refer to Note 20 to our consolidated financial statements for further details.

In September 2018 we issued \$2.1 billion in aggregate principal amount of senior unsecured notes with an initial weighted average interest rate of 5.03% and maturity dates ranging from 2021 to 2049. The notes are governed by the same indenture that was used in past issuances, which contains terms and covenants customary of these types of securities including limitations on the amount of certain secured debt we may incur. The net proceeds from the issuance of these senior unsecured notes were used to repay \$1.5 billion of debt in October 2018 upon maturity, pre-fund \$0.6 billion in certain mandatory contributions for our U.K. and Canada pension plans due in 2019 through 2021, and for other general corporate purposes.

GM Financial's Board of Directors declared and paid a dividend of \$0.4 billion on its common stock in October 2018. Future dividends from GM Financial will depend on a number of factors including business and economic conditions, its financial condition, earnings, liquidity requirements and leverage ratio.

The following table summarizes our available liquidity (dollars in billions):

	Dece	ember 31, 2018	Decem	ber 31, 2017
Automotive cash and cash equivalents	\$	13.7	\$	11.2
Marketable securities.		6.0		8.3
Automotive cash, cash equivalents and marketable securities(a)(b)		19.6		19.6
GM Cruise cash and cash equivalents(c).		2.3		_
Available liquidity		21.9		19.6
Available under credit facilities.		14.2		14.1
Total available liquidity(a).	\$	36.1	\$	33.6

⁽a) Amounts do not add due to rounding.

The following table summarizes the changes in our Automotive available liquidity (excluding GM Cruise, dollars in billions):

Operating cash flow	8
Capital expenditures	.7
	3.7)
Dividends paid and payments to purchase common stock	2.3)
Issuance of senior unsecured notes	.1
Repayment of senior unsecured notes. (1	.5)
GM investment in GM Cruise. (1	.1)
Proceeds from KDB investment in GM Korea	.7
Other non-operating	.7)
Total change in automotive available liquidity	0.2

Automotive Cash Flow (Dollars in Billions)

	Year	s Enc	ded Decembe	2018 vs. 2017	2017 vs. 2016	
	2018		2017	2016	Change	Change
Operating Activities						
Income (loss) from continuing operations	\$ 7.1	\$	(0.2)	\$ 8.8	\$ 7.3	\$ (9.0)
Depreciation, amortization and impairment charges	6.1		5.7	5.1	0.4	0.6
Pension and OPEB activities	(3.4)		(2.6)	(4.2)	(0.8)	1.6
Working capital	0.7		1.8	2.2	(1.1)	(0.4)
Accrued and other liabilities and income taxes	1.9		8.5	3.0	(6.6)	5.5
Other	(0.7)		1.2	(0.3)	(1.9)	1.5
Net automotive cash provided by operating activities	\$ 11.7	\$	14.4	\$ 14.6	\$ (2.7)	\$ (0.2)

In the year ended December 31, 2018 the decrease in Net automotive cash provided by operating activities was due primarily to: (1) unfavorable pre-tax earnings from continuing operations of \$3.9 billion, net of employee separation and other charges of \$1.3 billion resulting from transformation activities; (2) unfavorable Pension and OPEB activities due primarily to pension contributions of \$0.6 billion made to our U.K. and Canada pension plans; (3) less favorable Working capital due primarily to accounts receivable and accounts payable; and (4) unfavorable Other due to the increase in units returned from rental car companies of \$0.8 billion and several other insignificant items; partially offset by (5) favorable sales incentives and other accruals of \$3.6 billion; and (6) favorable re-timing of subvention payments and receivables factoring with GM Financial and other external sources of \$0.4 billion.

⁽b) Includes \$0.6 billion that is designated exclusively to fund capital expenditures in GM Korea at December 31, 2018. Refer to Note 20 to our consolidated financial statements for further details.

⁽c) Amounts are designated exclusively for the use of GM Cruise and do not include \$0.1 billion of GM Cruise's investment in GM stock. Refer to Note 20 to our consolidated financial statements for further details.

In the year ended December 31, 2017 the decrease in Net automotive cash provided by operating activities was due primarily to: (1) unfavorable Income (loss) from continuing operations partially offset by the add back of \$7.3 billion as a result of U.S. tax reform legislation and the establishment of a \$2.3 billion valuation allowance related to the sale of the Opel/Vauxhall Business; and (2) unfavorable Working capital due to lower production volumes, partially offset by accelerated cash receipts from GM Financial and other external sources totaling \$0.5 billion; partially offset by (3) favorable Pension and OPEB activities due primarily to discretionary contributions of \$2.0 billion made to our U.S. hourly pension plan in the year ended December 31, 2016; and (4) favorable Other due to a GM Financial dividend of \$0.6 billion and several insignificant items, partially offset by unfavorable equipment on operating leases of \$1.1 billion due to an increase in units out to daily rental car companies.

_	Years Ended December 31,			2018 vs. 2017	2017 vs. 2016	
_	2018	2017	2016	Change	Change	
Investing Activities						
Capital expenditures	(8.7)	\$ (8.3)	\$ (8.3)	\$ (0.4)	\$ —	
Acquisitions and liquidations of marketable securities, net	2.3	3.5	(3.7)	(1.2)	7.2	
GM investment in GM Cruise	(1.1)			(1.1)	_	
Investment in Lyft	_		(0.5)	_	0.5	
Other	(0.2)	(0.4)	(0.2)	0.2	(0.2)	
Net automotive cash used in investing activities	(7.7)	\$ (5.2)	\$ (12.7)	\$ (2.5)	\$ 7.5	

	Years Ended December 31,			2018 vs. 2017		2017 vs. 2016			
	2	2018		2017	2016		Change		ange
Financing Activities									
Issuance of senior unsecured notes	\$	2.1	\$	3.0	\$ 2.0	\$	(0.9)	\$	1.0
Net payments on short-term debt		(1.4)		(0.1)			(1.3)		(0.1)
Payments to purchase common stock		(0.1)		(4.5)	(2.5)		4.4		(2.0)
Dividends paid		(2.2)		(2.2)	(2.3)		_		0.1
Proceeds from KDB investment in GM Korea		0.7					0.7		
Other		(0.6)		(0.4)	(0.3)		(0.2)		(0.1)
Net automotive cash used in financing activities	\$	(1.5)	\$	(4.2)	\$ (3.1)	\$	2.7	\$	(1.1)

Adjusted Automotive Free Cash Flow

We measure adjusted automotive free cash flow as automotive operating cash flow from continuing operations less capital expenditures adjusted for management actions. For the year ended December 31, 2018, net automotive cash provided by operating activities under U.S. GAAP was \$11.7 billion, capital expenditures were \$8.7 billion and an adjustment for management actions related to restructuring in Korea was \$0.8 billion.

For the year ended December 31, 2017, net automotive cash provided by operating activities under U.S. GAAP was \$14.4 billion, capital expenditures were \$8.3 billion, and adjustments resulting from the sale of the European Business included an adjustment related to a U.K. pension plan contribution of \$0.2 billion and a reduction adjustment related to a dividend received from GM Financial of \$0.6 billion.

For the year ended December 31, 2016, net automotive cash provided by operating activities under U.S. GAAP was \$14.6 billion, capital expenditures were \$8.3 billion, and an adjustment for discretionary U.S. pension plan contributions was \$2.0 billion.

Status of Credit Ratings We receive ratings from four independent credit rating agencies: DBRS Limited, Fitch Ratings (Fitch), Moody's Investor Service (Moody's) and Standard & Poor's (S&P). All four credit rating agencies currently rate our corporate credit at investment grade. The following table summarizes our credit ratings at January 25, 2019:

		Revolving Credit			
	Corporate	Facilities	Senior Unsecured	Outlook	
DBRS Limited	BBB	BBB	N/A	Positive	
Fitch	BBB	BBB	BBB	Stable	
Moody's	Investment Grade	Baa2	Baa3	Stable	
S&P	BBB	BBB	BBB	Stable	

In March 2018 DBRS Limited revised their outlook to Positive from Stable. All other credit ratings remained unchanged from January 1, 2018 through January 25, 2019.

GM Cruise Liquidity

The following table summarizes the changes in our GM Cruise available liquidity (dollars in billions):

	Ended er 31, 2018
Operating cash flow	\$ (0.6)
Issuance of GM Cruise Preferred Shares to SoftBank.	0.9
Issuance of GM Cruise Common Shares to Honda	0.8
GM investment in GM Cruise	1.1
Other non-operating.	0.2
Total change in GM Cruise available liquidity	\$ 2.4

When GM Cruise's autonomous vehicles are ready for commercial deployment, SoftBank is obligated to purchase additional GM Cruise Preferred Shares for \$1.35 billion, subject to regulatory approval. In addition, Honda agreed to contribute approximately \$2.0 billion primarily in the form of a long-term annual fee to GM Cruise Holdings for certain rights to use GM Cruise Holdings' trade names and trademarks and the exclusive right to partner with GM Cruise Holdings to develop, deploy, and maintain a foreign market.

GM Cruise Cash Flow (Dollars in Billions)

	Years Ended December 31,					20	2018 vs. 2017		2017 vs. 2016	
		2018		2017		2016		Change		Change
Net cash used in operating activities	\$	(0.6)	\$	(0.5)	\$	(0.1)	\$	(0.1)	\$	(0.4)
Net cash used in investing activities	\$	(0.1)	\$	(0.1)	\$	(0.3)	\$		\$	0.2
Net cash provided by financing activities	\$	3.0	\$	0.6	\$	0.4	\$	2.4	\$	0.2

In the year ended December 31, 2017 Net cash used in operating activities increased due primarily to unfavorable income from operations.

In the year ended December 31, 2018 Net cash provided by financing activities increased due primarily to the GM investment in GM Cruise, proceeds from the issuance of GM Cruise Preferred Shares to SoftBank, and proceeds from the issuance of GM Cruise Common Shares to Honda.

Automotive Financing – GM Financial Liquidity GM Financial's primary sources of cash are finance charge income, leasing income and proceeds from the sale of terminated leased vehicles, net distributions from credit facilities, including securitizations, secured and unsecured borrowings and collections and recoveries on finance receivables. GM Financial's primary uses of cash are purchases of retail finance receivables and leased vehicles, the funding of commercial finance receivables, repayment of secured and unsecured debt, funding credit enhancement requirements in connection with securitizations and secured debt facilities, operating expenses, and interest costs. In September 2018 GM Financial issued \$0.5 billion of Fixed-to-Floating Rate Cumulative Perpetual Preferred Stock, Series B, \$0.01 par value, with a liquidation preference of \$1,000 per share. In September 2017 GM Financial issued \$1.0 billion of Fixed-to-Floating Rate Cumulative Perpetual Preferred Stock, Series A, \$0.01 par value, with a liquidation preference of \$1,000 per share. Refer to Note 20 to our consolidated financial statements for further details. The following table summarizes GM Financial's available liquidity (dollars in billions):

	December 31, 2018	December 31, 2017
Cash and cash equivalents	\$ 4.9	\$ 4.3
Borrowing capacity on unpledged eligible assets	18.0	12.5
Borrowing capacity on committed unsecured lines of credit.	0.3	0.1
Borrowing capacity on revolving credit facility, exclusive to GM Financial	2.0	_
Total GM Financial available liquidity	\$ 25.2	\$ 16.9

In the year ended December 31, 2018 available liquidity increased due primarily to an increase in cash and additional capacity on new and renewed secured revolving credit facilities, resulting from the issuance of securitizations and unsecured debt. In addition, GM Financial added \$2.0 billion in borrowing capacity on our 364-day credit facility as described in the Automotive Liquidity section of this MD&A.

GM Financial has access to our revolving credit facilities of \$16.5 billion with exclusive access to the 364-day, \$2.0 billion facility. Refer to the Automotive Liquidity section of this MD&A for additional details. We have a support agreement with GM Financial which, among other things, establishes commitments of funding from us to GM Financial. This agreement also provides that we will continue to own all of GM Financial's outstanding voting shares so long as any unsecured debt securities remain outstanding at GM Financial. In addition we are required to use our commercially reasonable efforts to ensure GM Financial remains a subsidiary borrower under our corporate revolving credit facilities.

Credit Facilities In the normal course of business, in addition to using its available cash, GM Financial utilizes borrowings under its credit facilities, which may be secured or unsecured, and GM Financial repays these borrowings as appropriate under its cash management strategy. At December 31, 2018 secured, committed unsecured and uncommitted unsecured credit facilities totaled \$26.4 billion, \$0.4 billion and \$2.0 billion with advances outstanding of \$3.4 billion, an insignificant amount and \$2.0 billion.

GM Financial Cash Flow (Dollars in Billions)

	Years Ended December 31,					201	2018 vs. 2017		7 vs. 2016	
		2018		2017		2016		Change		Change
Net cash provided by operating activities	\$	7.4	\$	6.5	\$	4.7	\$	0.9	\$	1.8
Net cash used in investing activities	\$	(17.5)	\$	(21.9)	\$	(23.7)	\$	4.4	\$	1.8
Net cash provided by financing activities	\$	11.1	\$	16.1	\$	19.1	\$	(5.0)	\$	(3.0)

In the years ended December 31, 2018 and 2017 Net cash provided by operating activities increased due primarily to an increase in leased vehicle income and finance charge income, partially offset by increased interest expense.

In the year ended December 31, 2018 Net cash used in investing activities decreased due primarily to: (1) increased collections on finance receivables of \$4.5 billion; (2) increased proceeds from the termination of leased vehicles of \$4.2 billion; and (3) decreased purchases of leased vehicles of \$2.4 billion; partially offset by (4) increased purchases and funding of finance receivables of \$6.8 billion.

In the year ended December 31, 2017 Net cash used in investing activities decreased due primarily to: (1) increased proceeds from the termination of leased vehicles of \$4.1 billion; (2) increased collections and recoveries on retail finance receivables of

\$3.0 billion; and (3) decreased purchases of leased vehicles of \$0.3 billion; partially offset by (4) increased net purchases of retail finance receivables of \$5.5 billion.

In the year ended December 31,2018 Net cash provided by financing activities decreased due primarily to a decrease in borrowing, net of payments, of \$4.6 billion and a decrease in the issuance of preferred stock of \$0.5 billion.

In the year ended December 31, 2017 Net cash provided by financing activities decreased due primarily to an increase in repayments of \$12.4 billion and a special dividend payment to GM of \$0.6 billion, partially offset by an increase in borrowings of \$9.0 billion and the issuance of preferred stock of \$1.0 billion.

Off-Balance Sheet Arrangements We do not currently utilize off-balance sheet securitization arrangements. All trade or finance receivables and related obligations subject to securitization programs are recorded on our consolidated balance sheets at December 31, 2018 and 2017. Refer to Note 16 of our consolidated financial statements for detailed information related to guarantees we have provided and for our noncancelable operating lease obligations.

Contractual Obligations and Other Long-Term Liabilities We have minimum commitments under contractual obligations, including purchase obligations. A purchase obligation is defined as an agreement to purchase goods or services that is enforceable and legally binding on us and that specifies all significant terms, including fixed or minimum quantities to be purchased or fixed minimum price provisions and the approximate timing of the transaction. Based on these definitions, the following table includes only those contracts which include fixed or minimum obligations. The majority of our purchases are not included in the table as they are made under purchase orders which are requirements based and accordingly do not specify minimum quantities. The following table summarizes aggregated information about our outstanding contractual obligations and other long-term liabilities at December 31, 2018:

	Payments Due by Period								
_	2019	20	20-2021	20	022-2023	202	4 and after		Total
Automotive debt	812	\$	1,002	\$	1,552	\$	10,568	\$	13,934
Automotive Financing debt.	31,045		38,191		12,513		9,937		91,686
Capital lease obligations	137		92		41		258		528
Automotive interest payments(a)	743		1,430		1,365		9,725		13,263
Automotive Financing interest payments(b)	2,811		2,994		1,198		714		7,717
Postretirement benefits(c)	250		25		_		_		275
Operating lease obligations, net	235		438		255		453		1,381
Other contractual commitments:									
Material	1,235		669		174		118		2,196
Marketing	819		282		18		25		1,144
Rental car repurchases	405				_		_		405
Other	1,010		429		106		218		1,763
Total contractual commitments(d)	39,502	\$	45,552	\$	17,222	\$	32,016	\$	134,292
Non-contractual benefits(e)\$	317	\$	983	\$	944	\$	10,229	\$	12,473

⁽a) Amounts include automotive interest payments based on contractual terms and current interest rates on our debt and capital lease obligations. Automotive interest payments based on variable interest rates were determined using the interest rate in effect at December 31, 2018.

⁽b) GM Financial interest payments were determined using the interest rate in effect at December 31, 2018 for floating rate debt and the contractual rates for fixed rate debt. GM Financial interest payments on floating rate tranches of the securitization notes payable were converted to a fixed rate based on the floating rate plus any expected hedge payments.

⁽c) Amounts include OPEB payments under the current U.S. contractual labor agreements through 2019 and Canada labor agreements through 2021. These agreements are generally renegotiated in the year of expiration. Amounts do not include pension funding obligations, which are discussed in Note 15 to our consolidated financial statements.

⁽d) Amounts do not include future cash payments for long-term purchase obligations and other accrued expenditures (unless specifically listed in the table above) which were recorded in Accounts payable or Accrued liabilities at December 31, 2018.

⁽e) Amounts include all expected future payments for both current and expected future service at December 31, 2018 for OPEB obligations for salaried and hourly employees extending beyond the current North American union contract agreements, workers' compensation and extended disability benefits. Amounts do not include pension funding obligations, which are discussed in Note 15 to our consolidated financial statements.

The table above does not reflect product warranty and related liabilities, certified pre-owned, extended warranty and free maintenance of \$8.5 billion and unrecognized tax benefits of \$1.3 billion due to the uncertainty regarding the future cash outflows potentially associated with these amounts. In addition, future cash outflows related to transformation activities announced in November 2018 are not included in the table above. Refer to Note 18 of our consolidated financial statements for additional information. To fund costs associated with transformation activities, we entered into a new three-year committed unsecured revolving credit facility in January 2019, with an initial borrowing capacity of \$3.0 billion reducing to \$2.0 billion in July 2020.

Critical Accounting Estimates The consolidated financial statements are prepared in conformity with U.S. GAAP, which requires the use of estimates, judgments and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses in the periods presented. We believe the accounting estimates employed are appropriate and the resulting balances are reasonable; however, due to the inherent uncertainties in developing estimates, actual results could differ from the original estimates, requiring adjustments to these balances in future periods. Refer to Note 2 to our consolidated financial statements for our significant accounting policies related to our critical accounting estimates.

Product Warranty and Recall Campaigns The estimates related to product warranties are established using historical information on the nature, frequency and average cost of claims of each vehicle line or each model year of the vehicle line and assumptions about future activity and events. When little or no claims experience exists for a model year or a vehicle line, the estimate is based on comparable models.

We accrue the costs related to product warranty at the time of vehicle sale and we accrue the estimated cost of recall campaigns when they are probable and estimable, which is generally at the time of sale.

The estimates related to recall campaigns accrued at the time of vehicle sale are established by applying a frequency times severity approach that considers the number of recall campaigns, the number of vehicles per recall campaign, the assumed number of vehicles that will be brought in by customers for repair (take rate) and the cost per vehicle for each recall campaign. These estimates consider the nature, frequency and magnitude of historical recall campaigns. Costs associated with recall campaigns not accrued at the time of vehicle sale are estimated based on the estimated cost of repairs and the estimated vehicles to be repaired. Depending on part availability and time to complete repairs we may, from time to time, offer courtesy transportation at no cost to our customers. These estimates are re-evaluated on an ongoing basis and based on the best available information. Revisions are made when necessary based on changes in these factors.

The estimated amount accrued for recall campaigns at the time of vehicle sale is most sensitive to the estimated number of recall events, the number of vehicles per recall event, the take rate, and the cost per vehicle for each recall event. The estimated cost of a recall campaign that is accrued on an individual basis is most sensitive to our estimated assumed take rate that is primarily developed based on our historical take rate experience. A 10% increase in the estimated take rate for all recall campaigns would increase the estimated cost by approximately \$0.2 billion.

Actual experience could differ from the amounts estimated requiring adjustments to these liabilities in future periods. Due to the uncertainty and potential volatility of the factors contributing to developing estimates, changes in our assumptions could materially affect our results of operations.

Sales Incentives The estimated effect of sales incentives offered to dealers and end customers is recorded as a reduction of Automotive net sales and revenue at the time of sale. There may be numerous types of incentives available at any particular time. Incentive programs are generally specific to brand, model or sales region and are for specified time periods, which may be extended. Significant factors used in estimating the cost of incentives include forecasted sales volume, product mix, and the rate of customer acceptance of incentive programs, all of which are estimated based on historical experience and assumptions concerning future customer behavior and market conditions. A change in any of these factors affecting the estimate could have a significant effect on recorded sales incentives. Subsequent adjustments to incentive estimates are possible as facts and circumstances change over time, which could affect the revenue previously recognized in Automotive net sales and revenue.

Valuation of GM Financial Equipment on Operating Leases Assets and Residuals GM Financial has investments in leased vehicles recorded as operating leases, which relate to vehicle leases to retail customers with lease terms which typically range from two to five years. At the beginning of the lease an estimate is made of the expected residual value at the end of the lease term. The expected residual value is based on third-party data which considers inputs including recent auction values, the expected future volume of returning leased vehicles, used vehicle prices, manufacturer incentive programs and fuel prices. Realization of the residual values is dependent on the future ability to market the vehicles under prevailing market conditions. The customer is

obligated to make payments during the term of the lease for the difference between the purchase price and the contract residual value plus a money factor. Since the customer is not obligated to purchase the vehicle prior to or at the end of the contract, we are exposed to a risk of loss to the extent the customer returns the vehicle at the end of the lease term and the value of the vehicle is below the expected residual value estimated at the inception of the lease.

The following table summarizes vehicles included in GM Financial equipment on operating leases, net (vehicles in thousands):

	December 31, 2018	December 31, 2017
Cars	379	450
Trucks	296	285
Crossovers	917	818
SUVs	111	99
Total	1,703	1,652

At December 31, 2018 the estimated residual value of our leased assets at the end of the lease term was \$31.4 billion. We periodically review the adequacy of the depreciation rates. If we believe that the expected residual values of the leased assets have changed, we revise the depreciation rate to ensure the net investment in the operating leases reflects the revised estimate of expected residual value at the end of the lease term. Such adjustments to the depreciation rate would result in a change in depreciation expense on leased assets which is recorded prospectively on a straight-line basis. The following table illustrates the effect of a 1% change in the estimated residual values at December 31, 2018, which would increase or decrease depreciation expense over the remaining term of our operating lease portfolio, holding all other assumptions constant:

	Impact to Depreciation Expense	e
Cars.	\$ 49)
Trucks.	73	3
Crossovers	150)
SUVs	42	2
Total	\$ 314	1

We also evaluate the carrying value of the operating leases aggregated by vehicle make, year and model into leased asset groups, check for indicators of impairment and test for impairment to the extent necessary in accordance with applicable accounting standards. A leased asset group is considered impaired if impairment indicators exist and the undiscounted expected future cash flows (including the expected residual value) are lower than the carrying value of the asset group. We believe no impairment indicators existed during 2018, 2017 or 2016.

Pension and OPEB Plans Our defined benefit pension plans are accounted for on an actuarial basis, which requires the selection of various assumptions, including an expected long-term rate of return on plan assets, a discount rate, mortality rates of participants and expectation of mortality improvement. Our pension obligations include Korean statutory pension payments that are valued on a walk away basis. The expected long-term rate of return on U.S. plan assets that is utilized in determining pension expense is derived from periodic studies, which include a review of asset allocation strategies, anticipated future long-term performance of individual asset classes, risks using standard deviations and correlations of returns among the asset classes that comprise the plans' asset mix. While the studies give appropriate consideration to recent plan performance and historical returns, the assumptions are primarily long-term, prospective rates of return.

In December 2018 an investment policy study was completed for the U.S. pension plans. As a result of changes to our capital market assumptions the weighted-average long-term rate of return on assets decreased from 6.6% at December 31, 2017 to 6.4% at December 31, 2018. The expected long-term rate of return on plan assets used in determining pension expense for non-U.S. plans is determined in a similar manner to the U.S. plans.

Another key assumption in determining net pension and OPEB expense is the assumed discount rate used to discount plan obligations. We estimate the assumed discount rate for U.S. plans using a cash flow matching approach, which uses projected cash flows matched to spot rates along a high quality corporate bond yield curve to determine the weighted-average discount rate for the calculation of the present value of cash flows. We apply the individual annual yield curve rates instead of the assumed discount

rate to determine the service cost and interest cost, which more specifically links the cash flows related to service cost and interest cost to bonds maturing in their year of payment.

The Society of Actuaries (SOA) issued mortality improvement tables in the three months ended December 31, 2018. We reviewed our recent mortality experience and have updated our base mortality assumptions in the U.S. This change in assumption decreased the December 31, 2018 U.S. pension and OPEB plans' obligations by \$0.3 billion. We determined our current mortality assumptions are appropriate to measure our December 31, 2018 U.S. pension and OPEB plans obligations.

Significant differences in actual experience or significant changes in assumptions may materially affect the pension obligations. The effects of actual results differing from assumptions and the changing of assumptions are included in unamortized net actuarial gains and losses that are subject to amortization to pension expense over future periods. The unamortized pre-tax actuarial loss on our pension plans was \$4.7 billion and \$4.0 billion at December 31, 2018 and 2017. The year-over-year change is primarily due to lower than expected asset returns partially offset by the increase in discount rates. At December 31, 2018 \$2.1 billion of the unamortized pre-tax actuarial loss is outside the corridor (primarily 10% of the projected benefit obligation (PBO)) and subject to amortization. The weighted-average amortization period is approximately sixteen years resulting in amortization expense of \$0.1 billion in 2019.

The underfunded status of the U.S. pension plans decreased by \$0.7 billion in the year ended December 31, 2018 to \$5.1 billion due primarily to: (1) a favorable effect of an increase in discount rates of \$4.1 billion; and (2) other favorable changes including contributions, demographic gains and assumption changes of \$0.3 billion; partially offset by (3) service and interest cost of \$2.3 billion; and (4) an unfavorable effect of actual returns on plan assets of \$1.4 billion.

The following table illustrates the sensitivity to a change in certain assumptions for the pension plans, holding all other assumptions constant:

	U.S. P	lans(a)	Non-U.S.	. Plans(a)		
	Effect on 2019 Pension Expense	Effect on December 31, 2018 PBO	Effect on 2019 Pension Expense	Effect on December 31, 2018 PBO		
25 basis point decrease in discount rate	-\$80	+\$1,480	+\$19	+\$589		
25 basis point increase in discount rate	+\$80	-\$1,420	+\$11	-\$564		
25 basis point decrease in expected rate of return on assets	+\$140	N/A	+\$33	N/A		
25 basis point increase in expected rate of return on assets	-\$140	N/A	-\$33	N/A		

⁽a) The sensitivity does not include the effects of the individual annual yield curve rates applied for the calculation of the service and interest cost.

Refer to Note 15 to our consolidated financial statements for additional information on pension contributions, investment strategies, assumptions, the change in benefit obligations and related plan assets, pension funding requirements and future net benefit payments. Refer to Note 2 to our consolidated financial statements for a discussion of the inputs used to determine fair value for each significant asset class or category.

Valuation of Deferred Tax Assets The ability to realize deferred tax assets depends on the ability to generate sufficient taxable income within the carryback or carryforward periods provided for in the tax law for each applicable tax jurisdiction. The assessment regarding whether a valuation allowance is required or should be adjusted is based on an evaluation of possible sources of taxable income and also considers all available positive and negative evidence factors. Our accounting for the valuation of deferred tax assets represents our best estimate of future events. Changes in our current estimates, due to unanticipated market conditions, governmental legislative actions or events, could have a material effect on our ability to utilize deferred tax assets. Refer to Note 17 to our consolidated financial statements for additional information on the composition of these valuation allowances.

Forward-Looking Statements In this 2018 Form 10-K and in reports we subsequently file and have previously filed with the SEC on Forms 10-K and 10-Q and file or furnish on Form 8-K, and in related comments by our management, we use words like "aim," "anticipate," "appears," "approximately," "believe," "continue," "could," "designed," "effect," "estimate," "evaluate," "expect," "forecast," "goal," "initiative," "intend," "may," "objective," "outlook," "plan," "potential," "priorities," "project," "pursue," "seek," "should," "target," "when," "will," "would," or the negative of any of those words or similar expressions to identify forward-looking statements that represent our current judgment about possible future events. In making these statements we rely on assumptions and analysis based on our experience and perception of historical trends, current conditions and expected

future developments as well as other factors we consider appropriate under the circumstances. We believe these judgments are reasonable, but these statements are not guarantees of any events or financial results, and our actual results may differ materially due to a variety of important factors, both positive and negative. These factors, which may be revised or supplemented in subsequent reports on SEC Forms 10-Q and 8-K, include among others the following: (1) our ability to deliver new products, services and customer experiences in response to increased competition in the automotive industry; (2) our ability to timely fund and introduce new and improved vehicle models that are able to attract a sufficient number of consumers; (3) the success of our crossovers, SUVs and full-size pick-up trucks; (4) our ability to successfully and cost-effectively restructure our operations in the U.S. and various other countries and initiate additional cost reduction actions with minimal disruption; (5) our ability to reduce the costs associated with the manufacture and sale of electric vehicles and drive increased consumer adoption; (6) unique technological, operational and regulatory risks related to our autonomous vehicle regulations; (7) global automobile market sales volume, which can be volatile; (8) our significant business in China which is subject to unique operational, competitive and regulatory risks as well as economic conditions in China; (9) our joint ventures, which we cannot operate solely for our benefit and over which we may have limited control; (10) the international scale and footprint of our operations which exposes us to a variety of political, economic and regulatory risks, including the risk of changes in government leadership and laws (including labor, tax and other laws), political instability and economic tensions between governments and changes in international trade policies, new barriers to entry and changes to or withdrawals from free trade agreements, changes in foreign exchange rates and interest rates, economic downturns in foreign countries, differing local product preferences and product requirements, compliance with U.S. and foreign countries' export controls and economic sanctions, differing labor regulations, requirements and union relationships, differing dealer and franchise regulations and relationships, and difficulties in obtaining financing in foreign countries; (11) any significant disruption at one of our manufacturing facilities could disrupt our production schedule; (12) the ability of our suppliers to deliver parts, systems and components without disruption and at such times to allow us to meet production schedules; (13) prices of raw materials used by us and our suppliers; (14) our highly competitive industry, which is characterized by excess manufacturing capacity and the use of incentives and the introduction of new and improved vehicle models by our competitors; (15) the possibility that competitors may independently develop products and services similar to ours or that our intellectual property rights are not sufficient to prevent competitors from developing or selling those products or services; (16) our ability to manage risks related to security breaches and other disruptions to our vehicles, information technology networks and systems; (17) our ability to comply with increasingly complex, restrictive, and punitive regulations relating to our enterprise data practices, including the collection, use, sharing, and security of the Personal Identifiable Information of our customers, employees, or suppliers; (18) our ability to comply with extensive laws and regulations applicable to our industry, including those regarding fuel economy and emissions and autonomous vehicles; (19) costs and risks associated with litigation and government investigations; (20) the cost and effect on our reputation of product safety recalls and alleged defects in products and services; (21) any additional tax expense or exposure; (22) our continued ability to develop captive financing capability through GM Financial; and (23) significant increases in our pension expense or projected pension contributions resulting from changes in the value of plan assets or the discount rate applied to value the pension liabilities or mortality or other assumption changes. A further list and description of these risks, uncertainties and other factors can be found in this 2018 Form 10-K and our subsequent filings with the SEC.

We caution readers not to place undue reliance on forward-looking statements. We undertake no obligation to update publicly or otherwise revise any forward-looking statements, whether as a result of new information, future events or other factors that affect the subject of these statements, except where we are expressly required to do so by law.

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Item 7A. Quantitative and Qualitative Disclosures About Market Risk

The overall financial risk management program is under the responsibility of the Chief Financial Officer with support from the Financial Risk Council which reviews and, where appropriate, approves strategies to be pursued to mitigate these risks. The Financial Risk Council comprises members of our management and functions under the oversight of the Audit Committee and Finance Committee of the Board of Directors. The Audit Committee and Finance Committee assist and guide the Board of Directors in its oversight of our financial and risk management strategies. A risk management control framework is utilized to monitor the strategies, risks and related hedge positions in accordance with the policies and procedures approved by the Financial Risk Council. Our financial risk management policy is designed to protect against risk arising from extreme adverse market movements on our key exposures.

Automotive The following analyses provide quantitative information regarding exposure to foreign currency exchange rate risk and interest rate risk. Sensitivity analysis is used to measure the potential loss in the fair value of financial instruments with exposure to market risk. The models used assume instantaneous, parallel shifts in exchange rates and interest rate yield curves. For options and other instruments with nonlinear returns, models appropriate to these types of instruments are utilized to determine the effect

of market shifts. There are certain shortcomings inherent in the sensitivity analyses presented, due primarily to the assumption that interest rates change in a parallel fashion and that spot exchange rates change instantaneously. In addition the analyses are unable to reflect the complex market reactions that normally would arise from the market shifts modeled and do not contemplate the effects of correlations between foreign currency exposures, offsetting long-short positions in currency or other exposures such as interest rates which may significantly reduce the potential loss in value.

Foreign Currency Exchange Rate Risk We have foreign currency exposures related to buying, selling and financing in currencies other than the functional currencies of our operations. At December 31, 2018 our most significant foreign currency exposures were between the U.S. Dollar and the Canadian Dollar, Brazilian Real, Euro, Chinese Yuan, Australian Dollar, Mexican Peso, and Argentine Peso. Derivative instruments such as foreign currency forwards, swaps and options are used primarily to hedge exposures with respect to forecasted revenues, costs and commitments denominated in foreign currencies. Such contracts had remaining maturities of up to 12 months at December 31, 2018.

The net fair value liability of financial instruments with exposure to foreign currency risk was \$0.9 billion and \$0.8 billion at December 31, 2018 and 2017. These amounts are calculated utilizing a population of foreign currency exchange derivatives and foreign currency denominated debt and exclude the offsetting effect of foreign currency cash, cash equivalents and other assets. The potential loss in fair value for such financial instruments from a 10% adverse change in all quoted foreign currency exchange rates would have been \$0.1 billion at December 31, 2018 and 2017.

We are exposed to foreign currency risk due to the translation and remeasurement of the results of certain international operations into U.S. Dollars as part of the consolidation process. We had foreign currency derivatives with notional amounts of \$2.7 billion and \$4.0 billion at December 31, 2018 and 2017. The fair value of these derivative financial instruments was insignificant. Fluctuations in foreign currency exchange rates can therefore create volatility in the results of operations and may adversely affect our financial condition

The following table summarizes the amounts of automotive foreign currency translation and transaction and remeasurement (gains) losses:

	Ye	ears Ended	Dece	mber 31,	
		2018		2017	
Translation (gains) losses recorded in Accumulated other comprehensive loss	\$	353	\$	(275)	
Transaction and remeasurement losses recorded in earnings	\$	156	\$	43	

Interest Rate Risk We are subject to market risk from exposure to changes in interest rates related to certain financial instruments, primarily debt, capital lease obligations and certain marketable securities. We did not have any interest rate swap positions to manage interest rate exposures in our automotive operations at December 31, 2018 and 2017. The fair value liability of debt and capital leases was \$13.5 billion and \$15.1 billion at December 31, 2018 and 2017. The potential increase in fair value resulting from a 10% decrease in quoted interest rates would have been \$0.8 billion and \$0.7 billion at December 31, 2018 and 2017.

We had marketable securities of \$6.0 billion and \$8.3 billion classified as available-for-sale at December 31, 2018 and 2017. The potential decrease in fair value from a 50 basis point increase in interest rates would have had an insignificant effect at December 31, 2018 and 2017.

Automotive Financing - GM Financial

Interest Rate Risk Fluctuations in market interest rates can affect GM Financial's gross interest rate spread, which is the difference between interest earned on finance receivables and interest paid on debt. Typically retail finance receivables purchased by GM Financial bear fixed interest rates and are funded by variable or fixed rate debt. Commercial finance receivables originated by GM Financial bear variable interest rates and are funded by variable rate debt. The variable rate debt is subject to adjustments to reflect prevailing market interest rates. To help mitigate interest rate risk or mismatched funding, GM Financial may employ hedging strategies to lock in the interest rate spread.

Fixed interest rate receivables purchased by GM Financial may be pledged to secure borrowings under its credit facilities. Amounts borrowed under these credit facilities bear interest at variable rates that are subject to frequent adjustments to reflect prevailing market interest rates. To protect the interest rate spread within each credit facility, GM Financial is contractually required to enter into interest rate cap agreements in connection with borrowings under its credit facilities.

In GM Financial's securitization transactions it can transfer fixed rate finance receivables to securitization trusts that, in turn, sell either fixed rate or floating rate securities to investors. Derivative financial instruments, such as interest rate swaps and caps, are used to manage the gross interest rate spread on the floating rate transactions.

Quantitative Disclosure We measure the sensitivity of our net interest income to changes in interest rates by using interest rate scenarios that assume a hypothetical, instantaneous parallel shift of one hundred basis points in all interest rates across all maturities, as well as a base case that assumes that rates perform at the current market forward curve. However, interest rate changes are rarely instantaneous or parallel and rates could move more or less than the one percentage point assumed in our analysis. Therefore, the actual impact to net interest income could be higher or lower than the results detailed in the table below. These interest rate scenarios are purely hypothetical and do not represent our view of future interest rate movements.

Under these interest rate scenarios, we are asset-sensitive, meaning that we expect more assets than liabilities to re-price within the next twelve months. During a period of rising interest rates, the interest earned on our assets will increase more than the interest paid on our debt, which would initially increase our net interest income. During a period of falling interest rates, we would expect our net interest income to initially decrease. The following table presents our net interest income sensitivity to interest rate movement:

	 Years Ended	Dece	mber 31,
	2018		2017
One hundred basis points instantaneous increase in interest rates	\$ 10.7	\$	19.4
One hundred basis points instantaneous decrease in interest rates(a)	\$ (10.7)	\$	(19.4)

⁽a) Net interest income sensitivity given a one hundred basis point decrease in interest rates requires an assumption of negative interest rates in markets where existing interest rates are below one percent.

Additional Model Assumptions The sensitivity analysis presented is our best estimate of the effect of the hypothetical interest rate scenarios; however, our actual results could differ. Our estimates are also based on assumptions including the amortization and prepayment of the finance receivable portfolio, originations of finance receivables and leases, refinancing of maturing debt, replacement of maturing derivatives and exercise of options embedded in debt and derivatives. Our prepayment projections are based on historical experience. If interest rates or other factors change, our actual prepayment experience could be different than projected.

Foreign Currency Exchange Rate Risk GM Financial is exposed to foreign currency risk due to the translation and remeasurement of the results of certain international operations into U.S. Dollars as part of the consolidation process. Fluctuations in foreign currency exchange rates can therefore create volatility in the results of operations and may adversely affect GM Financial's financial condition.

GM Financial primarily finances its receivables and leased assets with debt in the same currency. When a different currency is used GM Financial may use foreign currency swaps to convert substantially all of its foreign currency debt obligations to the local currency of the receivables and lease assets to minimize any impact to earnings.

GM Financial had foreign currency swaps with notional amounts of \$3.9 billion and \$2.8 billion at December 31, 2018 and 2017. The fair value of these derivative financial instruments was insignificant.

The following table summarizes GM Financial's foreign currency translation and transaction and remeasurement (gains) losses:

	Y	2018	December 31,			
		2018		2017		
Translation (gains) losses recorded in Accumulated other comprehensive loss	\$	291	\$	(474)		
Transaction and remeasurement losses, net recorded in earnings	\$	12	\$	9		

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of General Motors Company

Opinion on the Financial Statements

We have audited the accompanying Consolidated Balance Sheet of General Motors Company and subsidiaries (the Company) as of December 31, 2018, the related Consolidated Statements of Income, Comprehensive Income, Cash Flows, and Equity for the year ended December 31, 2018, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2018, and the results of its operations and its cash flows for the year ended December 31, 2018, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 6, 2019 expressed an unqualified opinion thereon.

Adoption of Accounting Standards Update (ASU) No. 2014-09

As discussed in Note 2 to the consolidated financial statements, the Company changed its method of accounting for revenue from contracts with customers in 2018 due to the adoption of ASU No. 2014-09, "Revenue from Contracts with Customers," as amended.

Basis for Opinion

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

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

/s/ ERNST & YOUNG LLP

We have served as the Company's auditor since 2017.

Detroit, Michigan February 6, 2019

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of General Motors Company

Opinion on Internal Control over Financial Reporting

We have audited General Motors Company and subsidiaries' internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, General Motors Company and subsidiaries (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Consolidated Balance Sheet of the Company as of December 31, 2018, the related Consolidated Statements of Income, Comprehensive Income, Cash Flows and Equity for the year ended December 31, 2018, and the related notes and our report dated February 6, 2019 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

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 (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of 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/ ERNST & YOUNG LLP

Detroit, Michigan February 6, 2019

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of General Motors Company:

Opinion on the Financial Statements

We have audited the accompanying Consolidated Balance Sheet of General Motors Company and subsidiaries (the "Company") as of December 31, 2017, the related Consolidated Statements of Income, Comprehensive Income, Cash Flows, and Equity for the years ended December 31, 2017 and 2016, and the related notes (collectively referred to as the "financial statements"). In our opinion, the 2017 and 2016 financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017, and the results of its operations and its cash flows for the years ended December 31, 2017 and 2016, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

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

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

/s/ Deloitte & Touche LLP

Detroit, Michigan February 6, 2018 (July 25, 2018 as to Note 25, *Segment Reporting*)

We began serving as the Company's auditor in 1918. In 2018 we became the predecessor auditor.

Item 8. Financial Statements and Supplementary Data

CONSOLIDATED INCOME STATEMENTS (In millions, except per share amounts)

	Years Ended December 31,					
-	2018	2017			2016	
Net sales and revenue						
Automotive	133,045	\$	133,449	\$	140,205	
GM Financial	14,004		12,139		8,979	
Total net sales and revenue (Note 3)	147,049		145,588		149,184	
Costs and expenses						
Automotive and other cost of sales	120,656		116,229		121,784	
GM Financial interest, operating and other expenses	12,298		11,128		8,369	
Automotive and other selling, general and administrative expense	9,650		9,570		10,345	
Total costs and expenses	142,604		136,927		140,498	
Operating income	4,445		8,661		8,686	
Automotive interest expense	655		575		563	
Interest income and other non-operating income, net (Note 19)	2,596		1,645		1,603	
Equity income (Note 8)	2,163		2,132		2,282	
Income before income taxes	8,549		11,863		12,008	
Income tax expense (Note 17)	474		11,533		2,739	
Income from continuing operations	8,075		330		9,269	
Loss from discontinued operations, net of tax (Note 22)	70		4,212		1	
Net income (loss)	8,005		(3,882)		9,268	
Net loss attributable to noncontrolling interests.	9		18		159	
Net income (loss) attributable to stockholders.	8,014	\$	(3,864)	\$	9,427	
Net income (loss) attributable to common stockholders	7,916	\$	(3,880)	\$	9,427	
Earnings per share (Note 21)						
Basic earnings per common share – continuing operations	5.66	\$	0.23	\$	6.12	
Basic loss per common share – discontinued operations	0.05	\$	2.88	\$	_	
Basic earnings (loss) per common share	5.61	\$	(2.65)	\$	6.12	
Weighted-average common shares outstanding – basic	1,411		1,465		1,540	
Diluted earnings per common share – continuing operations	5.58	\$	0.22	\$	6.00	
Diluted loss per common share – discontinued operations	0.05	\$	2.82	\$	_	
Diluted earnings (loss) per common share	5.53	\$	(2.60)	\$	6.00	
Weighted-average common shares outstanding – diluted	1,431		1,492		1,570	

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (In millions)

	Years Ended December 31,					
		2018	2018 2017		2017	
Net income (loss)	\$	8,005	\$	(3,882)	\$	9,268
Other comprehensive income (loss), net of tax (Note 20)						
Foreign currency translation adjustments and other.		(715)		747		(384)
Defined benefit plans		(221)		570		(969)
Other comprehensive income (loss), net of tax.		(936)		1,317		(1,353)
Comprehensive income (loss)		7,069		(2,565)		7,915
Comprehensive loss attributable to noncontrolling interests		15		20		218
Comprehensive income (loss) attributable to stockholders	\$	7,084	\$	(2,545)	\$	8,133

Reference should be made to the notes to consolidated financial statements.

CONSOLIDATED BALANCE SHEETS (In millions, except per share amounts)

	December 31, 2018	December 31, 2017
ASSETS		
Current Assets		
Cash and cash equivalents.		\$ 15,512
Marketable securities (Note 4)	5,966	8,313
Accounts and notes receivable (net of allowance of \$211 and \$278)		8,164
GM Financial receivables, net (Note 5; Note 11 at VIEs).	26,850	20,521
Inventories (Note 6)		10,663
Equipment on operating leases, net (Note 7).	247	1,106
Other current assets (Note 4; Note 11 at VIEs).	5,021	4,465
Total current assets	75,293	68,744
Non-current Assets		
GM Financial receivables, net (Note 5; Note 11 at VIEs).	25,083	21,208
Equity in net assets of nonconsolidated affiliates (Note 8)	9,215	9,073
Property, net (Note 9)	38,758	36,253
Goodwill and intangible assets, net (Note 10).		5,849
Equipment on operating leases, net (Note 7; Note 11 at VIEs)		42,882
Deferred income taxes (Note 17)		23,544
Other assets (Note 4; Note 11 at VIEs)		4,929
Total non-current assets.		143,738
Total Assets		
LIADH ITIES AND EQUITY		
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable (principally trade).	\$ 22,297	\$ 23,929
Short-term debt and current portion of long-term debt (Note 13)		
Automotive		2,515
GM Financial (Note 11 at VIEs)		24,450
Accrued liabilities (Note 12)		25,996
Total current liabilities.	82,237	76,890
Non-current Liabilities		
Long-term debt (Note 13)		
Automotive		10,987
GM Financial (Note 11 at VIEs)	60,032	56,267
Postretirement benefits other than pensions (Note 15)	5,370	5,998
Pensions (Note 15)	11,538	13,746
Other liabilities (Note 12)		12,394
Total non-current liabilities	102,325	99,392
Total Liabilities	184,562	176,282
Commitments and contingencies (Note 16)		
Equity (Note 20)		
Common stock, \$0.01 par value.	14	14
Additional paid-in capital	25,563	25,371
Retained earnings	22,322	17,627
Accumulated other comprehensive loss	(9,039)	(8,011)
Total stockholders' equity	38,860	35,001
Noncontrolling interests	3,917	1,199
Total Equity	42,777	36,200
Total Liabilities and Equity.	\$ 227,339	

GENERAL MOTORS COMPANY AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CASH FLOWS (In millions)

		Years Ended December 31				Ι,
		2018		2017		2016
Cash flows from operating activities						
Income from continuing operations	\$	8,075	\$	330	\$	9,269
Depreciation and impairment of Equipment on operating leases, net		7,604		6,805		4,804
Depreciation, amortization and impairment charges on Property, net		6,065		5,456		5,015
Foreign currency remeasurement and transaction losses		168		52		229
Undistributed earnings of nonconsolidated affiliates, net		(141)		(132)		(15)
Pension contributions and OPEB payments.		(2,069)		(1,636)		(3,454)
Pension and OPEB income, net		(1,280)		(934)		(769)
Provision (benefit) for deferred taxes.		(112)		10,880		2,228
Change in other operating assets and liabilities (Note 26).		(1,376)		(3,015)		580
Other operating activities		(1,678)		(468)		(894)
Net cash provided by operating activities – continuing operations		15,256	_	17,338	_	16,993
Net cash used in operating activities – discontinued operations		15,250		(10)		(386)
Net cash provided by operating activities		15,256		17,328	_	16,607
Cash flows from investing activities		13,230		17,520		10,007
Expenditures for property.		(8,761)		(8,453)		(8,384)
Available-for-sale marketable securities, acquisitions		(2,820)		(5,503)		(15,182)
		(2,820)		(3,303)		
Trading marketable securities, acquisitions		5,108		9,007		(262) 10,871
Available-for-sale marketable securities, liquidations		3,108		9,007		
Trading marketable securities, liquidations		(02)		(41)		872
Acquisition of companies/investments, net of cash acquired		(83)		(41)		(804)
Purchases of finance receivables, net.		(25,671)		(19,325)		(14,378)
Principal collections and recoveries on finance receivables		17,048		12,578		9,899
Purchases of leased vehicles, net		(16,736)		(19,180)		(19,495)
Proceeds from termination of leased vehicles		10,864		6,667		2,554
Other investing activities		122		178		162
Net cash used in investing activities – continuing operations		(20,929)		(24,072)		(34,147)
Net cash provided by (used in) investing activities – discontinued operations (Note 22)		166		(3,500)		(1,496)
Net cash used in investing activities.		(20,763)		(27,572)		(35,643)
Cash flows from financing activities						
Net increase (decrease) in short-term debt.		1,186		(140)		(282)
Proceeds from issuance of debt (original maturities greater than three months)		43,801		52,187		42,036
Payments on debt (original maturities greater than three months).		(33,323)		(33,592)		(20,727)
Payments to purchase common stock.		(190)		(4,492)		(2,500)
Proceeds from issuance of subsidiary preferred and common stock (Note 20)		2,862		985		_
Dividends paid		(2,242)		(2,233)		(2,368)
Other financing activities		(640)		(305)		(163)
Net cash provided by financing activities – continuing operations		11,454		12,410		15,996
Net cash provided by financing activities – discontinued operations				174		1,081
Net cash provided by financing activities		11,454		12,584		17,077
Effect of exchange rate changes on cash, cash equivalents and restricted cash		(299)		348		(213)
Net increase (decrease) in cash, cash equivalents and restricted cash		5,648		2,688		(2,172)
Cash, cash equivalents and restricted cash at beginning of period		17,848		15,160		17,332
Cash, cash equivalents and restricted cash at end of period	\$	23,496	\$	17,848	\$	15,160
Cash, cash equivalents and restricted cash – continuing operations at end of period (Note 4)	\$	23,496	\$	17,848	\$	14,487
Cash, cash equivalents and restricted cash – continuing operations at end of period (Note 4)		43,470	\$	17,040	\$	673
Significant Non-cash Investing and Financing Activity	Φ	_	Φ	_	Φ	0/3
	¢	2 912	¢	2 006	¢	2 207
Non-cash property additions – continuing operations		3,813	\$ \$	3,996	\$	3,897
		_		_	\$	868
Non-cash business acquisition – continuing operations		_	\$	900	\$	290
Non-cash proceeds on sale of discontinued operations (Note 22)	Ф	_	\$	808	\$	_

GENERAL MOTORS COMPANY AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF EQUITY (In millions)

		Common				
	Common Stock	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Noncontrolling Interests	Total Equity
Balance at January 1, 2016	\$ 15	\$ 27,607	\$20,285	\$ (8,036)	\$ 452	\$ 40,323
Net income	_	_	9,427	_	(159)	9,268
Other comprehensive loss	_	_	_	(1,294)	(59)	(1,353)
Issuance of common stock	_	290	_	_	_	290
Purchase of common stock	_	(1,320)	(1,180)	_	_	(2,500)
Exercise of common stock warrants	_	89		_	_	89
Stock based compensation		317	(27)	_	_	290
Cash dividends paid on common stock.	_	_	(2,337)	_		(2,337)
Dividends to noncontrolling interests.		_		_	(31)	(31)
Other	_	_	_	_	36	36
Balance at December 31, 2016	15	26,983	26,168	(9,330)	239	44,075
Net loss	_	_	(3,864)	_	(18)	(3,882)
Other comprehensive income	_	_	_	1,319	(2)	1,317
Purchase of common stock	(1)	(2,063)	(2,428)	_	_	(4,492)
Exercise of common stock warrants	_	43	_	_	_	43
Issuance of subsidiary preferred stock (Note 20)	_	_	_	_	985	985
Stock based compensation	_	468	(34)	_	_	434
Cash dividends paid on common stock.	_	_	(2,215)	_	_	(2,215)
Dividends to noncontrolling interests	_	_	_	_	(18)	(18)
Other	_	(60)	_	_	13	(47)
Balance at December 31, 2017	14	25,371	17,627	(8,011)	1,199	36,200
Adoption of accounting standards (Note 2)	_	_	(1,046)	(98)	_	(1,144)
Net income	_	_	8,014	_	(9)	8,005
Other comprehensive loss	_	_	_	(930)	(6)	(936)
Purchase of common stock	_	(91)	(99)	_	_	(190)
Issuance of subsidiary preferred and common stock (Note 20)	_	_	_	_	2,862	2,862
Stock based compensation	_	287	_	_	_	287
Cash dividends paid on common stock	_	_	(2,144)	_	_	(2,144)
Dividends to noncontrolling interests	_	_	_	_	(169)	(169)
Other	_	(4)	(30)	_	40	6
Balance at December 31, 2018	\$ 14	\$ 25,563	\$22,322	\$ (9,039)	\$ 3,917	\$ 42,777

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1. Nature of Operations and Basis of Presentation

General Motors Company was incorporated as a Delaware corporation in 2009. We design, build and sell trucks, crossovers, cars and automobile parts worldwide and are investing in and growing an autonomous ride-sharing vehicle business. We also provide automotive financing services through GM Financial. We analyze the results of our continuing operations through the following segments: GMNA, GMI, GM Cruise and GM Financial. GM Cruise is our global segment responsible for the development and commercialization of autonomous vehicle technology. As a result of the growing importance of our autonomous vehicle operations, we moved these operations from Corporate to GM Cruise and began presenting GM Cruise as a new reportable segment in 2018. All periods presented have been recast to reflect the segment changes. Nonsegment operations and Maven, our ride- and car-sharing business, are classified as Corporate. Corporate includes certain centrally recorded income and costs such as interest, income taxes, corporate expenditures and certain nonsegment specific revenues and expenses.

On July 31, 2017 we closed the sale of the Opel/Vauxhall Business to PSA Group. On October 31, 2017 we closed the sale of the Fincos to Banque PSA Finance S.A. and BNP Paribas Personal Finance S.A. The European Business is presented as discontinued operations in our consolidated financial statements for all periods presented. Unless otherwise indicated, information in this report relates to our continuing operations. Refer to Note 22 for additional information on our discontinued operations.

In 2018 we changed the presentation of our consolidated statements of cash flows to separately classify Depreciation and impairment of Equipment on operating leases, net and Depreciation, amortization and impairment charges on Property, net. We have made corresponding reclassifications to the comparable information for all periods presented.

Principles of Consolidation The consolidated financial statements are prepared in conformity with U.S. GAAP. All intercompany balances and transactions have been eliminated in consolidation. Except for per share amounts or as otherwise specified, amounts presented within tables are stated in millions.

We consolidate entities that we control due to ownership of a majority voting interest and we consolidate variable interest entities (VIEs) when we are the primary beneficiary. Our share of earnings or losses of nonconsolidated affiliates is included in our consolidated operating results using the equity method of accounting when we are able to exercise significant influence over the operating and financial decisions of the affiliate. Beginning January 1, 2018 we no longer use the cost method of accounting due to the adoption of ASU 2016-01, "Recognition and Measurement of Financial Assets and Financial Liabilities" (ASU 2016-01). Refer to Note 2 for additional information on recently adopted accounting standards.

Use of Estimates in the Preparation of the Financial Statements Accounting estimates are an integral part of the consolidated financial statements. These estimates require the use of judgments and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses in the periods presented. We believe that the accounting estimates employed are appropriate and the resulting balances are reasonable; however, due to the inherent uncertainties in making estimates, actual results could differ from the original estimates, requiring adjustments to these balances in future periods.

GM Financial The amounts presented for GM Financial have been adjusted to include the effect of our tax attributes on GM Financial's deferred tax positions and provision for income taxes, which are not applicable to GM Financial on a stand-alone basis, and to eliminate the effect of transactions between GM Financial and the other members of the consolidated group. Accordingly, the amounts presented will differ from those presented by GM Financial on a stand-alone basis.

Note 2. Significant Accounting Policies

The accounting policies that follow are utilized by our automotive, automotive financing and GM Cruise operations, unless otherwise indicated. The information presented on Revenue Recognition, Equipment on Operating Leases, Marketable Debt Securities, Equity Investments and Derivative Financial Instruments reflects our recently adopted accounting standards on January 1, 2018.

Revenue Recognition We adopted ASU 2014-09 on January 1, 2018, which requires us to recognize revenue when a customer obtains control rather than when we have transferred substantially all risks and rewards of a good or service. We adopted ASU 2014-09 by applying the modified retrospective method to all noncompleted contracts as of the date of adoption. See the Recently Adopted Accounting Standards section for additional information pertaining to the adoption of ASU 2014-09. The comparative information has not been restated and continues to be reported under the accounting standards in effect for those periods. The following accounting policies became effective upon the adoption of ASU 2014-09:

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Automotive Automotive net sales and revenue represents the amount of consideration to which we expect to be entitled in exchange for vehicle, parts and accessories and services and other sales. The consideration recognized represents the amount received, typically shortly after the sale to a customer, net of estimated dealer and customer sales incentives we reasonably expect to pay. Significant factors in determining our estimates of incentives include forecasted sales volume, product mix, and the rate of customer acceptance of incentive programs, all of which are estimated based on historical experience and assumptions concerning future customer behavior and market conditions. Subsequent adjustments to incentive estimates are possible as facts and circumstances change over time. A portion of the consideration received is deferred for separate performance obligations, such as maintenance and vehicle connectivity, that will be provided to our customers at a future date. Taxes assessed by various government entities, such as sales, use and value-added taxes, collected at the time of the vehicle sale are excluded from Automotive net sales and revenue. Costs for shipping and handling activities that occur after control of the vehicle transfers to the dealer are recognized at the time of sale and presented in Automotive and other cost of sales.

Vehicle, Parts and Accessories For the majority of vehicle and accessories sales our customers obtain control and we recognize revenue when the vehicle transfers to the dealer, which generally occurs when the vehicle is released to the carrier responsible for transporting it to a dealer. Revenue, net of estimated returns, is recognized on the sale of parts upon delivery to the customer. When our customers have a right to return eligible parts and accessories, we consider the returns in our estimation of the transaction price.

Certain transfers to daily rental companies are accounted for as sales, with revenue recognized at the time of transfer. Such transactions were previously accounted for as operating leases. At the time of transfer, we defer revenue for remarketing obligations, record a residual value guarantee and reflect a deposit liability for amounts expected to be returned once the remarketing services are complete. Deferred revenue is recognized in earnings upon completion of the remarketing service. Transfers that occurred prior to January 1, 2018 and future transfers containing a substantive repurchase obligation continue to be accounted for as operating leases and rental income is recognized over the estimated term of the lease. Our total exposure to vehicle repurchase obligations would be reduced to the extent vehicles are able to be resold to a third party.

Used Vehicles Proceeds from the auction of vehicles returned from daily rental car companies and vehicles utilized by our employees are recognized in Automotive net sales and revenue upon transfer of control of the vehicle to the customer and the related vehicle carrying value is recognized in Automotive and other cost of sales.

Services and Other Services and other revenue primarily consists of revenue from vehicle-related service arrangements and after-sale services such as maintenance, vehicle connectivity and extended service warranties. For those service arrangements that are bundled with a vehicle sale, a portion of the revenue from the sale is allocated to the service component and recognized as deferred revenue within Accrued liabilities or Other liabilities. We recognize revenue for bundled services and services sold separately as services are performed, typically over a period of less than three years.

Automotive Financing - GM Financial Finance charge income earned on receivables is recognized using the effective interest method. Fees and commissions (including incentive payments) received and direct costs of originating loans are deferred and amortized over the term of the related finance receivables using the effective interest method and are removed from the consolidated balance sheets when the related finance receivables are fully charged off or paid in full. Accrual of finance charge income on retail finance receivables is generally suspended on accounts that are more than 60 days delinquent, accounts in bankruptcy and accounts in repossession. Payments received on nonaccrual loans are first applied to any fees due, then to any interest due and then any remaining amounts are applied to principal. Interest accrual generally resumes once an account has received payments bringing the delinquency to less than 60 days past due. Accrual of finance charge income on commercial finance receivables is generally suspended on accounts that are more than 90 days delinquent, upon receipt of a bankruptcy notice from a borrower, or where reasonable doubt exists about the full collectability of contractually agreed upon principal and interest. Payments received on nonaccrual loans are first applied to principal. Interest accrual resumes once an account has received payments bringing the account fully current and collection of contractual principal and interest is reasonably assured (including amounts previously charged off).

Income from operating lease assets, which includes lease origination fees, net of lease origination costs and incentives, is recorded as operating lease revenue on a straight-line basis over the term of the lease agreement.

Advertising and Promotion Expenditures Advertising and promotion expenditures, which are expensed as incurred in Automotive and other selling, general and administrative expense, were \$4.0 billion, \$4.3 billion and \$4.6 billion in the years ended December 31, 2018, 2017 and 2016.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Research and Development Expenditures Research and development expenditures, which are expensed as incurred in Automotive and other cost of sales, were \$7.8 billion, \$7.3 billion and \$6.6 billion in the years ended December 31, 2018, 2017 and 2016. We enter into cost sharing arrangements with third parties or nonconsolidated affiliates for product-related research, engineering, design and development activities. Cost sharing payments and fees related to these arrangements are presented in Automotive and other cost of sales.

Cash Equivalents and Restricted Cash Cash equivalents are defined as short-term, highly-liquid investments with original maturities of 90 days or less. We are required to post cash as collateral as part of certain agreements that we enter into as part of our operations. Cash and cash equivalents subject to contractual restrictions and not readily available are classified as restricted cash. Restricted cash is invested in accordance with the terms of the underlying agreements and include amounts related to various deposits, escrows and other cash collateral. Restricted cash is included in Other current assets and Other assets in the consolidated balance sheets.

Fair Value Measurements A three-level valuation hierarchy, based upon observable and unobservable inputs, is used for fair value measurements. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect market assumptions based on the best evidence available. These two types of inputs create the following fair value hierarchy: Level 1 – Quoted prices for identical instruments in active markets; Level 2 – Quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active and model-derived valuations whose significant inputs are observable; and Level 3 – Instruments whose significant inputs are unobservable.

Marketable Debt Securities We classify marketable debt securities as either available-for-sale or trading. Various factors, including turnover of holdings and investment guidelines, are considered in determining the classification of securities. Available-for-sale debt securities are recorded at fair value with unrealized gains and losses recorded net of related income taxes in Accumulated other comprehensive loss until realized. Trading debt securities are recorded at fair value with changes in fair value recorded in Interest income and other non-operating income, net. We determine realized gains and losses for all debt securities using the specific identification method.

We measure the fair value of our marketable debt securities using a market approach where identical or comparable prices are available and an income approach in other cases. If quoted market prices are not available, fair values of securities are determined using prices from a pricing service, pricing models, quoted prices of securities with similar characteristics or discounted cash flow models. These prices represent non-binding quotes. Our pricing service utilizes industry-standard pricing models that consider various inputs. We conduct an annual review of our pricing service and believe the prices received from our pricing service are a reliable representation of exit prices.

An evaluation is made quarterly to determine if unrealized losses related to non-trading investments in debt securities are other-than-temporary. Factors considered include the length of time and extent to which the fair value has been below cost, the financial condition and near-term prospects of the issuer and the intent to sell or likelihood to be forced to sell the debt security before any anticipated recovery.

Accounts and Notes Receivable Accounts and notes receivable primarily consists of amounts that are due and payable from our customers for the sale of vehicles, parts, and accessories. We evaluate the collectability of receivables each reporting period and record an allowance for doubtful accounts representing our estimate of probable losses. Additions to the allowance are charged to bad debt expense reported in Automotive and other selling, general and administrative expense and were insignificant in the years ended December 31, 2018, 2017 and 2016.

GM Financial Receivables Finance receivables are carried at amortized cost, net of allowance for loan losses. GM Financial uses forecasting models to determine the collective allowance for loan losses based on factors including historical delinquency migration to loss, probability of default and loss given default. The loss confirmation period is a key assumption within the models and represents the average amount of time from when a loss event first occurs to when the receivable is charged off. GM Financial also considers an evaluation of overall portfolio credit quality based on various indicators.

Retail finance receivables that become classified as troubled debt restructurings (TDRs) are separately assessed for impairment. A specific allowance is estimated based on the present value of the expected future cash flows of the receivables discounted at the original weighted average effective interest rate. Finance charge income from loans classified as TDRs is accounted for in the same manner as other accruing loans. Cash collections on these loans are allocated according to the same payment hierarchy methodology applied to loans that are not classified as TDRs.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Retail finance receivables are generally charged off in the month in which the account becomes 120 days contractually delinquent if GM Financial has not yet recorded a repossession charge-off. A repossession charge-off generally represents the difference between the estimated net sales proceeds and the unpaid balance of the contract, including accrued interest.

Inventories Inventories are stated at the lower of cost or net realizable value. Net realizable value is the estimated selling price in the ordinary course of business less cost to sell, and considers general market and economic conditions, periodic reviews of current profitability of vehicles, product warranty costs and the effect of estimated sales incentives. Net realizable value for offlease and other vehicles is current auction sales proceeds less disposal and warranty costs. Productive material, supplies, work in process and service parts are reviewed to determine if inventory quantities are in excess of forecasted usage or if they have become obsolete.

Equipment on Operating Leases Equipment on operating leases, net consists of vehicle leases to retail customers with lease terms of two to five years and vehicle sales to rental car companies that are expected to be repurchased in an average of seven months. We are exposed to changes in the residual values of these assets. The residual values represent estimates of the values of the leased vehicles at the end of the lease contracts and are determined based on forecasted auction proceeds when there is a reliable basis to make such a determination. Realization of the residual values is dependent on the future ability to market the vehicles under prevailing market conditions. The estimate of the residual value is evaluated over the life of the arrangement and adjustments may be made to the extent the expected value of the vehicle changes. Adjustments may be in the form of revisions to the depreciation rate or recognition of an impairment charge. A lease vehicle asset group is determined to be impaired if an impairment indicator exists and the expected future cash flows, which include estimated residual values, are lower than the carrying amount of the vehicle asset group. If the carrying amount is considered impaired an impairment charge is recorded for the amount by which the carrying amount exceeds fair value of the vehicle asset group. Fair value is determined primarily using the anticipated cash flows, including estimated residual values. In our automotive operations when a vehicle that is accounted for as a lease is returned the asset is reclassified from Equipment on operating leases, net to Inventories at the lower of cost or estimated selling price, less costs to sell. Upon disposition, proceeds are recorded in Automotive net sales and revenue and costs are recorded in Automotive and other cost of sales. In our automotive finance operations when a leased vehicle is returned or repossessed the asset is recorded in Other assets at the lower of amortized cost or estimated selling price, less costs to sell. Upon disposition a gain or loss is recorded in GM Financial interest, operating and other expenses for any difference between the net book value of the leased asset and the proceeds from the disposition of the asset.

Equity Investments When events and circumstances warrant, equity investments accounted for under the equity method of accounting are evaluated for impairment. An impairment charge is recorded whenever a decline in value of an equity investment below its carrying amount is determined to be other-than-temporary. Impairment charges related to equity method investments are recorded in Equity income. Equity investments that are not accounted for under the equity method of accounting are measured at fair value with changes in fair value recorded in Interest income and other non-operating income, net.

Property, net Property, plant and equipment, including internal use software, is recorded at cost. Major improvements that extend the useful life or add functionality are capitalized. The gross amount of assets under capital leases is included in property, plant and equipment. Expenditures for repairs and maintenance are charged to expense as incurred. We depreciate depreciable property using the straight-line method. Leasehold improvements are amortized over the period of lease or the life of the asset, whichever is shorter. The amortization of the assets under capital leases is included in depreciation expense. Upon retirement or disposition of property, plant and equipment, the cost and related accumulated depreciation are eliminated and any resulting gain or loss is recorded in earnings. Impairment charges related to property are recorded in Automotive and other cost of sales, Automotive and other selling, general and administrative expense or GM Financial interest, operating and other expenses.

Special Tools Special tools represent product-specific propulsion and non-propulsion related tools, dies, molds and other items used in the vehicle manufacturing process. Expenditures for special tools are recorded at cost and are capitalized. We amortize special tools over their estimated useful lives using the straight-line method or an accelerated amortization method based on their historical and estimated production volume. Impairment charges related to special tools are recorded in Automotive and other cost of sales.

Goodwill Goodwill is not amortized but rather tested for impairment annually on October 1 or when events occur or circumstances change that would trigger such a review. The impairment test entails an assessment of qualitative factors to determine whether it is more likely than not that an impairment exists. If it is more likely than not that an impairment exists, then a quantitative impairment test is performed. Impairment exists when the carrying amount of a reporting unit exceeds its fair value.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Intangible Assets, net Intangible assets, excluding goodwill, primarily include brand names, technology and intellectual property, customer relationships and dealer networks. Intangible assets are amortized on a straight-line or an accelerated method of amortization over their estimated useful lives. An accelerated amortization method reflecting the pattern in which the asset will be consumed is utilized if that pattern can be reliably determined. We consider the period of expected cash flows and underlying data used to measure the fair value of the intangible assets when selecting a useful life. Amortization of developed technology and intellectual property is recorded in Automotive and other cost of sales. Amortization of brand names, customer relationships and our dealer networks is recorded in Automotive and other selling, general and administrative expense or GM Financial interest, operating and other expenses. Impairment charges, if any, related to intangible assets are recorded in Automotive and other selling, general and administrative expense or Automotive and other cost of sales.

Valuation of Long-Lived Assets The carrying amount of long-lived assets and finite-lived intangible assets to be held and used in the business is evaluated for impairment when events and circumstances warrant. If the carrying amount of a long-lived asset group is considered impaired, a loss is recorded based on the amount by which the carrying amount exceeds fair value. Product-specific long-lived asset groups and non-product specific long-lived assets are separately tested for impairment on an asset group basis. Fair value is determined using either the market or sales comparison approach, cost approach or anticipated cash flows discounted at a rate commensurate with the risk involved. Long-lived assets to be disposed of other than by sale are considered held for use until disposition.

Pension and OPEB Plans

Attribution, Methods and Assumptions The cost of benefits provided by defined benefit pension plans is recorded in the period employees provide service. The cost of pension plan amendments that provide for benefits already earned by plan participants is amortized over the expected period of benefit which may be the duration of the applicable collective bargaining agreement specific to the plan, the expected future working lifetime or the life expectancy of the plan participants.

The cost of medical, dental, legal service and life insurance benefits provided through postretirement benefit plans is recorded in the period employees provide service. The cost of postretirement plan amendments that provide for benefits already earned by plan participants is amortized over the expected period of benefit which may be the average period to full eligibility or the average life expectancy of the plan participants.

An expected return on plan asset methodology is utilized to calculate future pension expense for certain significant funded benefit plans. A market-related value of plan assets methodology is also utilized that averages gains and losses on the plan assets over a period of years to determine future pension expense. The methodology recognizes 60% of the difference between the fair value of assets and the expected calculated value in the first year and 10% of that difference over each of the next four years.

The discount rate assumption is established for each of the retirement-related benefit plans at their respective measurement dates. In the U.S. we use a cash flow matching approach that uses projected cash flows matched to spot rates along a high quality corporate bond yield curve to determine the present value of cash flows to calculate a single equivalent discount rate. We apply individual annual yield curve rates to determine the service cost and interest cost for our pension and OPEB plans to more specifically link the cash flows related to service cost and interest cost to bonds maturing in their year of payment.

The benefit obligation for pension plans in Canada, the U.K. and Germany represents 92% of the non-U.S. pension benefit obligation at December 31, 2018. The discount rates for plans in Canada, the U.K. and Germany are determined using a cash flow matching approach similar to the U.S.

Plan Asset Valuation Due to the lack of timely available market information for certain investments in the asset classes described below as well as the inherent uncertainty of valuation, reported fair values may differ from fair values that would have been used had timely available market information been available.

Common and Preferred Stock Common and preferred stock for which market prices are readily available at the measurement date are valued at the last reported sale price or official closing price on the primary market or exchange on which they are actively traded and are classified in Level 1. Such equity securities for which the market is not considered to be active are valued via the use of observable inputs, which may include the use of adjusted market prices last available, bids or last available sales prices and/or other observable inputs and are classified in Level 2. Common and preferred stock classified in Level 3 are privately issued securities or other issues that are valued via the use of valuation models using significant unobservable inputs that generally consider aged (stale) pricing, earnings multiples, discounted cash flows and/or other qualitative and quantitative factors.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Debt Securities Valuations for debt securities are based on quotations received from independent pricing services or from dealers who make markets in such securities. Debt securities priced via pricing services that utilize matrix pricing which considers readily observable inputs such as the yield or price of bonds of comparable quality, coupon, maturity and type as well as dealer supplied prices, are classified in Level 2. Debt securities that are typically priced by dealers and pricing services via the use of proprietary pricing models which incorporate significant unobservable inputs are classified in Level 3. These inputs primarily consist of yield and credit spread assumptions, discount rates, prepayment curves, default assumptions and recovery rates.

Investment Funds, Private Equity and Debt Investments and Real Estate Investments Investment funds, private equity and debt investments and real estate investments are valued based on the Net Asset Value (NAV) per Share (or its equivalent) as a practical expedient to estimate fair value due to the absence of readily available market prices.

NAV's are provided by the respective investment sponsors or investment advisers and are subsequently reviewed and approved by management. In the event management concludes a reported NAV does not reflect fair value or is not determined as of the financial reporting measurement date, we will consider whether and when deemed necessary to make an adjustment at the balance sheet date. In determining whether an adjustment to the external valuation is required, we will review material factors that could affect the valuation, such as changes in the composition or performance of the underlying investments or comparable investments, overall market conditions, expected sale prices for private investments which are probable of being sold in the short-term and other economic factors that may possibly have a favorable or unfavorable effect on the reported external valuation.

Stock Incentive Plans Our stock incentive plans include RSUs, RSAs, PSUs, stock options and awards that may be settled in our stock, the stock of our subsidiaries or in cash. We measure and record compensation expense based on the fair value of GM or GM Cruise's common stock on the date of grant for RSUs, RSAs and PSUs and the grant date fair value, determined utilizing a lattice model or the Black-Scholes formula, for stock options and PSUs. RSUs granted in stock of GM Cruise vest upon satisfaction of both a service condition and a liquidity condition, defined as a change in control transaction or the consummation of an initial public offering. Compensation cost for awards that do not have an established accounting grant date, but for which the service inception date has been established, or are settled in cash is based on the fair value of GM or GM Cruise's common stock at the end of each reporting period. We record compensation cost for service-based RSUs, RSAs, PSUs and service-based stock options on a straight-line basis over the entire vesting period, or for retirement eligible employees over the requisite service period. Compensation costs for RSUs granted in stock of GM Cruise are recorded when the liquidity condition described above is met. We use the graded vesting method to record compensation cost for stock options with market conditions over the lesser of the vesting period or the time period an employee becomes eligible to retain the award at retirement.

Product Warranty and Recall Campaigns The estimated costs related to product warranties are accrued at the time products are sold and are charged to Automotive and other cost of sales. These estimates are established using historical information on the nature, frequency and average cost of claims of each vehicle line or each model year of the vehicle line and assumptions about future activity and events. Revisions are made when necessary and are based on changes in these factors.

The estimated costs related to recall campaigns are accrued when probable and estimable, which is generally at the time of vehicle sale. In GMNA, we estimate the costs related to recall campaigns by applying a frequency times severity approach that considers the number of historical recall campaigns, the number of vehicles per recall campaign, the estimated number of vehicles to be repaired and the cost per vehicle for each recall campaign. The estimated costs associated with recall campaigns in other geographical regions are determined using the estimated costs of repairs and the estimated number of vehicles to be repaired. Costs associated with recall campaigns are charged to Automotive and other cost of sales. Revisions are made when necessary based on changes in these factors.

Income Taxes The liability method is used in accounting for income taxes. Deferred tax assets and liabilities are recorded for temporary differences between the tax basis of assets and liabilities and their reported amounts in the consolidated financial statements using the statutory tax rates in effect for the year in which the differences are expected to reverse. The effect on deferred tax assets and liabilities of a change in tax laws or rates is recorded in the results of operations in the period that includes the enactment date under the law.

Deferred income tax assets are evaluated quarterly to determine if valuation allowances are required or should be adjusted. We establish valuation allowances for deferred tax assets based on a more likely than not standard. The ability to realize deferred tax assets depends on the ability to generate sufficient taxable income within the carryback or carryforward periods provided for in the tax law for each applicable tax jurisdiction. The assessment regarding whether a valuation allowance is required or should be adjusted also considers all available positive and negative evidence factors. It is difficult to conclude a valuation allowance is not

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

required when there is significant objective and verifiable negative evidence, such as cumulative losses in recent years. We utilize a rolling three years of actual and current year results as the primary measure of cumulative losses in recent years.

Income tax expense (benefit) for the year is allocated between continuing operations and other categories of income such as Other comprehensive income (loss). In periods in which there is a pre-tax loss from continuing operations and pre-tax income in another income category, the tax benefit allocated to continuing operations is determined by taking into account the pre-tax income of other categories.

We record uncertain tax positions on the basis of a two-step process whereby we determine whether it is more likely than not that the tax positions will be sustained based on the technical merits of the position, and for those tax positions that meet the more likely than not criteria, we recognize the largest amount of tax benefit that is greater than 50% likely to be realized upon ultimate settlement with the related tax authority. We record interest and penalties on uncertain tax positions in Income tax expense (benefit).

Foreign Currency Transactions and Translation The assets and liabilities of foreign subsidiaries that use the local currency as their functional currency are translated to U.S. Dollars based on the current exchange rate prevailing at each balance sheet date and any resulting translation adjustments are included in Accumulated other comprehensive loss. The assets and liabilities of foreign subsidiaries whose local currency is not their functional currency are remeasured from their local currency to their functional currency and then translated to U.S. Dollars. Revenues and expenses are translated into U.S. Dollars using the average exchange rates prevailing for each period presented. The financial statements of any foreign subsidiary that has been identified as having a highly inflationary economy are remeasured as if the functional currency were the U.S. Dollar.

Gains and losses arising from foreign currency transactions and the effects of remeasurements discussed in the preceding paragraph are recorded in Automotive and other cost of sales and GM Financial interest, operating and other expenses unless related to Automotive debt, which are recorded in Interest income and other non-operating income, net. Foreign currency transaction and remeasurement losses were \$168 million, \$52 million and \$229 million in the years ended December 31, 2018, 2017 and 2016.

Derivative Financial Instruments Derivative financial instruments are recognized as either assets or liabilities at fair value. The accounting for changes in the fair value of each derivative financial instrument depends on whether it has been designated and qualifies as an accounting hedge, as well as the type of hedging relationship identified. Derivative instruments are not used for trading or speculative purposes.

Automotive We utilize options, swaps and forward contracts to manage foreign currency, commodity price and interest rate risks. The change in fair value of option and forward contracts not designated as hedges is recorded in Interest income and other non-operating income, net. Cash flows for all derivative financial instruments are classified in cash flows from operating activities.

Certain foreign currency and commodity forward contracts have been designated as cash flow hedges. The risk being hedged is the foreign currency and commodity price risk related to forecasted transactions. If the contract has been designated as a cash flow hedge, the change in the fair value of the cash flow hedge is deferred in Accumulated other comprehensive loss and is recognized in Automotive and other cost of sales along with the earnings effect of the hedged item when the hedged item affects earnings.

We estimate the fair value of the PSA warrants using a Black-Scholes formula. The significant inputs to the model include the PSA stock price and the estimated dividend yield. We are entitled to receive any dividends declared by PSA through the conversion date upon exercise of the warrants. Gains or losses as a result of the change in the fair value of the PSA warrants are recorded in Interest income and other non-operating income, net.

Automotive Financing - GM Financial GM Financial utilizes interest rate derivative instruments to manage interest rate risk and foreign currency derivative instruments to manage foreign currency risk. The change in fair value of the derivative instruments not designated as hedges is recorded in GM Financial interest, operating and other expenses. Cash flows for all derivative financial instruments are classified in cash flows from operating activities.

Certain interest rate and foreign currency swap agreements have been designated as fair value hedges. The risk being hedged is the risk of changes in the fair value of the hedged debt attributable to changes in the benchmark interest rate or the risk of changes in fair value attributable to changes in foreign currency exchange rates. If the swap has been designated as a fair value hedge, the changes in the fair value of the hedged item are recorded in GM Financial interest, operating and other expenses. The change in fair value of the related hedge is also recorded in GM Financial interest, operating and other expenses.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Certain interest rate swap and foreign currency swap agreements have been designated as cash flow hedges. The risk being hedged is the interest rate and foreign currency risk related to forecasted transactions. If the contract has been designated as a cash flow hedge, the change in the fair value of the cash flow hedge is deferred in Accumulated other comprehensive loss and is recognized in GM Financial interest, operating and other expenses along with the earnings effect of the hedged item when the hedged item affects earnings. Changes in the fair value of amounts excluded from the assessment of effectiveness are recorded currently in earnings and are presented in the same income statement line as the earnings effect of the hedged item.

Recently Adopted Accounting Standards Effective January 1, 2018 we adopted ASU 2014-09, as incorporated into Accounting Standards Codification (ASC) 606, on a modified retrospective basis by recognizing a cumulative effect adjustment to the opening balance of Retained earnings. Under ASU 2014-09 sales incentives are recorded at the time of sale rather than at the later of sale or announcement, thereby resulting in the shifting of incentive amounts to an earlier quarter and fixed fee license arrangements are recognized when access to intellectual property is granted instead of over the contract period. The retiming of quarterly incentive amounts mainly offset for the year ended December 31, 2018. Actual incentive spending is dependent upon future market conditions.

Beginning January 1, 2018 certain transfers to daily rental companies are accounted for as sales when ownership of the vehicle is not expected to transfer back to us. Such transactions were previously accounted for as operating leases. Transfers that occurred prior to January 2018 continue to be accounted for as operating leases because at the original time of transfer an expectation existed that ownership of the vehicle would transfer back to us.

The following table summarizes the financial statement line items within our consolidated income statement and balance sheet significantly impacted by ASU 2014-09:

	Year Ended December 31, 2018									
	As Reported			Balances without option of ASC 606		Effect of Change				
Income Statement										
Automotive net sales and revenue	\$	133,045	\$	132,101	\$	944				
Automotive and other cost of sales	\$	120,656	\$	119,635	\$	1,021				
Income before income taxes	\$	8,549	\$	8,428	\$	121				
Net income attributable to stockholders	\$	8,014	\$	7,906	\$	108				

	December 31, 2018							
		As Reported Balances without Adoption of ASC 606				Effect of Change		
Balance Sheet								
Equipment on operating leases, net	\$	247	\$	1,182	\$	(935)		
Deferred income taxes	\$	24,082	\$	23,652	\$	430		
Accrued liabilities	\$	28,049	\$	26,543	\$	1,506		
Other liabilities	\$	12,357	\$	12,792	\$	(435)		
Retained earnings	\$	22,322	\$	23,550	\$	(1,228)		

Effective January 1, 2018 we adopted ASU 2016-01, on a modified retrospective basis, with a \$182 million cumulative effect adjustment recorded to the opening balance of Retained earnings to adjust an investment previously carried at cost to its fair value. ASU 2016-01 requires equity investments that are not accounted for under the equity method of accounting to be measured at fair value with changes recognized in Net income.

In the three months ended March 31, 2018 we adopted ASU 2017-12, "Derivatives and Hedging (Topic 815), Targeted Improvements to Accounting for Hedging Activities" (ASU 2017-12), on a modified retrospective basis and adopted ASU 2018-02, "Income Statement-Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income" (ASU 2018-02), on a modified retrospective basis. ASU 2018-02 provides the option to reclassify stranded tax effects related to the Tax Act in accumulated other comprehensive income to retained earnings. The adjustment relates to the change in the U.S. corporate income tax rate. The cumulative effect of the adjustments to the opening balance of Retained earnings for these adopted standards was \$108 million.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

The following table summarizes the changes to our consolidated balance sheet for the adoption of ASU 2014-09, ASU 2016-01, ASU 2017-12 and ASU 2018-02:

	Decembe	er 31, 2017	justment due to ASU 2014-09	AS	SU 2016-01, ASU 017-12 and ASU 2018-02	Ja	anuary 1, 2018
Deferred income taxes	\$	23,544	\$ 444	\$	(63)	\$	23,925
Other assets	\$	4,929	\$ 195	\$	242	\$	5,366
GM Financial short-term debt and current portion of long-term debt	\$	24,450	\$ _	\$	(13)	\$	24,437
Accrued liabilities	\$	25,996	\$ 2,328	\$		\$	28,324
Other liabilities	\$	12,394	\$ (235)	\$		\$	12,159
Retained earnings	\$	17,627	\$ (1,336)	\$	290	\$	16,581
Accumulated other comprehensive loss	\$	(8,011)	\$ _	\$	(98)	\$	(8,109)

Effective January 1, 2018 we adopted ASU 2016-15, "Statement of Cash Flows (Topic 230), Classification of Certain Cash Receipts and Payments" (ASU 2016-15), which clarified guidance on the classification of certain cash receipts and payments in the statement of cash flows. The adoption of ASU 2016-15 did not have a material impact on our consolidated financial statements and prior periods were not restated.

Effective January 1, 2018 we adopted ASU 2017-07, "Compensation - Retirement Benefits (Topic 715), Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost" (ASU 2017-07) on a retrospective basis, which requires that the service cost component of net periodic pension and OPEB (income) expense be presented in the same income statement line item as other employee compensation costs. The remaining components of net periodic pension and OPEB (income) expense are now presented outside operating income. Amounts previously reflected in Operating income were reclassified to Interest income and other non-operating income, net in accordance with the provisions of ASU 2017-07. Refer to Note 15 for amounts that were reclassified.

Accounting Standards Not Yet Adopted In February 2016 the Financial Accounting Standards Board (FASB) issued ASU 2016-02, "Leases" (ASU 2016-02), which requires us as the lessee to recognize most leases on the balance sheet thereby resulting in the recognition of right of use assets and lease obligations for those leases currently classified as operating leases. The accounting for leases where we are the lessor remains largely unchanged. ASU 2016-02 became effective for us on January 1, 2019 and we elected the optional transition method as well as the package of practical expedients upon adoption. While we are still finalizing our adoption procedures, we estimate the primary impact to our consolidated financial position upon adoption will be the recognition, on a discounted basis, of our minimum commitments under noncancelable operating leases on our consolidated balance sheets resulting in the recording of right of use assets and lease obligations for approximately \$1.0 billion.

In June 2016 the FASB issued ASU 2016-13, "Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments" (ASU 2016-13), which requires entities to use a new impairment model based on Current Expected Credit Losses (CECL) rather than incurred losses. We plan to adopt ASU 2016-13 on January 1, 2020 on a modified retrospective basis, which will result in an increase to our allowance for credit losses and a decrease to Retained earnings as of the adoption date. Estimated credit losses under CECL will consider relevant information about past events, current conditions and reasonable and supportable forecasts, resulting in recognition of lifetime expected credit losses upon loan origination. We are currently evaluating new processes to calculate credit losses in accordance with ASU 2016-13 that, once completed, will determine the impact on our consolidated financial statements at the date of adoption.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Note 3. Revenue

The following table disaggregates our revenue by major source for revenue generating segments:

				Year Eı	nde	d December	· 31,	2018			
	GMNA	GMI	С	Corporate	A	Total utomotive	Fi	GM nancial	Elim	inations	Total
Vehicle, parts and accessories	\$ 107,217	\$ 17,980	\$	20	\$	125,217	\$		\$	(62)	\$ 125,155
Used vehicles	3,215	175		_		3,390		_		(36)	3,354
Services and other	3,360	993		183		4,536		_		_	4,536
Automotive net sales and revenue	113,792	19,148		203		133,143				(98)	133,045
Leased vehicle income	_	_		_		_		9,963		_	9,963
Finance charge income	_	_		_		_		3,629		(8)	3,621
Other income								424		(4)	420
GM Financial net sales and revenue								14,016		(12)	14,004
Net sales and revenue	\$ 113,792	\$ 19,148	\$	203	\$	133,143	\$	14,016	\$	(110)	\$ 147,049

Revenue is measured as the amount of consideration we expect to receive in exchange for transferring goods or providing services. Adjustments to sales incentives for previously recognized sales were insignificant during the year ended December 31, 2018.

Contract liabilities in our Automotive segments consist primarily of maintenance, extended warranty and other service contracts. We recognized revenue of \$1.4 billion related to contract liabilities during the year ended December 31, 2018. We expect to recognize revenue of \$1.5 billion, \$509 million and \$626 million in the years ending December 31, 2019, 2020 and thereafter related to contract liabilities as of December 31, 2018.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Note 4. Marketable and Other Securities

The following table summarizes the fair value of cash equivalents and marketable debt and equity securities which approximates cost:

	Fair Value Level	Decem	ber 31, 2018	Decem	ber 31, 2017
Cash and cash equivalents					
Cash and time deposits(a)		\$	7,254	\$	6,962
Available-for-sale debt securities					
U.S. government and agencies	2		4,656		750
Corporate debt	2		3,791		3,032
Sovereign debt	2		1,976		1,954
Total available-for-sale debt securities – cash equivalents			10,423		5,736
Money market funds	1		3,167		2,814
Total cash and cash equivalents(b)		\$	20,844	\$	15,512
Marketable debt securities					
U.S. government and agencies	2	\$	1,230	\$	3,310
Corporate debt	2		3,478		3,665
Mortgage and asset-backed	2		695		635
Sovereign debt	2		563		703
Total available-for-sale debt securities – marketable securities		\$	5,966	\$	8,313
Restricted cash					
Cash and cash equivalents		\$	260	\$	219
Money market funds	1		2,392		2,117
Total restricted cash		\$	2,652	\$	2,336
Available-for-sale debt securities included above with contractual maturities(c)					
Due in one year or less.		\$	11,288		
Due between one and five years			4,406		
Total available-for-sale debt securities with contractual maturities		\$	15,694		

⁽a) Includes \$616 million that is designated exclusively to fund capital expenditures in GM Korea at December 31, 2018. Refer to Note 20 for additional information.

Proceeds from the sale of investments classified as available-for-sale and sold prior to maturity were \$4.3 billion, \$5.6 billion and \$8.5 billion in the years ended December 31, 2018, 2017 and 2016. Net unrealized gains and losses on available-for-sale debt securities were insignificant in the years ended December 31, 2018, 2017 and 2016. Cumulative unrealized gains and losses on available-for-sale debt securities were insignificant at December 31, 2018 and 2017.

Investments in equity securities where market quotations are not available that are accounted for at fair value primarily use Level 3 inputs. We recorded an unrealized gain of \$142 million in Interest income and other non-operating income, net in the year ended December 31, 2018 to adjust an investment in an equity security to a fair value of \$884 million at December 31, 2018.

⁽b) Includes \$2.3 billion in GM Cruise at December 31, 2018. Refer to Note 20 for additional information.

⁽c) Excludes mortgage and asset-backed securities.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the consolidated balance sheets that sum to the total of the same amounts shown in the consolidated statements of cash flows:

	December 31, 2018	December 31, 2017
Cash and cash equivalents	\$ 20,844	\$ 15,512
Restricted cash included in Other current assets	2,083	1,745
Restricted cash included in Other assets.	569	591
Total	\$ 23,496	\$ 17,848

Note 5. GM Financial Receivables and Transactions

	1	December 31, 2	018	December 31, 2017					
	Retail	Commercial(a) Total	Retail	Commercial(a)	Total			
Finance receivables, collectively evaluated for impairment, net of fees	\$ 38,220	\$ 12,23	5 \$ 50,455	\$ 30,486	\$ 9,935	\$ 40,421			
Finance receivables, individually evaluated for impairment, net of fees	2,348	4	1 2,389	2,228	22	2,250			
GM Financial receivables	40,568	12,27	6 52,844	32,714	9,957	42,671			
Less: allowance for loan losses	(844)	(6	7) (911)	(889)	(53)	(942)			
GM Financial receivables, net	\$ 39,724	\$ 12,20	9 \$ 51,933	\$ 31,825	\$ 9,904	\$ 41,729			
Fair value of GM Financial receivables utilizing Level 2 inputs			\$ 12,209			\$ 9,904			
Fair value of GM Financial receivables utilizing Level 3 inputs			\$ 39,430			\$ 31,831			

⁽a) Net of dealer cash management balances of \$922 million and \$536 million at December 31, 2018 and 2017.

	Years Ended December 31,							
·		2018		2017		2016		
Allowance for loan losses at beginning of period	\$	942	\$	805	\$	749		
Provision for loan losses		642		757		644		
Charge-offs		(1,199)		(1,173)		(1,137)		
Recoveries		536		552		542		
Effect of foreign currency		(10)		1		7		
Allowance for loan losses at end of period	\$	911	\$	942	\$	805		
•								

The allowance for loan losses on retail and commercial finance receivables included a collective allowance of \$586 million, \$611 million and \$525 million and a specific allowance of \$325 million, \$331 million and \$280 million at December 31, 2018, 2017 and 2016.

Retail Finance Receivables We use proprietary scoring systems in the underwriting process that measure the credit quality of retail finance receivables using several factors, such as credit bureau information, consumer credit risk scores (e.g. FICO score or its equivalent) and contract characteristics. We also consider other factors such as employment history, financial stability and capacity to pay. Subsequent to origination we review the credit quality of retail finance receivables based on customer payment activity. At December 31, 2018 and 2017 25% and 33% of retail finance receivables were from consumers with sub-prime credit scores, which are defined as a FICO score or its equivalent of less than 620 at the time of loan origination.

We purchase retail finance contracts from automobile dealers without recourse, and accordingly, the dealer has no liability to GM Financial if the consumer defaults on the contract. Finance receivables are collateralized by vehicle titles and GM Financial has the right to repossess the vehicle in the event the consumer defaults on the payment terms of the contract.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

An account is considered delinquent if a substantial portion of a scheduled payment has not been received by the date the payment was contractually due. The accrual of finance charge income had been suspended on delinquent retail finance receivables with contractual amounts due of \$888 million and \$778 million at December 31, 2018 and 2017. The following table summarizes the contractual amount of delinquent retail finance receivables, which is not significantly different than the recorded investment of the retail finance receivables:

	Decemb	er 31, 2018	Decemb	er 31, 2017
	Amount	Percent of Contractual Amount Due	Amount	Percent of Contractual Amount Due
31-to-60 days delinquent	\$ 1,349	3.3%	\$ 1,334	4.1%
Greater-than-60 days delinquent	547	1.4%	559	1.7%
Total finance receivables more than 30 days delinquent	1,896	4.7%	1,893	5.8%
In repossession	44	0.1%	27	%
Total finance receivables more than 30 days delinquent or in repossession	\$ 1,940	4.8%	\$ 1,920	5.8%

Retail finance receivables classified as TDRs and individually evaluated for impairment were \$2.3 billion and \$2.2 billion and the allowance for loan losses included \$321 million and \$328 million of specific allowances on these receivables at December 31, 2018 and 2017.

Commercial Finance Receivables Our commercial finance receivables consist of dealer financings, primarily for inventory purchases. Proprietary models are used to assign a risk rating to each dealer. We perform periodic credit reviews of each dealership and adjust the dealership's risk rating, if necessary. Dealers in Group VI are subject to additional restrictions on funding, including suspension of lines of credit and liquidation of assets. The commercial finance receivables on non-accrual status were insignificant at December 31, 2018 and 2017. The following table summarizes the credit risk profile by dealer risk rating of the commercial finance receivables:

	Dec	ember 31, 2018	Dece	mber 31, 2017
Group I – Dealers with superior financial metrics · · · · · · · · · · · · · · · · · · ·	\$	2,192	\$	1,915
Group II . — Dealers with strong financial metrics		4,399		3,465
Group III — Dealers with fair financial metrics		4,064		3,239
Group IV — Dealers with weak financial metrics.		1,116		997
Group V. – Dealers warranting special mention due to elevated risks · · · · · · · · · · · · · · · · · ·		422		260
Group VI — Dealers with loans classified as substandard, doubtful or impaired		83		81
	\$	12,276	\$	9,957
	_	,-,-	_	- ,

Transactions with GM Financial The following table shows transactions between our Automotive segments and GM Financial. These amounts are presented in GM Financial's consolidated balance sheets and statements of income. All balance sheet amounts in the table below are eliminated.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

	December 31, 2018		December	31, 2017
Consolidated Balance Sheets		_		
Commercial finance receivables, net due from GM consolidated dealers	\$ 4	45	\$	355
Direct-financing lease receivables from GM subsidiaries	\$ 1	34	\$	88
Subvention receivable(a)	\$ 7	27	\$	306
Commercial loan funding payable	\$	61	\$	90

	Years Ended December 31,									
		2018		2017		2016				
Consolidated Statements of Income										
Interest subvention earned on finance receivables.	\$	554	\$	492	\$	387				
Leased vehicle subvention earned	\$	3,274	\$	3,046	\$	2,232				

⁽a) Cash paid by Automotive segments to GM Financial for subvention was \$3.8 billion, \$4.3 billion, and \$4.2 billion during 2018, 2017 and 2016.

GM Financial's Board of Directors declared and paid a dividend of \$375 million on its common stock in October 2018; and paid a special dividend of \$550 million to GM in November 2017 following the sale of the Fincos.

Note 6. Inventories

	Decemb	per 31, 2018	Decen	nber 31, 2017
Total productive material, supplies and work in process	\$	4,274	\$	4,203
Finished product, including service parts		5,542		6,460
Total inventories	\$	9,816	\$	10,663

Note 7. Equipment on Operating Leases

Equipment on operating leases consists of leases to retail customers that are recorded as operating leases and vehicle sales to daily rental car companies with an actual or expected repurchase obligation.

	December 31, 2018		Decen	nber 31, 2017
Equipment on operating leases	\$	55,282	\$	53,947
Less: accumulated depreciation		(11,476)		(9,959)
Equipment on operating leases, net(a)	\$	43,806	\$	43,988

⁽a) Includes \$43.6 billion and \$42.9 billion of GM Financial Equipment on operating leases, net at December 31, 2018 and 2017.

Depreciation expense related to Equipment on operating leases, net was \$7.5 billion, \$6.7 billion and \$4.7 billion in the years ended December 31, 2018, 2017 and 2016.

The following table summarizes minimum rental payments due to GM Financial on leases to retail customers:

	Years Ending December 31,										
	2019	019 2020 2021 2022 2023									
Minimum rental receipts under operating leases	\$ 6.733	\$ 4.141	\$ 1.568	\$ 155	\$ 9	\$12,606					

Note 8. Equity in Net Assets of Nonconsolidated Affiliates

Nonconsolidated affiliates are entities in which an equity ownership interest is maintained and for which the equity method of accounting is used due to our ability to exert significant influence over decisions relating to their operating and financial affairs. Revenue and expenses of our joint ventures are not consolidated into our financial statements; rather, our proportionate share of the earnings of each joint venture is reflected as Equity income.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

	Years Ended December 31,							
	2018			2017		2016		
Automotive China equity income	\$	1,981	\$	1,976	\$	1,973		
Other joint ventures equity income		182		156		309		
Total Equity income	\$	2,163	\$	2,132	\$	2,282		

Investments in Nonconsolidated Affiliates

	Decem	ber 31, 2018	Decem	iber 31, 2017
Automotive China carrying amount	\$	7,779	\$	7,832
Other investments carrying amount		1,436		1,241
Total equity in net assets of nonconsolidated affiliates	\$	9,215	\$	9,073

The carrying amount of our investments in certain joint ventures exceeded our share of the underlying net assets by \$4.4 billion and \$4.3 billion at December 31, 2018 and 2017 due primarily to goodwill from the application of fresh-start reporting and the purchase of additional interests in nonconsolidated affiliates.

The following table summarizes our direct ownership interests in our China JVs:

	December 31, 2018	December 31, 2017
Automotive China JVs		
SAIC General Motors Corp., Ltd. (SGM)	50%	50%
FAW-GM Light Duty Commercial Vehicle Co., Ltd. (FAW-GM)	50%	50%
Pan Asia Technical Automotive Center Co., Ltd	50%	50%
SAIC General Motors Sales Co., Ltd.	49%	49%
SAIC GM Wuling Automobile Co., Ltd. (SGMW)	44%	44%
Shanghai OnStar Telematics Co., Ltd. (Shanghai OnStar)	40%	40%
SAIC GM (Shenyang) Norsom Motors Co., Ltd. (SGM Norsom).	25%	25%
SAIC GM Dong Yue Motors Co., Ltd. (SGM DY)	25%	25%
SAIC GM Dong Yue Powertrain Co., Ltd. (SGM DYPT)	25%	25%
Other joint ventures		
SAIC-GMAC	35%	35%
SAIC-GMF Leasing Co., Ltd.	35%	

SGM is a joint venture we established with Shanghai Automotive Industry Corporation (SAIC) (50%). SGM has interests in three other joint ventures in China: SGM Norsom, SGM DY and SGM DYPT. These three joint ventures are jointly held by SGM (50%), SAIC (25%) and ourselves. These four joint ventures are engaged in the production, import and sale of a range of products under the Buick, Chevrolet and Cadillac brands. SGM also has interests in Shanghai OnStar (20%), SAIC-GMAC (20%) and SAIC-GMF Leasing Co., Ltd. (20%). Shanghai Automotive Group Finance Company Ltd., a subsidiary of SAIC, owns 45% of SAIC-GMF Leasing Co., Ltd.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Summarized Financial Data of Nonconsolidated Affiliates

	December 31, 2018					December 31, 2017						
		Automotive China JVs Others Total		Automotive China JVs		Others			Total			
Summarized Balance Sheet Data												
Current assets	\$	16,506	\$	16,234	\$	32,740	\$	17,370	\$	13,484	\$	30,854
Non-current assets		14,012		3,870		17,882		14,188		3,409		17,597
Total assets	\$	30,518	\$	20,104	\$	50,622	\$	31,558	\$	16,893	\$	48,451
Current liabilities	\$	21,574	\$	13,985	\$	35,559	\$	22,642	\$	12,255	\$	34,897
Non-current liabilities		1,689		2,826		4,515		1,639		1,903		3,542
Total liabilities	\$	23,263	\$	16,811	\$	40,074	\$	24,281	\$	14,158	\$	38,439
Noncontrolling interests	\$	865	\$	1	\$	866	\$	871	\$	1	\$	872

	Years Ended December 31,								
		2018		2017		2016			
Summarized Operating Data									
Automotive China JVs' net sales.	\$	50,316	\$	50,065	\$	47,150			
Others' net sales.		1,721		2,542		2,412			
Total net sales	\$	52,037	\$	52,607	\$	49,562			
Automotive China JVs' net income.	\$	3,992	\$	3,984	\$	4,117			
Others' net income.		536		648		378			
Total net income	\$	4,528	\$	4,632	\$	4,495			

Transactions with Nonconsolidated Affiliates Our nonconsolidated affiliates are involved in various aspects of the development, production and marketing of trucks, crossovers, cars and automobile parts. We enter into transactions with certain nonconsolidated affiliates to purchase and sell component parts and vehicles. The following tables summarize transactions with and balances related to our nonconsolidated affiliates:

		Years Ended December 31,						
-	2	2018	2017				2016	
Automotive sales and revenue	\$	406	\$		923	\$	889	
Automotive purchases, net	\$	1,155	\$		674	\$	803	
Dividends received.	\$	2,022	\$	2,	000	\$	2,120	
Operating cash flows	\$	657	\$	2,	321	\$	2,512	
		Decembe	r 31,	2018	Dec	embe	er 31, 2017	
Accounts and notes receivable, net	⁻	\$		979	\$		780	
Accounts payable		\$		163	\$		534	
Undistributed earnings		\$	2	,331	\$		2,184	

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Note 9. Property

	Estimated Useful Lives in Years	December 31, 2018		Dece	nber 31, 2017
Land		\$	1,349	\$	1,647
Buildings and improvements	5-40		9,173		7,471
Machinery and equipment	3-27		26,453		23,915
Special tools	1-13		23,828		21,113
Construction in progress			4,680		6,188
Total property			65,483		60,334
Less: accumulated depreciation			(26,725)		(24,081)
Total property, net		\$	38,758	\$	36,253

The amount of capitalized software included in Property, net was \$1.1 billion and \$1.2 billion at December 31, 2018 and 2017. The amount of interest capitalized and excluded from Automotive interest expense related to Property, net was insignificant in the years ended December 31, 2018, 2017 and 2016.

	Years Ended December 31,							
		2018		2017	2016			
Depreciation and amortization expense	\$	5,347	\$	4,966	\$	4,622		
Impairment charges.	\$	466	\$	199	\$	68		
Capitalized software amortization expense(a)	\$	424	\$	459	\$	458		

⁽a) Included in depreciation and amortization expense.

Note 10. Goodwill and Intangible Assets

Goodwill of \$1.9 billion consisted of \$1.4 billion recorded in GM Financial and \$504 million and \$490 million included in GM Cruise at December 31, 2018 and 2017.

	December 31, 2018						December 31, 2017										
	Gross Carrying Amount		Accumulated Amortization		Net Carrying Amount		Carrying		Carrying		Carrying		Gross Carrying Amount		cumulated ortization	Car	Net rrying nount
Technology and intellectual property	\$ 734	\$	457	\$	277	\$	8,092	\$	7,735	\$	357						
Brands	4,299		1,165		3,134		4,302		1,044	3	3,258						
Dealer network, customer relationships and other	968		661		307		1,310		933		377						
Total intangible assets	\$ 6,001	\$	2,283	\$	3,718	\$	13,704	\$	9,712	\$ 3	3,992						

Our amortization expense related to intangible assets was \$247 million, \$278 million, and \$325 million in the years ended December 31, 2018, 2017 and 2016.

Amortization expense related to intangible assets is estimated to be approximately \$184 million in each of the next five years.

We removed \$7.7 billion of fully amortized intangible assets in the year ended December 31, 2018 which are no longer in use and provide no remaining economic benefit.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Note 11. Variable Interest Entities

GM Financial uses special purpose entities (SPEs) that are considered VIEs to issue variable funding notes to third party bank-sponsored warehouse facilities or asset-backed securities to investors in securitization transactions. The debt issued by these VIEs is backed by finance receivables and leasing related assets transferred to the VIEs (Securitized Assets). GM Financial determined that it is the primary beneficiary of the SPEs because the servicing responsibilities for the Securitized Assets give GM Financial the power to direct the activities that most significantly impact the performance of the VIEs and the variable interests in the VIEs give GM Financial the obligation to absorb losses and the right to receive residual returns that could potentially be significant. The assets serve as the sole source of repayment for the debt issued by these entities. Investors in the notes issued by the VIEs do not have recourse to GM Financial or its other assets, with the exception of customary representation and warranty repurchase provisions and indemnities that GM Financial provides as the servicer. GM Financial is not required and does not currently intend to provide additional financial support to these SPEs. While these subsidiaries are included in GM Financial's consolidated financial statements, they are separate legal entities and their assets are legally owned by them and are not available to GM Financial's creditors. The following table summarizes the assets and liabilities related to GM Financial's consolidated VIEs:

	Dece	mber 31, 2018	December 31, 2017		
Restricted cash – current · · · · · · · · · · · · · · · · · · ·	\$	1,876	\$	1,740	
Restricted cash – non-current· · · · · · · · · · · · · · · · · · ·	\$	504	\$	527	
GM Financial receivables, net of fees – current · · · · · · · · · · · · · · · · · · ·	\$	18,304	\$	15,141	
GM Financial receivables, net of fees – non-current · · · · · · · · · · · · · · · · · · ·	\$	14,008	\$	12,944	
GM Financial equipment on operating leases, net	\$	21,781	\$	22,222	
GM Financial short-term debt and current portion of long-term debt	\$	21,087	\$	18,972	
GM Financial long-term debt.	\$	21,417	\$	20,356	

GM Financial recognizes finance charge, leased vehicle and fee income on the Securitized Assets and interest expense on the secured debt issued in a securitization transaction and records a provision for loan losses to recognize probable loan losses inherent in the finance receivables.

Note 12. Accrued and Other Liabilities

	Decen	nber 31, 2018	Decem	ber 31, 2017
Accrued liabilities				
Dealer and customer allowances, claims and discounts	\$	11,611	\$	8,523
Deposits primarily from rental car companies		405		2,113
Deferred revenue		3,504		3,400
Product warranty and related liabilities		2,788		2,994
Payrolls and employee benefits excluding postemployment benefits		2,233		2,594
Other		7,508		6,372
Total accrued liabilities.	\$	28,049	\$	25,996
Other liabilities				
Deferred revenue	\$	2,959	\$	2,887
Product warranty and related liabilities		4,802		5,338
Employee benefits excluding postemployment benefits		658		680
Postemployment benefits including facility idling reserves		875		574
Other		3,063		2,915
Total other liabilities	\$	12,357	\$	12,394

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

	Years Ended December 31,							
	2018	2017			2016			
Product Warranty and Related Liabilities								
Warranty balance at beginning of period	\$ 8,332	\$	9,069	\$	8,550			
Warranties issued and assumed in period – recall campaigns	665		678		899			
Warranties issued and assumed in period – product warranty	2,143		2,123		2,338			
Payments	(2,903)		(3,129)		(3,375)			
Adjustments to pre-existing warranties.	(464)		(495)		636			
Effect of foreign currency and other	(183)		86		21			
Warranty balance at end of period	\$ 7,590	\$	8,332	\$	9,069			
Warranties issued and assumed in period – product warranty Payments Adjustments to pre-existing warranties. Effect of foreign currency and other	\$ 2,143 (2,903) (464) (183)	\$	2,123 (3,129) (495) 86	\$	2,338 (3,375) 636 21			

We estimate our reasonably possible loss in excess of amounts accrued for recall campaigns to be insignificant at December 31, 2018. Refer to Note 16 for reasonably possible losses on Takata matters.

Note 13. Automotive and GM Financial Debt

	Dec	ember 31, 2018	December 31, 201		
Secured debt	\$	143	\$	204	
Unsecured debt		13,292		12,579	
Capital leases		528		719	
Total automotive debt(a).	\$	13,963	\$	13,502	
Fair value utilizing Level 1 inputs	\$	11,693	\$	13,202	
Fair value utilizing Level 2 inputs		1,838		1,886	
Fair value of automotive debt.	\$	13,531	\$	15,088	
Available under credit facility agreements	\$	14,167	\$	14,067	
Interest rate range on outstanding debt(b)		0.0-18.5%		0.0-21.8%	
Weighted-average interest rate on outstanding short-term debt(b)		6.6%		4.7%	
Weighted-average interest rate on outstanding long-term debt(b)		5.2%		5.2%	

⁽a) Includes net discount and debt issuance costs of \$499 million at December 31, 2018 and 2017.

In April 2018 we amended and restated our two existing revolving credit facilities and entered into a third facility, increasing our aggregate borrowing capacity from \$14.5 billion to \$16.5 billion. These facilities consist of a 364-day, \$2.0 billion facility, a three-year, \$4.0 billion facility and a five-year, \$10.5 billion facility. The facilities are available to us as well as certain wholly-owned subsidiaries, including GM Financial. The three-year, \$4.0 billion facility allows for borrowings in U.S. Dollars and other currencies and includes a letter of credit sub-facility of \$1.1 billion. The five-year, \$10.5 billion facility allows for borrowings in U.S. Dollars and other currencies. The 364-day, \$2.0 billion facility allows for borrowing in U.S. Dollars only. We have allocated the 364-day, \$2.0 billion facility for exclusive use by GM Financial.

In September 2018 we issued \$2.1 billion in aggregate principal amount of senior unsecured notes with an initial weighted average interest rate of 5.03% and maturity dates ranging from 2021 to 2049. The notes are governed by the same indenture that was used in past issuances, which contains terms and covenants customary of these types of securities including limitations on the amount of certain secured debt we may incur. The net proceeds from the issuance of these senior unsecured notes were used to repay \$1.5 billion of debt in October 2018 upon maturity, pre-fund \$584 million in certain mandatory contributions for our U.K. and Canada pension plans due in 2019 through 2021, and for other general corporate purposes.

⁽b) Includes coupon rates on debt denominated in various foreign currencies and interest free loans and the impact of reclassification of \$1.5 billion of senior unsecured notes from long-term to short-term in the year ended December 31, 2017.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

In January 2019 we entered into a new three-year committed unsecured revolving credit facility with an initial borrowing capacity of \$3.0 billion, reducing to \$2.0 billion in July 2020. The facility will be used to fund costs related to the transformation activities announced in November 2018 and to provide additional financial flexibility.

	December 31, 2018				December 31, 2017			
	Carrying Amount Fai						rying ount Fair Value	
Secured debt	\$	42,835	\$	42,835	\$	39,887	\$	39,948
Unsecured debt		48,153		47,556		40,830		41,989
Total GM Financial debt.	\$	90,988	\$	90,391	\$	80,717	\$	81,937
Fair value utilizing Level 2 inputs			\$	88,305			\$	79,623
Fair value utilizing Level 3 inputs			\$	2,086			\$	2,314

Secured debt consists of revolving credit facilities and securitization notes payable. Most of the secured debt was issued by VIEs and is repayable only from proceeds related to the underlying pledged Securitized Assets. Refer to Note 11 for additional information on GM Financial's involvement with VIEs. GM Financial is required to hold certain funds in restricted cash accounts to provide additional collateral for borrowings under certain secured credit facilities. The weighted-average interest rate on secured debt was 2.85% at December 31, 2018. The revolving credit facilities have maturity dates ranging from 2019 to 2024 and securitization notes payable have maturity dates ranging from 2019 to 2026. At the end of the revolving period, if not renewed, the debt of revolving credit facilities will amortize over a defined period. In the year ended December 31, 2018 GM Financial entered into new or renewed credit facilities with a total net additional borrowing capacity of \$695 million, which had substantially the same terms as existing debt and GM Financial issued \$22.8 billion in aggregate principal amount of securitization notes payable with an initial weighted average interest rate of 3.00% and maturity dates ranging from 2020 to 2026.

Unsecured debt consists of senior notes, credit facilities and other unsecured debt. Senior notes outstanding at December 31, 2018 are due beginning in 2019 through 2028 and have a weighted-average interest rate of 3.40%. In the year ended December 31, 2018 GM Financial issued \$8.6 billion in aggregate principal amount of senior notes with an initial weighted average interest rate of 3.36% and maturity dates ranging from 2020 to 2028.

In January 2019 GM Financial issued \$2.5 billion in aggregate principal amount of senior notes with an initial weighted average interest rate of 5.03% and maturity dates ranging from 2021 to 2029.

In January 2019 GM Financial issued €850 million of Euro Medium Term Notes under the Euro Medium Term Note Programme with an interest rate of 2.20% due in 2024.

During the year ended December 31, 2018, GM Financial launched an unsecured commercial paper notes program in the U.S. At December 31, 2018, the principal amount outstanding of GM Financial's commercial paper in the U.S. was \$1.2 billion.

Each of the revolving credit facilities and the indentures governing GM Financial's notes contain terms and covenants including limitations on GM Financial's ability to incur certain liens.

The terms of advances on credit facilities and other unsecured debt have original maturities of up to four years. The weighted-average interest rate on credit facilities and other unsecured debt was 5.98% at December 31, 2018.

	Years Ended December 31,							
		2018		2017		2016		
Automotive interest expense	\$	655	\$	575	\$	563		
Automotive Financing - GM Financial interest expense		3,225		2,566		1,972		
Total interest expense	\$	3,880	\$	3,141	\$	2,535		

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The following table summarizes contractual maturities including capital leases at December 31, 2018:

	Αι	ıtomotive	 utomotive nancing(a)	Total		
2019	\$	949	\$ 31,045	\$	31,994	
2020		589	23,153		23,742	
2021		505	15,038		15,543	
2022		49	7,430		7,479	
2023		1,544	5,083		6,627	
Thereafter		10,826	9,937		20,763	
	\$	14,462	\$ 91,686	\$	106,148	
2022. 2023.		49 1,544 10,826	\$ 7,430 5,083 9,937	\$	7,47 6,62 20,76	

⁽a) Secured debt, credit facilities and other unsecured debt are based on expected payoff date. Senior notes principal amounts are based on maturity.

At December 31, 2018 future interest payments on automotive capital lease obligations were \$565 million. GM Financial had no capital lease obligations at December 31, 2018.

Compliance with Debt Covenants Several of our loan facilities, including our revolving credit facilities, require compliance with certain financial and operational covenants as well as regular reporting to lenders, including providing certain subsidiary financial statements. Certain of GM Financial's secured debt agreements also contain various covenants, including maintaining portfolio performance ratios as well as limits on deferment levels. GM Financial's unsecured debt obligations contain covenants including limitations on GM Financial's ability to incur certain liens. Failure to meet certain of these requirements may result in a covenant violation or an event of default depending on the terms of the agreement. An event of default may allow lenders to declare amounts outstanding under these agreements immediately due and payable, to enforce their interests against collateral pledged under these agreements or restrict our ability or GM Financial's ability to obtain additional borrowings. No technical defaults or covenant violations existed at December 31, 2018.

Note 14. Derivative Financial Instruments

Automotive The following table presents the notional amounts of derivative financial instruments in our automotive operations:

	Fair Value Level	Decem	ber 31, 2018	Decem	nber 31, 2017
Derivatives not designated as hedges(a)					
Foreign currency	2	\$	2,710	\$	4,022
Commodity	2		658		606
PSA Warrants(b)	2		45		48
Total derivative financial instruments		\$	3,413	\$	4,676

⁽a) The fair value of these derivative instruments at December 31, 2018 and 2017 and the gains/losses included in our consolidated income statements for the years ended December 31, 2018, 2017 and 2016 were insignificant, unless otherwise noted.

⁽b) The fair value of the PSA warrants located in Other assets was \$827 million and \$764 million at December 31, 2018 and 2017. We recorded insignificant amounts in Interest income and other non-operating income, net for the years ended December 31, 2018 and 2017.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

GM Financial The following table presents the notional amounts of GM Financial's derivative financial instruments:

	Fair Value Level	Decei	December 31, 2018		nber 31, 2017
Derivatives designated as hedges(a)(b)					
Fair value hedges – interest rate swaps(c)	2	\$	9,533	\$	11,110
Fair value hedges – foreign currency swaps(c)	2		1,829		_
Cash flow hedges					
Interest rate swaps.	2		768		2,177
Foreign currency swaps	2		2,075		1,574
Derivatives not designated as hedges(a)(b)					
Interest rate contracts(d)	2		99,666		81,938
Foreign currency swaps.	2				1,201
Total derivative financial instruments(e)		\$	113,871	\$	98,000

⁽a) The fair value of these derivative instruments at December 31, 2018 and 2017 and the gains/losses included in our consolidated income statements and statements of comprehensive income for the years ended December 31, 2018, 2017 and 2016 were insignificant, unless otherwise noted.

The fair value for Level 2 instruments was derived using the market approach based on observable market inputs including quoted prices of similar instruments and foreign exchange and interest rate forward curves.

The following amounts were recorded in the consolidated balance sheet related to items designated and qualifying as hedged items in fair value hedging relationships:

	Decembe	r 31, 2018
	Carrying Amount of Hedged Items	Cumulative Amount of Fair Value Hedging Adjustments(a)
GM Financial long-term debt	\$ 17,923	\$ 459

⁽a) Includes \$247 million of adjustments remaining on hedged items for which hedge accounting has been discontinued.

Note 15. Pensions and Other Postretirement Benefits

Employee Pension and Other Postretirement Benefit Plans

Defined Benefit Pension Plans Defined benefit pension plans covering eligible U.S. hourly employees (hired prior to October 2007) and Canadian hourly employees (hired prior to October 2016) generally provide benefits of negotiated, stated amounts for each year of service and supplemental benefits for employees who retire with 30 years of service before normal retirement age. The benefits provided by the defined benefit pension plans covering eligible U.S. (hired prior to January 1, 2001) and Canadian salaried employees and employees in certain other non-U.S. locations are generally based on years of service and compensation history. Accrual of defined pension benefits ceased in 2012 for U.S. and Canadian salaried employees. There is also an unfunded nonqualified pension plan covering primarily U.S. executives for service prior to January 1, 2007 and it is based on an "excess plan" for service after that date.

⁽b) Amounts accrued for interest payments in a net receivable position are included in Other assets. Amounts accrued for interest payments in a net payable position are included in Other liabilities.

⁽c) The fair value of these derivative instruments located in Other liabilities was \$291 million and \$290 million at December 31, 2018 and 2017. The fair value of these derivative instruments located in Other assets were insignificant at December 31, 2018 and 2017.

⁽d) The fair value of these derivative instruments located in Other assets was \$372 million and \$329 million at December 31, 2018 and 2017. The fair value of these derivative instruments located in Other liabilities was \$520 million and \$207 million at December 31, 2018 and 2017.

⁽e) We held insignificant amounts and posted \$451 million and \$299 million of collateral available for netting at December 31, 2018 and 2017.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

The funding policy for qualified defined benefit pension plans is to contribute annually not less than the minimum required by applicable laws and regulations or to directly pay benefit payments where appropriate. In the year ended December 31, 2018 all legal funding requirements were met and we contributed \$584 million to pre-fund U.K. and Canada pension plans. In the year ended December 31, 2016 we made a discretionary contribution to our U.S. hourly pension plan of \$2.0 billion. The following table summarizes contributions made to the defined benefit pension plans:

	Year	s En	ded Decembe	er 31,	31,		
	2018		2017		2016		
U.S. hourly and salaried	\$ 76	\$	77	\$	2,054		
Non-U.S.	1,624		1,153		1,022		
Total	\$ 1,700	\$	1,230	\$	3,076		

We expect to contribute approximately \$70 million to our U.S. non-qualified plans and approximately \$600 million to our non-U.S. pension plans in 2019.

Based on our current assumptions, over the next five years we expect no significant mandatory contributions to our U.S. qualified pension plans and mandatory contributions totaling \$310 million to our U.K. and Canada pension plans.

Other Postretirement Benefit Plans Certain hourly and salaried defined benefit plans provide postretirement medical, dental, legal service and life insurance to eligible U.S. and Canadian retirees and their eligible dependents. Certain other non-U.S. subsidiaries have postretirement benefit plans, although most non-U.S. employees are covered by government sponsored or administered programs. We made contributions to the U.S. OPEB plans of \$325 million, \$323 million and \$335 million in the years ended December 31, 2018, 2017 and 2016. Plan participants' contributions were insignificant in the years ended December 31, 2018, 2017 and 2016.

Defined Contribution Plans We have defined contribution plans for eligible U.S. salaried and hourly employees that provide discretionary matching contributions. Contributions are also made to certain non-U.S. defined contribution plans. We made contributions to our defined contribution plans of \$617 million, \$650 million and \$589 million in the years ended December 31, 2018, 2017 and 2016.

Significant Plan Amendments, Benefit Modifications and Related Events

Other Remeasurements The SOA issued mortality improvement tables in the three months ended December 31, 2018. We reviewed our recent mortality experience and have updated our base mortality assumptions in the U.S. This change in assumption decreased the December 31, 2018 U.S. pension and OPEB plans' obligations by \$264 million. We determined our current mortality improvement assumptions are appropriate to measure our December 31, 2018 U.S. pension and OPEB plans obligations. We incorporated the mortality improvement tables issued by the SOA in the three months ended December 31, 2016 that lowered life expectancies and thereby indicated the amount of estimated aggregate benefit payments to our U.S. pension plans' participants was decreasing. This change in assumption decreased the December 31, 2016 U.S. pension and OPEB plans' obligations by \$888 million.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Pension and OPEB Obligations and Plan Assets

	Year Ended December 31, 2018					Year Ended December 31, 2017						
		Pension	Ben	efits		Global OPEB		Pension	Ben	efits	Global OPEB	
	1	U.S.	N	on-U.S.		Plans	_	U.S.	N	on-U.S.		Plans
Change in benefit obligations												
Beginning benefit obligation	\$	68,450	\$	22,789	\$	6,374	\$	68,827	\$	21,156	\$	6,180
Service cost.		209		149		20		203		180		19
Interest cost.		2,050		464		195		2,145		473		202
Actuarial (gains) losses.		(4,449)		(272)		(389)		2,885		561		311
Benefits paid		(4,898)		(1,595)		(388)		(5,067)		(1,369)		(426)
Foreign currency translation adjustments		_		(1,452)		(106)		_		1,953		78
Curtailments, settlements and other		(172)		(179)		38		(543)		(165)		10
Ending benefit obligation		61,190		19,904		5,744		68,450		22,789		6,374
Change in plan assets												
Beginning fair value of plan assets		62,639		14,495		_		61,622		12,799		_
Actual return on plan assets		(1,419)		301		_		6,549		1,025		_
Employer contributions.		76		1,624		369		77		1,153		406
Benefits paid		(4,898)		(1,595)		(388)		(5,067)		(1,369)		(426)
Foreign currency translation adjustments		_		(1,106)		_		_		1,007		_
Settlements and other		(296)		(191)		19		(542)		(120)		20
Ending fair value of plan assets		56,102		13,528		_		62,639		14,495		_
Ending funded status.	\$	(5,088)	\$	(6,376)	\$	(5,744)	\$	(5,811)	\$	(8,294)	\$	(6,374)
Amounts recorded in the consolidated balance sheets												
Non-current assets.	\$	_	\$	496	\$	_	\$	_	\$	67	\$	_
Current liabilities		(73)		(349)		(374)		(71)		(355)		(376)
Non-current liabilities.		(5,015)		(6,523)		(5,370)		(5,740)		(8,006)		(5,998)
Net amount recorded.	\$	(5,088)	\$	(6,376)	\$	(5,744)	\$	(5,811)	\$	(8,294)	\$	(6,374)
Amounts recorded in Accumulated other comprehensive loss												
Net actuarial gain (loss)	\$	(752)	\$	(3,983)	\$	(752)	\$	114	\$	(4,163)	\$	(1,186)
Net prior service (cost) credit		19		(64)		34		23		(26)		55
Total recorded in Accumulated other comprehensive loss	\$	(733)	\$	(4,047)	\$	(718)	\$	137	\$	(4,189)	\$	(1,131)
•												

The following table summarizes the total accumulated benefit obligations (ABO), the ABO and fair value of plan assets for defined benefit pension plans with ABO in excess of plan assets, and the PBO and fair value of plan assets for defined benefit pension plans with PBO in excess of plan assets:

	Decemb	er 31, 2018		December 31, 2017				
_	U.S.	.S. Non-U.S.		U.S.		on-U.S.		
ABO	\$ 61,177	\$ 19,822	\$	68,437	\$	22,650		
Plans with ABO in excess of plan assets								
ABO	\$ 61,177	\$ 10,289	\$	68,437	\$	21,679		
Fair value of plan assets	\$ 56,102	\$ 3,485	\$	62,639	\$	13,408		
Plans with PBO in excess of plan assets								
PBO	\$ 61,190	\$ 10,356	\$	68,450	\$	21,822		
Fair value of plan assets	\$ 56,102	\$ 3,485	\$	62,639	\$	13,411		

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

The following table summarizes the components of net periodic pension and OPEB expense along with the assumptions used to determine benefit obligations:

	Year Ended December 31, 2018 Ye				ed December	31, 2017	Year Ende	31, 2016	
	Pension	Benefits	Global OPEB	Pension	Benefits	Global OPEB	Pension	Benefits	Global OPEB
	U.S.	Non-U.S.	Plans	U.S.	Non-U.S.	Plans	U.S.	Non-U.S.	Plans
Components of expense									
Service cost	\$ 330	\$ 163	\$ 20	\$ 315	\$ 199	\$ 19	\$ 381	\$ 273	\$ 18
Interest cost	2,050	464	195	2,145	473	202	2,212	527	201
Expected return on plan assets	(3,890)	(825)	_	(3,677)	(750)	_	(3,778)	(733)	_
Amortization of net actuarial (gains) losses	10	144	54	(6)	157	23	(25)	137	19
Curtailments, settlements and other	(19)	43	(19)	(37)	8	(5)	(4)	16	(13)
Net periodic pension and OPEB (income) expense	\$(1,519)	\$ (11)	\$ 250	\$(1,260)	\$ 87	\$ 239	\$(1,214)	\$ 220	\$ 225
Weighted-average assumptions used to determine benefit obligations(a)									
Discount rate	4.22%	2.86%	4.19%	3.53%	2.66%	3.52%	3.92%	2.88%	3.93%
Weighted-average assumptions used to determine net expense(a)									
Discount rate	3.19%	2.99%	3.29%	3.35%	2.94%	3.39%	3.36%	3.14%	3.49%
Expected rate of return on plan assets	6.61%	6.09%	N/A	6.23%	5.82%	N/A	6.33%	6.07%	N/A

⁽a) The rate of compensation increase does not have a significant effect on our U.S. pension and OPEB plans.

The non-service cost components of the net periodic pension and OPEB income of \$1.7 billion, \$1.3 billion and \$1.3 billion in the years ended December 31, 2018, 2017 and 2016 are presented in Interest income and other non-operating income, net. Refer to Note 2 for additional details on the adoption of ASU 2017-07.

U.S. pension plan service cost includes administrative expenses and Pension Benefit Guarantee Corporation premiums which were insignificant in the years ended December 31, 2018, 2017 and 2016. Weighted-average assumptions used to determine net expense are determined at the beginning of the period and updated for remeasurements. Non-U.S. pension plan administrative expenses included in service cost were insignificant in the years ended December 31, 2018, 2017 and 2016.

Estimated amounts to be amortized from Accumulated other comprehensive loss into net periodic benefit cost in the year ending December 31, 2019 based on December 31, 2018 plan measurements are \$129 million, consisting primarily of amortization of the net actuarial loss in the non-U.S. pension plans.

Assumptions

Investment Strategies and Long-Term Rate of Return Detailed periodic studies are conducted by our internal asset management group as well as outside actuaries and are used to determine the long-term strategic mix among asset classes, risk mitigation strategies and the expected long-term return on asset assumptions for the U.S. pension plans. The U.S. study includes a review of alternative asset allocation and risk mitigation strategies, anticipated future long-term performance and risk of the individual asset classes that comprise the plans' asset mix. Similar studies are performed for the significant non-U.S. pension plans with the assistance of outside actuaries and asset managers. While the studies incorporate data from recent plan performance and historical returns, the expected long-term return on plan asset assumptions are determined based on long-term prospective rates of return.

We continue to pursue various options to fund and de-risk our pension plans, including continued changes to the pension asset portfolio mix to reduce funded status volatility. The strategic asset mix and risk mitigation strategies for the plans are tailored specifically for each plan. Individual plans have distinct liabilities, liquidity needs and regulatory requirements. Consequently there are different investment policies set by individual plan fiduciaries. Although investment policies and risk mitigation strategies may differ among plans, each investment strategy is considered to be appropriate in the context of the specific factors affecting each plan.

In setting new strategic asset mixes, consideration is given to the likelihood that the selected asset mixes will effectively fund the projected pension plan liabilities, while aligning with the risk tolerance of the plans' fiduciaries. The strategic asset mixes for U.S. defined benefit pension plans are increasingly designed to satisfy the competing objectives of improving funded positions

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

(market value of assets equal to or greater than the present value of the liabilities) and mitigating the possibility of a deterioration in funded status.

Derivatives may be used to provide cost effective solutions for rebalancing investment portfolios, increasing or decreasing exposure to various asset classes and for mitigating risks, primarily interest rate, equity and currency risks. Equity and fixed income managers are permitted to utilize derivatives as efficient substitutes for traditional securities. Interest rate derivatives may be used to adjust portfolio duration to align with a plan's targeted investment policy and equity derivatives may be used to protect equity positions from downside market losses. Alternative investment managers are permitted to employ leverage, including through the use of derivatives, which may alter economic exposure.

In December 2018 an investment policy study was completed for the U.S. pension plans. As a result of changes to our capital market assumptions, the weighted-average long-term rate of return on assets decreased from 6.6% at December 31, 2017 to 6.4% at December 31, 2018. The expected long-term rate of return on plan assets used in determining pension expense for non-U.S. plans is determined in a similar manner to the U.S. plans.

Target Allocation Percentages The following table summarizes the target allocations by asset category for U.S. and non-U.S. defined benefit pension plans:

	December	31, 2018	December	31, 2017
	U.S.	Non-U.S.	U.S.	Non-U.S.
Equity	12%	14%	15%	18%
Debt	64%	66%	61%	56%
Other(a)	24%	20%	24%	26%
Total	100%	100%	100%	100%

⁽a) Primarily includes private equity, real estate and absolute return strategies which mainly consist of hedge funds.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Assets and Fair Value Measurements The following tables summarize the fair value of U.S. and non-U.S. defined benefit pension plan assets by asset class:

	. — 12,077 — 12,07							December 31, 2017								
	Level 1	Level	2	Lev	vel 3		Total	Level	l	Level 2	Le	vel 3	Total			
U.S. Pension Plan Assets																
Common and preferred stocks	\$ 4,914	\$	8	\$	2	\$	4,934	\$ 8,89	2	\$ 17	\$	2	\$ 8,911			
Government and agency debt securities(a)	_	12,07	7		_		12,077	_	_	12,116		_	12,116			
Corporate and other debt securities	_	24,64	15		_		24,645	-	_	26,122		_	26,122			
Other investments, net	350	8	30		371		801	55	2	119		395	1,066			
Net plan assets subject to leveling	\$ 5,264	\$36,82	20	\$	373		42,457	\$ 9,44	4	\$38,374	\$	397	48,215			
Plan assets measured at net asset value																
Investment funds							6,465						6,632			
Private equity and debt investments							3,021						3,539			
Real estate investments							3,504						3,351			
Total plan assets measured at net asset value							12,990						13,522			
Other plan assets, net(b)							655						902			
Net plan assets						\$	56,102						\$ 62,639			

			1	Decembe	r 31,	2018			December 31, 2017							
	Le	Level 1 Level 2		Le	Level 3		Total		vel 1	1 Level 2		Level 3		7	Total	
Non-U.S. Pension Plan Assets																
Common and preferred stocks	\$	441	\$	5 1	\$	5	\$	447	\$	578	\$	1	\$	6	\$	585
Government and agency debt securities(a)		_		3,640		_		3,640		_		3,853		_		3,853
Corporate and other debt securities		_		2,589		1		2,590		_		2,566		_		2,566
Other investments, net		59		128		242		429		23		149		438		610
Net plan assets subject to leveling	\$	500	\$	6,358	\$	248		7,106	\$	601	\$	6,569	\$	444		7,614
Plan assets measured at net asset value			_													
Investment funds								5,081								5,346
Private equity and debt investments								526								570
Real estate investments								980								1,097
Total plan assets measured at net asset value								6,587								7,013
Other plan assets (liabilities), net(b)								(165)								(132)
Net plan assets							\$1	3,528							\$	14,495

⁽a) Includes U.S. and sovereign government and agency issues.

The activity attributable to U.S. and non-U.S. Level 3 defined benefit pension plan investments was insignificant in the years ended December 31, 2018 and 2017.

Investment Fund Strategies Investment funds include hedge funds, funds of hedge funds, equity funds and fixed income funds. Hedge funds and funds of hedge funds managers typically seek to achieve their objectives by allocating capital across a broad array of funds and/or investment managers. Equity funds invest in U.S. common and preferred stocks as well as similar equity securities issued by companies incorporated, listed or domiciled in developed and/or emerging market countries. Fixed income funds include investments in high quality funds and, to a lesser extent, high yield funds. High quality fixed income funds invest in government securities, investment-grade corporate bonds and mortgage and asset-backed securities. High yield fixed income funds invest in high yield fixed income securities issued by corporations which are rated below investment grade. Other investment funds also included in this category primarily represent multi-strategy funds that invest in broadly diversified portfolios of equity, fixed income and derivative instruments.

Private equity and debt investments primarily consist of investments in private equity and debt funds. These investments provide exposure to and benefit from long-term equity investments in private companies, including leveraged buy-outs, venture capital and distressed debt strategies.

⁽b) Cash held by the plans, net of amounts receivable/payable for unsettled security transactions and payables for investment manager fees, custody fees and other expenses.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Real estate investments include funds that invest in entities which are primarily engaged in the ownership, acquisition, development, financing, sale and/or management of income-producing real estate properties, both commercial and residential. These funds typically seek long-term growth of capital and current income that is above average relative to public equity funds.

Significant Concentrations of Risk The assets of the pension plans include certain investment funds, private equity and debt investments and real estate investments. Investment managers may be unable to quickly sell or redeem some or all of these investments at an amount close or equal to fair value in order to meet a plan's liquidity requirements or to respond to specific events such as deterioration in the creditworthiness of any particular issuer or counterparty.

Illiquid investments held by the plans are generally long-term investments that complement the long-term nature of pension obligations and are not used to fund benefit payments when currently due. Plan management monitors liquidity risk on an ongoing basis and has procedures in place that are designed to maintain flexibility in addressing plan-specific, broader industry and market liquidity events.

The pension plans may invest in financial instruments denominated in foreign currencies and may be exposed to risks that the foreign currency exchange rates might change in a manner that has an adverse effect on the value of the foreign currency denominated assets or liabilities. Forward currency contracts may be used to manage and mitigate foreign currency risk.

The pension plans may invest in debt securities for which any change in the relevant interest rates for particular securities might result in an investment manager being unable to secure similar returns upon the maturity or the sale of securities. In addition changes to prevailing interest rates or changes in expectations of future interest rates might result in an increase or decrease in the fair value of the securities held. Interest rate swaps and other financial derivative instruments may be used to manage interest rate risk.

Benefit Payments Benefits for most U.S. pension plans and certain non-U.S. pension plans are paid out of plan assets rather than our Cash and cash equivalents. The following table summarizes net benefit payments expected to be paid in the future, which include assumptions related to estimated future employee service:

	Pension Benefits					obal OPEB
	U			n-U.S. Plans		
2019	\$	5,325	\$	1,360	\$	379
2020	\$	4,858	\$	1,212	\$	374
2021	\$	4,720	\$	1,174	\$	369
2022	\$	4,603	\$	1,144	\$	364
2023	\$	4,491	\$	1,113	\$	361
2024 - 2028	\$	20,803	\$	5,116	\$	1,762

Note 16. Commitments and Contingencies

Litigation-Related Liability and Tax Administrative Matters In the normal course of our business, we are named from time to time as a defendant in various legal actions, including arbitrations, class actions and other litigation. We identify below the material individual proceedings and investigations where we believe a material loss is reasonably possible or probable. We accrue for matters when we believe that losses are probable and can be reasonably estimated. At December 31, 2018 and 2017, we had accruals of \$1.3 billion and \$930 million in Accrued liabilities and Other liabilities. In many matters, it is inherently difficult to determine whether loss is probable or reasonably possible or to estimate the size or range of the possible loss. Accordingly adverse outcomes from such proceedings could exceed the amounts accrued by an amount that could be material to our results of operations or cash flows in any particular reporting period.

Proceedings Related to Ignition Switch Recall and Other Recalls In 2014 we announced various recalls relating to safety and other matters. Those recalls included recalls to repair ignition switches that could under certain circumstances unintentionally move from the "run" position to the "accessory" or "off" position with a corresponding loss of power, which could in turn prevent airbags from deploying in the event of a crash.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Economic-Loss Claims We are aware of over 100 putative class actions pending against GM in U.S. and Canadian courts alleging that consumers who purchased or leased vehicles manufactured by GM or MLC (formerly known as General Motors Corporation) had been economically harmed by one or more of the 2014 recalls and/or the underlying vehicle conditions associated with those recalls (economic-loss cases). In general, these economic-loss cases seek recovery for purported compensatory damages, such as alleged benefit-of-the-bargain damages or damages related to alleged diminution in value of the vehicles, as well as punitive damages, injunctive relief and other relief.

Many of the pending U.S. economic-loss claims have been transferred to, and consolidated in, a single federal court, the U.S. District Court for the Southern District of New York (Southern District). These plaintiffs have asserted economic-loss claims under federal and state laws, including claims relating to recalled vehicles manufactured by GM and claims asserting successor liability relating to certain recalled vehicles manufactured by MLC. The Southern District has dismissed various of these claims, including claims under the Racketeer Influenced and Corrupt Organization Act, claims for recovery for alleged reduction in the value of plaintiffs' vehicles due to damage to GM's reputation and brand as a result of the ignition switch matter, and claims of certain plaintiffs who purchased a vehicle before GM came into existence in July 2009. The Southern District also dismissed certain state law claims at issue.

In August 2017 the Southern District granted our motion to dismiss the successor liability claims of plaintiffs in seven of the sixteen states at issue on the motion and called for additional briefing to decide whether plaintiffs' claims can proceed in the other nine states. In December 2017 the Southern District granted GM's motion and dismissed successor liability claims of plaintiffs in an additional state, but found that there are genuine issues of material fact that prevent summary judgment for GM in eight other states. In January 2018, GM moved for reconsideration of certain portions of the Southern District's December 2017 summary judgment ruling. That motion was granted in April 2018, dismissing plaintiffs' successor liability claims in any state where New York law applies.

In September 2018 the Southern District granted our motion to dismiss claims for lost personal time (in 41 out of 47 jurisdictions) and certain unjust enrichment claims, but denied our motion to dismiss plaintiffs' economic loss claims in 27 jurisdictions under the "manifest defect" rule. Significant summary judgment, class certification, and expert evidentiary motions remain at issue.

Personal Injury Claims We also are aware of several hundred actions pending in various courts in the U.S. and Canada alleging injury or death as a result of defects that may be the subject of the 2014 recalls (personal injury cases). In general, these cases seek recovery for purported compensatory damages, punitive damages and/or other relief. Since 2016, several bellwether trials of personal injury cases have taken place in the Southern District and in a Texas state court, which is administering a Texas state multi-district litigation. None of these trials resulted in a finding of liability against GM.

Appellate Litigation Regarding Successor Liability Ignition Switch Claims In 2016, the United States Court of Appeals for the Second Circuit held that the 2009 order of the Bankruptcy Court approving the sale of substantially all of the assets of MLC to GM free and clear of, among other things, claims asserting successor liability for obligations owed by MLC (successor liability claims) could not be enforced to bar claims against GM asserted by either plaintiffs who purchased used vehicles after the sale or against purchasers who asserted claims relating to the ignition switch defect, including pre-sale personal injury claims and economicloss claims.

Contingently Issuable Shares Under the Amended and Restated Master Sale and Purchase Agreement between us and MLC, GM may be obligated to issue Adjustment Shares of our common stock if allowed general unsecured claims against the GUC Trust, as estimated by the Bankruptcy Court, exceed \$35.0 billion. The maximum number of Adjustment Shares issuable is 30 million shares (subject to adjustment to take into account stock dividends, stock splits and other transactions), which amounts to approximately \$1.2 billion based on the GM share price as of January 25, 2019. The GUC Trust stated in public filings that allowed general unsecured claims were approximately \$31.9 billion as of December 31, 2018. In 2016 and 2017 certain personal injury and economic loss plaintiffs filed motions in the Bankruptcy Court seeking authority to file late claims against the GUC Trust. In May 2018, the GUC Trust filed motions seeking the Bankruptcy Court's approval of a proposed settlement with certain personal injury and economic loss plaintiffs, approval of a notice relating to that proposed settlement and estimation of alleged personal injury and economic loss late claims for the purpose of obtaining an order requiring GM to issue the maximum number of Adjustment Shares. GM vigorously contested each of these motions.

In September 2018 the Bankruptcy Court denied without prejudice the GUC Trust's motions described above, finding that the settling parties first need to obtain class certification with respect to the economic loss late claims. In February 2019 the GUC Trust and certain plaintiffs filed a motion with the Bankruptcy Court requesting approval of a new settlement to obtain the maximum

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

number of Adjustment Shares. We will assert available and appropriate legal objections to this new settlement. We are unable to estimate any reasonably possible loss or range of loss that may result from this matter.

Government Matters In connection with the 2014 recalls, we have from time to time received subpoenas and other requests for information related to investigations by agencies or other representatives of U.S. federal, state and the Canadian governments. GM is cooperating with all reasonable pending requests for information. Any existing governmental matters or investigations could in the future result in the imposition of damages, fines, civil consent orders, civil and criminal penalties or other remedies.

The total amount accrued for the 2014 recalls at December 31, 2018 reflects amounts for a combination of settled but unpaid matters, and for the remaining unsettled investigations, claims and/or lawsuits relating to the ignition switch recalls and other related recalls to the extent that such matters are probable and can be reasonably estimated. The amounts accrued for those unsettled investigations, claims, and/or lawsuits represent a combination of our best single point estimates where determinable and, where no such single point estimate is determinable, our estimate of the low end of the range of probable loss with regard to such matters, if that is determinable. We will continue to consider resolution of pending matters involving ignition switch recalls and other recalls where it makes sense to do so.

GM Korea Wage Litigation GM Korea is party to litigation with current and former hourly employees in the appellate court and Incheon District Court in Incheon, Korea. The group actions, which in the aggregate involve more than 10,000 employees, allege that GM Korea failed to include bonuses and certain allowances in its calculation of Ordinary Wages due under Korean regulations. In 2012 the Seoul High Court (an intermediate level appellate court) affirmed a decision in one of these group actions involving five GM Korea employees which was contrary to GM Korea's position. GM Korea appealed to the Supreme Court of the Republic of Korea (Supreme Court). In 2014 the Supreme Court largely agreed with GM's legal arguments and remanded the case to the Seoul High Court for consideration consistent with earlier Supreme Court precedent holding that while fixed bonuses should be included in the calculation of Ordinary Wages, claims for retroactive application of this rule would be barred under certain circumstances. In 2015, on reconsideration, the Seoul High Court held in GM Korea's favor, after which the plaintiffs appealed to the Supreme Court. The Supreme Court has not yet rendered a decision. We estimate our reasonably possible loss in excess of amounts accrued to be approximately \$590 million at December 31, 2018. Both the scope of claims asserted and GM Korea's assessment of any or all of the individual claim elements may change if new information becomes available or the legal or regulatory framework change.

GM Korea is also party to litigation with current and former salaried employees over allegations relating to ordinary wages regulation and whether to include fixed bonuses in the calculation of ordinary wages. In 2017, the Seoul High Court held that certain workers are not barred from filing retroactive wage claims. GM Korea appealed this ruling to the Supreme Court. The Supreme Court has not yet rendered a decision. We estimate our reasonably possible loss in excess of amounts accrued to be approximately \$170 million at December 31, 2018. Both the scope of claims asserted and GM Korea's assessment of any or all of the individual claim elements may change if new information becomes available or the legal or regulatory framework change.

GM Korea is also party to litigation with current and former subcontract workers over allegations that they are entitled to the same wages and benefits provided to full-time employees, and to be hired as full-time employees. In May 2018 the Korean labor authorities issued an adverse administrative order finding that GM Korea must hire certain current subcontract workers as full-time employees. GM Korea appealed that order. At December 31, 2018, we recorded an insignificant accrual covering certain asserted claims and claims that we believe are probable of assertion and for which liability is probable. We estimate that the reasonably possible loss in excess of amounts accrued for other current subcontract workers who may assert similar claims to be approximately \$150 million at December 31, 2018. We are currently unable to estimate any possible loss or range of loss that may result from additional claims that may be asserted by former subcontract workers.

GM Brazil Indirect Tax Claim In March 2017, the Supreme Court of Brazil issued a decision concluding that a certain state value added tax should not be included in the calculation of federal gross receipts taxes. The decision reduced GM Brazil's gross receipts tax prospectively and, potentially, retrospectively. The retrospective right to recover is under judicial review, and a decision could be rendered in 2019. If the Judicial Court grants retrospective recovery we estimate potential recoveries of up to \$1.3 billion. However, given the remaining uncertainty regarding the judicial resolution of this matter, we are unable to assess the likelihood of any favorable outcome at this time. We have not recorded any amounts relating to the retrospective nature of this matter.

Other Litigation-Related Liability and Tax Administrative Matters Various other legal actions, including class actions, governmental investigations, claims and proceedings are pending against us or our related companies or joint ventures, including matters arising out of alleged product defects; employment-related matters; product and workplace safety, vehicle emissions and

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

fuel economy regulations; product warranties; financial services; dealer, supplier and other contractual relationships; government regulations relating to competition issues; tax-related matters not subject to the provision of ASC 740, Income Taxes (indirect tax-related matters); product design, manufacture and performance; consumer protection laws; and environmental protection laws, including laws regulating air emissions, water discharges, waste management and environmental remediation from stationary sources.

There are several putative class actions pending against GM in federal courts in the U.S. and in the Provincial Courts in Canada alleging that various vehicles sold including model year 2011-2016 Duramax Diesel Chevrolet Silverado and GMC Sierra vehicles, violate federal and state emission standards. GM has also faced a series of additional lawsuits based primarily on allegations in the Duramax suit, including putative shareholder class actions claiming violations of federal securities law and a shareholder demand lawsuit. The securities lawsuits have been voluntarily dismissed. At this stage of these proceedings, we are unable to provide an evaluation of the likelihood that a loss will be incurred or an estimate of the amounts or range of possible loss.

We believe that appropriate accruals have been established for losses that are probable and can be reasonably estimated. It is possible that the resolution of one or more of these matters could exceed the amounts accrued in an amount that could be material to our results of operations. We also from time to time receive subpoenas and other inquiries or requests for information from agencies or other representatives of U.S. federal, state and foreign governments on a variety of issues.

Indirect tax-related matters are being litigated globally pertaining to value added taxes, customs, duties, sales, property taxes and other non-income tax related tax exposures. The various non-U.S. labor-related matters include claims from current and former employees related to alleged unpaid wage, benefit, severance and other compensation matters. Certain administrative proceedings are indirect tax-related and may require that we deposit funds in escrow or provide an alternative form of security which may range from \$200 million to \$550 million at December 31, 2018. Some of the matters may involve compensatory, punitive or other treble damage claims, environmental remediation programs or sanctions that, if granted, could require us to pay damages or make other expenditures in amounts that could not be reasonably estimated at December 31, 2018. We believe that appropriate accruals have been established for losses that are probable and can be reasonably estimated. For indirect tax-related matters we estimate our reasonably possible loss in excess of amounts accrued to be up to approximately \$900 million at December 31, 2018.

Takata Matters In May 2016 NHTSA issued an amended consent order requiring Takata to file DIRs for previously unrecalled front airbag inflators that contain phased-stabilized ammonium nitrate-based propellant without a moisture absorbing desiccant on a multi-year, risk-based schedule through 2019 impacting tens of millions of vehicles produced by numerous automotive manufacturers. NHTSA concluded that the likely root cause of the rupturing of the airbag inflators is a function of time, temperature cycling and environmental moisture.

Although we do not believe there is a safety defect at this time in any unrecalled GM vehicles within scope of the Takata DIRs, in cooperation with NHTSA we have filed Preliminary DIRs covering certain of our GMT900 vehicles, which are full-size pickup trucks and SUVs. We have also filed petitions for inconsequentiality with respect to the vehicles subject to those Preliminary DIRs. NHTSA has consolidated our petitions and will rule on them at the same time.

While these petitions have been pending, we have provided NHTSA with the results of our long-term studies and the studies performed by third-party experts, all of which form the basis for our determination that the inflators in these vehicles do not present an unreasonable risk to safety and that no repair should ultimately be required.

We believe these vehicles are currently performing as designed and our inflator aging studies and field data support the belief that the vehicles' unique design and integration mitigates against inflator propellant degradation and rupture risk. For example, the airbag inflators used in the vehicles are a variant engineered specifically for our vehicles, and include features such as greater venting, unique propellant wafer configurations, and machined steel end caps. The inflators are packaged in the instrument panel in such a way as to minimize exposure to moisture from the climate control system. Also, these vehicles have features that minimize the maximum temperature to which the inflator will be exposed, such as larger interior volumes and standard solar absorbing windshields and side glass.

Accordingly, no warranty provision has been made for any repair associated with our vehicles subject to the Preliminary DIRs and amended consent order. However, in the event we are ultimately obligated to repair the vehicles subject to current or future Takata DIRs under the amended consent order in the U.S., we estimate a reasonably possible impact to GM of approximately \$1.2 billion.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

GM has recalled certain vehicles sold outside of the U.S. to replace Takata inflators in those vehicles. There are significant differences in vehicle and inflator design between the relevant vehicles sold internationally and those sold in the U.S. We continue to gather and analyze evidence about these inflators and to share our findings with regulators. Additional recalls, if any, could be material to our results of operations and cash flows. We continue to monitor the international situation.

Through January 25, 2019 we are aware of three putative class actions pending against GM in federal court in the U.S., one putative class action in Mexico and three putative class actions pending in various Provincial Courts in Canada arising out of allegations that airbag inflators manufactured by Takata are defective. At this early stage of these proceedings, we are unable to provide an evaluation of the likelihood that a loss will be incurred or an estimate of the amounts or range of possible loss.

Product Liability With respect to product liability claims (other than claims relating to the ignition switch recalls discussed above) involving our and General Motors Corporation products, we believe that any judgment against us for actual damages will be adequately covered by our recorded accruals and, where applicable, excess liability insurance coverage. We recorded liabilities of \$531 million and \$595 million in Accrued liabilities and Other liabilities at December 31, 2018 and 2017 for the expected cost of all known product liability claims, plus an estimate of the expected cost for product liability claims that have already been incurred and are expected to be filed in the future for which we are self-insured. It is reasonably possible that our accruals for product liability claims may increase in future periods in material amounts, although we cannot estimate a reasonable range of incremental loss based on currently available information.

Guarantees We enter into indemnification agreements for liability claims involving products manufactured primarily by certain joint ventures. These guarantees terminate in years ranging from 2019 to 2029 or upon the occurrence of specific events or are ongoing. We believe that the related potential costs incurred are adequately covered by our recorded accruals, which are insignificant. The maximum future undiscounted payments mainly based on vehicles sold to date was \$2.4 billion and \$1.9 billion for these guarantees at December 31, 2018 and 2017, the majority of which relate to the indemnification agreements.

We provide payment guarantees on commercial loans outstanding with third parties such as dealers. In some instances certain assets of the party or our payables to the party whose debt or performance we have guaranteed may offset, to some degree, the amount of any potential future payments. We are also exposed to residual value guarantees associated with certain sales to rental car companies.

We periodically enter into agreements that incorporate indemnification provisions in the normal course of business. It is not possible to estimate our maximum exposure under these indemnifications or guarantees due to the conditional nature of these obligations. Insignificant amounts have been recorded for such obligations as the majority of them are not probable or estimable at this time and the fair value of the guarantees at issuance was insignificant. Refer to Note 22 for additional information on our indemnification obligations to PSA Group under the Agreement.

Credit Cards Credit card programs offer rebates that can be applied primarily against the purchase or lease of our vehicles. At December 31, 2018 and 2017 our redemption liability was insignificant, our deferred revenue was \$247 million and \$283 million, and qualified cardholders had rebates available, net of deferred program revenue, of \$1.4 billion and \$1.5 billion. Our redemption liability and deferred revenue are recorded in Accrued liabilities and Other liabilities.

Noncancelable Operating Leases The following table summarizes our minimum commitments under noncancelable operating leases having initial terms in excess of one year, primarily for property:

	2	019	2	2020	2	2021	2	2022	2	2023	The	reafter	Total
Minimum commitments(a)	\$	296	\$	286	\$	247	\$	180	\$	146	\$	582	\$ 1,737
Sublease income		(61)		(51)		(44)		(38)		(33)		(129)	(356)
Net minimum commitments	\$	235	\$	235	\$	203	\$	142	\$	113	\$	453	\$ 1,381

⁽a) Certain leases contain escalation clauses and renewal or purchase options.

Rental expense under operating leases was \$300 million, \$284 million and \$270 million in the years ended December 31, 2018, 2017 and 2016.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Note 17. Income Taxes

	Year	s En	ded Decemb	er 31	,
	2018		2017		2016
U.S. income.	\$ 4,433	\$	8,399	\$	9,989
Non-U.S. income (loss).	1,953		1,332		(263)
Income before income taxes and equity income	\$ 6,386	\$	9,731	\$	9,726
	Year	s En	ded Decemb	er 31	,
	2018		2017		2016
Current income tax expense (benefit)					
U.S. federal	\$ (104)	\$	18	\$	(126)
U.S. state and local	113		83		65
Non-U.S.	577		552		572
Total current income tax expense	586		653		511
Deferred income tax expense (benefit)					
U.S. federal	(578)		7,831		1,865
U.S. state and local	250		(187)		264
Non-U.S.	216		3,236		99
Total deferred income tax expense (benefit)	(112)		10,880		2,228

Provisions are made for estimated U.S. and non-U.S. income taxes which may be incurred on the reversal of our basis differences in investments in foreign subsidiaries and corporate joint ventures not deemed to be indefinitely reinvested. Taxes have not been provided on basis differences in investments primarily as a result of earnings in foreign subsidiaries which are deemed indefinitely reinvested of \$2.9 billion and \$2.8 billion at December 31, 2018 and 2017. Additional basis differences related to investments in nonconsolidated China JVs exist of \$4.1 billion at December 31, 2018 and 2017 as a result of fresh-start reporting. Quantification of the deferred tax liability, if any, associated with indefinitely reinvested basis differences is not practicable.

2,739

11,533 \$

	Year	s End	ded Decembe	r 31,	
	2018		2017		2016
Income tax expense at U.S. federal statutory income tax rate.	\$ 1,341	\$	3,406	\$	3,404
State and local tax expense	282		(76)		190
Non-U.S. income taxed at other than the U.S. federal statutory tax rate	90		(145)		(61)
U.S. tax impact on Non-U.S. income	(822)		(941)		(894)
Change in valuation allowances	1,695		2,712		237
Change in tax laws	(134)		7,194		147
General business credits and manufacturing incentives	(695)		(428)		(342)
Capital loss expiration	107				_
Settlements of prior year tax matters	(188)		(256)		(46)
Realization of basis differences in affiliates	(59)				(94)
German statutory approval of net operating losses	(990)				_
Other adjustments	(153)		67		198
Total income tax expense	\$ 474	\$	11,533	\$	2,739

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Deferred Income Tax Assets and Liabilities Deferred income tax assets and liabilities at December 31, 2018 and 2017 reflect the effect of temporary differences between amounts of assets, liabilities and equity for financial reporting purposes and the bases of such assets, liabilities and equity as measured based on tax laws, as well as tax loss and tax credit carryforwards. The following table summarizes the components of temporary differences and carryforwards that give rise to deferred tax assets and liabilities:

	December 31, 2018	December 31, 2017
Deferred tax assets		
Postretirement benefits other than pensions	\$ 1,584	\$ 1,948
Pension and other employee benefit plans	3,020	3,285
Warranties, dealer and customer allowances, claims and discounts	6,307	5,675
U.S. capitalized research expenditures	5,176	4,413
U.S. operating loss and tax credit carryforwards(a)	8,591	8,578
Non-U.S. operating loss and tax credit carryforwards(b)	6,393	5,103
Miscellaneous	2,034	1,697
Total deferred tax assets before valuation allowances	33,105	30,699
Less: valuation allowances	(7,976)	(6,690)
Total deferred tax assets	25,129	24,009
Deferred tax liabilities		
Property, plant and equipment	1,098	418
Intangible assets	729	735
Total deferred tax liabilities	1,827	1,153
Net deferred tax assets	\$ 23,302	\$ 22,856

⁽a) At December 31, 2018 U.S. operating loss and tax credit carryforwards of \$8.6 billion expire through 2038 if not utilized.

Valuation Allowances We have \$3.3 billion of net operating loss carryforwards in Germany that, as a result of reorganizations that took place in 2008 and 2009 and then existing German Law, were not previously recorded as deferred tax assets. In the three months ended December 31, 2018 a favorable European court decision was statutorily approved in Germany enabling use of those loss carryforwards. As a result, in the three months ended December 31, 2018 deferred tax assets totaling \$1.0 billion were established for the loss carryfowards; offsetting valuation allowances were also established as the deferred tax assets are not more likely than not to be realized. During the year ended December 31, 2018 valuation allowances against deferred tax assets of \$8.0 billion were comprised of cumulative losses, credits and other timing differences, primarily in Germany, Spain and South Korea.

During the year ended December 31, 2017 there was a \$2.3 billion increase in the valuation allowance related to deferred tax assets that are no longer realizable as a result of the sale of the Opel/Vauxhall Business as described in Note 22. At December 31, 2017 valuation allowances against deferred tax assets of \$6.7 billion were comprised of cumulative losses, credits and other timing differences, primarily in Germany, Spain and South Korea.

⁽b) At December 31, 2018 Non-U.S. operating loss and tax credit carryforwards of \$1.2 billion expire through 2037 if not utilized and the remaining balance of \$5.2 billion may be carried forward indefinitely.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Uncertain Tax Positions The following table summarizes activity of the total amounts of unrecognized tax benefits:

		2018	2017		2016
Balance at beginning of period	\$	1,557	\$ 1,182	\$	1,337
Additions to current year tax positions		292	160		49
Additions to prior years' tax positions		264	448		96
Reductions to prior years' tax positions		(244)	(195)		(192)
Reductions in tax positions due to lapse of statutory limitations		(38)	(44)		(103)
Settlements		(450)	(11)		(1)
Other		(40)	17		(4)
Balance at end of period	\$	1,341	\$ 1,557	\$	1,182

At December 31, 2018 and 2017 there were \$991 million and \$390 million of unrecognized tax benefits that if recognized would favorably affect our effective tax rate in the future. In the years ended December 31, 2018, 2017 and 2016 income tax related interest and penalties were insignificant. At December 31, 2018 and 2017 we had liabilities of \$116 million and \$152 million for income tax related interest and penalties.

At December 31, 2018 it is not possible to reasonably estimate the expected change to the total amount of unrecognized tax benefits in the next twelve months.

Other Matters Income tax returns are filed in multiple jurisdictions and are subject to examination by taxing authorities throughout the world. We have open tax years from 2008 to 2018 with various significant tax jurisdictions. Tax authorities may have the ability to review and adjust net operating loss or tax credit carryforwards that were generated prior to these periods if utilized in an open tax year. These open years contain matters that could be subject to differing interpretations of applicable tax laws and regulations as they relate to the amount, character, timing or inclusion of revenue and expenses or the sustainability of income tax credits for a given audit cycle.

The Tax Act was signed into law on December 22, 2017. The Tax Act changed many aspects of U.S. corporate income taxation and included reduction of the corporate income tax rate from 35% to 21%, implementation of a territorial tax system and imposition of a tax on deemed repatriated earnings of foreign subsidiaries. We recognized the tax effects of the Tax Act in the year ended December 31, 2017 and recorded \$7.3 billion in tax expense. The tax expense relates primarily to the remeasurement of deferred tax assets to the 21% tax rate. We applied the guidance in SAB 118 when accounting for the enactment-date effects of the Tax Act in 2017 and throughout 2018. At December 31, 2018, we have now completed our accounting for all the enactment-date income tax effects of the Tax Act. We reduced our year ended December 31, 2017 estimated tax expense of \$7.3 billion to \$7.1 billion, primarily related to the remeasurement of deferred tax assets to the 21% tax rate.

The Tax Act subjects a U.S. shareholder to tax on Global Intangible Low Tax Income (GILTI) earned by certain foreign subsidiaries. The FASB Staff Q&A Topic 740, No. 5 "Accounting for Global Intangible Low-Taxed Income," states that an entity can make an accounting policy election to either recognize deferred taxes for temporary basis differences expected to reverse as GILTI in future years or to provide for the tax expense related to GILTI in the year the tax is incurred as a period expense only. We have elected to account for GILTI as a current period expense when incurred.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Note 18. Restructuring and Other Initiatives

We have and continue to execute various restructuring and other initiatives and we may execute additional initiatives in the future, if necessary, to streamline manufacturing capacity and other costs to improve the utilization of remaining facilities. To the extent these programs involve voluntary separations, a liability is generally recorded at the time offers to employees are accepted. To the extent these programs provide separation benefits in accordance with pre-existing agreements, a liability is recorded once the amount is probable and reasonably estimable. If employees are involuntarily terminated, a liability is generally recorded at the communication date. Related charges are recorded in Automotive and other cost of sales and Automotive and other selling, general and administrative expense. The following table summarizes the reserves and charges related to restructuring and other initiatives, including postemployment benefit reserves and charges:

	er 31,				
	2018		2017		2016
\$	227	\$	268	\$	383
	1,637		330		412
	(600)		(315)		(490)
	(142)		(56)		(37)
\$	1,122	\$	227	\$	268
		\$ 227 1,637 (600) (142)	\$ 227 \$ 1,637 (600) (142)	2018 2017 \$ 227 \$ 268 1,637 330 (600) (315) (142) (56)	\$ 227 \$ 268 \$ 1,637 330 (600) (315) (142) (56)

In the year ended December 31, 2018 restructuring and other initiatives in GMNA primarily included actions related to the unallocation of products to certain manufacturing facilities in 2019 and other employee separation programs. We recorded charges of \$1.2 billion in GMNA in the year ended December 31, 2018 consisting of \$941 million in employee separation and other charges, which are reflected in the table above, and \$301 million primarily in non-cash accelerated depreciation, not reflected in the table above. We expect to incur additional restructuring and other charges in 2019 that range between \$1.5 billion to \$2.0 billion, primarily related to accelerated depreciation, supplier-related charges, and employee-related separation charges. We expect cash outflows related to these activities of approximately \$1.5 billion by the end of 2020.

In the year ended December 31, 2018 restructuring and other initiatives in GMI primarily included the closure of a facility and other restructuring actions in Korea and employee separation programs. We recorded charges of \$1.0 billion related to Korea, net of noncontrolling interests. These charges consisted of \$537 million in non-cash asset impairments and other charges, not reflected in the table above, and \$495 million in employee separation charges, which are reflected in the table above. We incurred \$775 million in cash outflows resulting from Korea restructuring actions, primarily for employee separations and statutory pension payments. In GMI we expect to incur between \$200 million and \$300 million in additional employee separation and other charges in 2019, and we expect cash outflows related to previously announced restructuring activities of approximately \$300 million in 2019.

In the year ended December 31, 2017 restructuring and other initiatives primarily included restructuring actions announced in the three months ended June 30, 2017 in GMI. These actions related primarily to the withdrawal of Chevrolet from the Indian and South African markets at the end of 2017 and the transition of our South Africa manufacturing operations to Isuzu Motors. We continue to manufacture vehicles in India for sale to certain export markets. We recorded charges of \$460 million in GMI primarily consisting of \$297 million of asset impairments, sales incentives, inventory provisions and other charges, not reflected in the table above, and \$163 million of dealer restructurings, employee separations and other contract cancellation costs, which are reflected in the table above. We completed these programs in GMI in 2017. Other GMI restructuring programs reflected in the table above include separation and other programs in Australia, Korea and India and the withdrawal of the Chevrolet brand from Europe. Collectively, these programs had a total cost of \$892 million since inception in 2013 through the completion of the programs in the year ended December 31, 2017.

In the year ended December 31, 2016 restructuring and other initiatives related primarily to charges of \$240 million in the three months ended March 31, 2016 in GMNA related to the cash severance incentive program to qualified U.S. hourly employees under our 2015 labor agreement with the UAW and insignificant costs for separation and other programs in Australia, Korea and India and the withdrawal of Chevrolet brand from Europe.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Note 19. Interest Income and Other Non-Operating Income

	Year	,		
	2018	2017		2016
Non-service pension and OPEB income.	\$ 1,665	\$ 1,316	\$	1,262
Interest income	335	266		182
Licensing agreements income.	296	74		94
Revaluation of investments	258	(56)		_
Other	42	45		65
Total interest income and other non-operating income, net	\$ 2,596	\$ 1,645	\$	1,603

Note 20. Stockholders' Equity and Noncontrolling Interests

Preferred and Common Stock We have 2.0 billion shares of preferred stock and 5.0 billion shares of common stock authorized for issuance. At December 31, 2018 and 2017 we had 1.4 billion shares of common stock issued and outstanding.

Common Stock Holders of our common stock are entitled to dividends at the sole discretion of our Board of Directors. Our dividends declared per common share were \$1.52 and our total dividends paid on common stock were \$2.1 billion, \$2.2 billion and \$2.3 billion for the years ended December 31, 2018, 2017 and 2016. Holders of common stock are entitled to one vote per share on all matters submitted to our stockholders for a vote. The liquidation rights of holders of our common stock are secondary to the payment or provision for payment of all our debts and liabilities and to holders of our preferred stock, if any such shares are then outstanding.

In the years ended December 31, 2018, 2017 and 2016 we purchased three million, 120 million and 77 million shares of our outstanding common stock for \$100 million, \$4.5 billion and \$2.5 billion as part of the common stock repurchase program announced in March 2015, which our Board of Directors increased and extended in January 2016 and January 2017.

Warrants At December 31, 2017 we had 22 million warrants outstanding that we issued in July 2009. The warrants are exercisable at any time prior to July 10, 2019 at an exercise price of \$18.33 per share. We had 15 million warrants outstanding at December 31, 2018.

GM Financial Preferred Stock In September 2018 GM Financial issued \$500 million of Fixed-to-Floating Rate Cumulative Perpetual Preferred Stock, Series B, \$0.01 par value, with a liquidation preference of \$1,000 per share. The preferred stock is classified as noncontrolling interests in our consolidated financial statements. Dividends will be paid semi-annually when declared starting March 30, 2019 at a fixed rate of 6.50%.

In September 2017 GM Financial issued \$1.0 billion of Fixed-to-Floating Rate Cumulative Perpetual Preferred Stock, Series A, \$0.01 par value, with a liquidation preference of \$1,000 per share. The preferred stock is classified as noncontrolling interests in our consolidated financial statements. Dividends are paid semi-annually when declared, which started March 30, 2018 at a fixed rate of 5.75%.

GM Cruise Preferred Shares On May 31, 2018, we entered into a Purchase Agreement with The Vision Fund. The Vision Fund subsequently assigned its rights and obligations under the Purchase Agreement to SoftBank. In June 2018, at the closing of the transactions contemplated by the Purchase Agreement, GM Cruise Holdings, our subsidiary, issued \$900 million of GM Cruise Preferred Shares to SoftBank, representing 10.9% of GM Cruise Holdings' equity at closing. Immediately prior to the issuance of the GM Cruise Preferred Shares, we invested \$1.1 billion in GM Cruise Holdings. When GM Cruise's autonomous vehicles are ready for commercial deployment, SoftBank is obligated to purchase additional GM Cruise Preferred Shares for \$1.35 billion, subject to regulatory approval, after which the GM Cruise Preferred Shares will represent 18.6% of GM Cruise Holdings' equity. All proceeds are designated exclusively for working capital and general corporate purposes of GM Cruise. Dividends are cumulative and accrue at an annual rate of 7% and are payable quarterly in cash or in-kind, at GM Cruise's discretion. The GM Cruise Preferred Shares are also entitled to participate in GM Cruise dividends above a defined threshold. Prior to an initial public offering, SoftBank is restricted from transferring the GM Cruise Preferred Shares until June 28, 2025.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

The GM Cruise Preferred Shares are convertible into common stock of GM Cruise Holdings, at specified exchange ratios, at the option of SoftBank or upon occurrence of an initial public offering. The GM Cruise Preferred Shares are entitled to receive the greater of their carrying value or a pro-rata share of any proceeds or distributions upon the occurrence of a merger, sale, liquidation, or dissolution of GM Cruise Holdings. Beginning on June 28, 2025, SoftBank has the option to convert all of the GM Cruise Preferred Shares into our common stock at a conversion ratio that is indexed to the fair value of GM Cruise Holdings at the time of conversion. We have the option to settle the conversion feature with our common shares or cash, and in certain situations with nonredeemable, nonconvertible preferred shares. Beginning on June 28, 2025, we can call all, but not less than all of the GM Cruise Preferred Shares held by SoftBank at an amount equal to the greater of the original investment amount plus accrued distributions paid in-kind and the fair value of GM Cruise Holdings at the time of conversion. The GM Cruise Preferred Shares are classified as noncontrolling interests in our consolidated financial statements.

GM Cruise Common Shares In October 2018, GM Cruise Holdings entered into a Purchase Agreement with Honda, pursuant to which Honda invested \$750 million in GM Cruise Holdings in exchange for Class E Common Shares, representing 5.7% of the fully diluted equity of GM Cruise Holdings at closing. In addition, Honda agreed to contribute approximately \$2.0 billion primarily in the form of a long-term annual fee to GM Cruise Holdings for certain rights to use GM Cruise Holdings' trade names and trademarks and the exclusive right to partner with GM Cruise Holdings to develop, deploy, and maintain a foreign market. The remaining contribution or funding will come in the form of shared development costs for a SAV that Honda, General Motors Holdings LLC and GM Cruise Holdings will jointly develop for deployment onto GM Cruise's autonomous vehicle network. All proceeds are designated exclusively for working capital and general corporate purposes of GM Cruise. At the later of October 3, 2025 or the termination of the commercial agreements between GM Cruise Holdings and Honda, GM Cruise Holdings can call all, but not less than all of the Class E Common Shares at an amount equal to the then fair value of GM Cruise Holdings. The Class E Common Shares are classified as noncontrolling interests in our consolidated financial statements.

GM Korea Preferred Shares In the year ended December 31, 2018 KDB purchased \$720 million of GM Korea Preferred Shares. Dividends on the GM Korea Preferred Shares are cumulative and accrue at an annual rate of 1%. GM Korea can call the preferred shares at their original issue price six years from the date of issuance and once called, the preferred shares can be converted into common shares of GM Korea at the option of the holder. The GM Korea Preferred Shares are classified as noncontrolling interests in our consolidated financial statements. The KDB investment proceeds can only be used for purposes of funding capital expenditures in GM Korea. In conjunction with the GM Korea Preferred Share issuance we agreed to provide GM Korea future funding, if needed, not to exceed \$2.8 billion through December 31, 2027, inclusive of \$2.0 billion of planned capital expenditures through 2027.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

The following table summarizes the significant components of Accumulated other comprehensive loss:

	Year	s End	led Decembe	r 31	,
	2018		2017		2016
Foreign Currency Translation Adjustments					
Balance at beginning of period	\$ (1,606)	\$	(2,355)	\$	(2,034)
Other comprehensive income (loss) and noncontrolling interests before reclassification adjustment, net of tax and impact of adoption of accounting standards(a)(b)(c) \dots	(664)		560		(317)
Reclassification adjustment, net of tax(a)	20		189		(4)
Other comprehensive income (loss), net of tax(a)	(644)		749		(321)
Balance at end of period	\$ (2,250)	\$	(1,606)	\$	(2,355)
Defined Benefit Plans					
Balance at beginning of period	\$ (6,398)	\$	(6,968)	\$	(5,999)
Other comprehensive loss and noncontrolling interests before reclassification adjustment, net of impact of adoption of accounting standards(b)(c)	(580)		(798)		(1,546)
Tax benefit	100		98		459
Other comprehensive loss and noncontrolling interests before reclassification adjustment, net of tax and impact of adoption of accounting standards(b)(c)	(480)		(700)		(1,087)
Reclassification adjustment, net of tax(a)(d).	141		1,270		118
Other comprehensive income (loss), net of tax	(339)		570		(969)
Balance at end of period(e)	\$ (6,737)	\$	(6,398)	\$	(6,968)

⁽a) The income tax effect was insignificant in the years ended December 31, 2018, 2017 and 2016.

Note 21. Earnings Per Share

Basic and diluted earnings (loss) per share are computed by dividing Net income (loss) attributable to common stockholders by the weighted-average common shares outstanding in the period. Diluted earnings (loss) per share is computed by giving effect to all potentially dilutive securities that are outstanding.

⁽b) The noncontrolling interests are insignificant in the years ended December 31, 2018, 2017 and 2016.

⁽c) Refer to Note 2 for additional information on adoption of accounting standards in 2018.

⁽d) \$1.2 billion is included in the loss on sale of the Opel/Vauxhall Business in the year ended December 31, 2017. An insignificant amount is included in the computation of periodic pension and OPEB (income) expense in the years ended December 31, 2018, 2017 and 2016.

⁽e) Consists primarily of unamortized actuarial loss on our defined benefit plans. Refer to the critical accounting estimates section of our MD&A for additional information.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

	Year	s End	ded Decembe	er 31,	
_	2018		2017		2016
Basic earnings per share					
Income from continuing operations(a).	8,084	\$	348	\$	9,428
Less: cumulative dividends on subsidiary preferred stock	(98)		(16)		_
Income from continuing operations attributable to common stockholders	7,986		332		9,428
Loss from discontinued operations, net of tax	70		4,212		1
Net income (loss) attributable to common stockholders	7,916	\$	(3,880)	\$	9,427
Weighted-average common shares outstanding.	1,411		1,465		1,540
Basic earnings per common share – continuing operations	5.66	\$	0.23	\$	6.12
Basic loss per common share – discontinued operations	0.05	\$	2.88	\$	
Basic earnings (loss) per common share	5.61	\$	(2.65)	\$	6.12
Diluted earnings per share					
Income from continuing operations attributable to common stockholders – diluted(a)	7,986	\$	332	\$	9,428
Loss from discontinued operations, net of tax – diluted	70	\$	4,212	\$	1
Net income (loss) attributable to common stockholders – diluted	7,916	\$	(3,880)	\$	9,427
Weighted-average common shares outstanding – basic	1,411		1,465		1,540
Dilutive effect of warrants and awards under stock incentive plans	20		27		30
Weighted-average common shares outstanding – diluted	1,431		1,492		1,570
Diluted earnings per common share – continuing operations	5.58	\$	0.22	\$	6.00
Diluted loss per common share – discontinued operations	0.05	\$	2.82	\$	
Diluted earnings (loss) per common share.	5.53	\$	(2.60)	\$	6.00
Potentially dilutive securities(b)	9		_		_

⁽a) Net of Net loss attributable to noncontrolling interests.

Note 22. Discontinued Operations

On March 5, 2017 we entered into the Master Agreement to sell our European Business to PSA Group. On July 31, 2017 we closed the sale of our Opel/Vauxhall Business to PSA Group and on October 31, 2017 we closed the sale of the Fincos to Banque PSA Finance S.A. and BNP Paribas Personal Finance S.A. The net consideration paid at closing for the European Business was \$2.5 billion, consisting of (1) \$2.2 billion in cash; and (2) \$808 million in warrants in PSA Group; partially offset by (3) a \$455 million de-risking premium payment made to PSA Group for assuming certain underfunded pension liabilities. The warrants are not exercisable for five years from closing.

The total charge from the sale of the European Business during the year ended December 31, 2017 was \$6.2 billion, net of tax, of which \$3.9 billion was recorded in Loss from discontinued operations, net of tax, and \$2.3 billion was recorded in Income tax expense. The charge related to: (1) \$4.3 billion of deferred tax assets that will no longer be realizable or that transferred to PSA Group; (2) \$1.5 billion related to previously deferred pension losses and payment of the de-risking premium to PSA Group for its assumption of certain underfunded pension liabilities; (3) a pre-tax disposal loss of \$525 million as a result of the sale of the Fincos, which included the recognition of \$197 million of foreign currency translation losses; (4) a pre-tax charge of \$421 million for the cancellation of production programs resulting from the convergence of vehicle platforms between our European Business and PSA Group; and (5) other insignificant costs to support the separation of operations provided for a period of time following closing; partially offset by proceeds.

⁽b) Potentially dilutive securities attributable to outstanding stock options and RSUs were excluded from the computation of diluted EPS because the securities would have had an antidilutive effect.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

We retained net underfunded pension liabilities of \$6.8 billion owed primarily to current pensioners and former employees of the European Business with vested pension rights. PSA Group assumed, pursuant to the Agreement, approximately \$3.1 billion of net underfunded pension liabilities primarily with respect to active employees of the Opel/Vauxhall Business, and during the year ended December 31, 2017 our wholly owned subsidiary (the Seller) made payments to PSA Group, or one or more pension funding vehicles, of \$3.4 billion in respect of these assumed liabilities, which included pension funding payments for active employees and the de-risking premium payment of \$455 million discussed above.

The Seller agreed to indemnify PSA Group for certain losses resulting from any inaccuracy of the representations and warranties or breaches of our covenants included in the Agreement and for certain other liabilities including certain emissions and product liabilities. The Company entered into a guarantee for the benefit of PSA Group and pursuant to which the Company agreed to guarantee the Seller's obligation to indemnify PSA Group. Certain of these indemnification obligations are subject to time limitations, thresholds and/or caps as to the amount of required payments.

Although the sale reduced our new vehicle presence in Europe, we may still be impacted by actions taken by regulators related to vehicles sold before the sale. In Germany, the Kraftfahrt-Bundesamt (KBA) issued an order in October 2018 converting Opel's existing voluntary recall of certain vehicles into a mandatory recall for allegedly failing to comply with certain emissions regulations. In addition, at the KBA's request, the German authorities recently re-opened a separate criminal investigation that had previously been closed with no action. Opel is challenging the mandatory recall order of the KBA in court on the grounds that the emission control systems contained in the subject vehicles, have at all times complied with the regulations in place when the vehicles were manufactured, tested, approved and sold.

Opel voluntarily recalled and serviced many of these vehicles between 2017 and 2018 at its own expense, and this expense should not be transferred to the Seller because it was undertaken voluntarily by Opel and accounted for at the time of the sale. However, the Seller may be obligated to indemnify PSA Group for certain additional expenses resulting from any mandatory recall that is actually implemented, including potential litigation costs, settlements, judgments and potential fines. We are unable to estimate any reasonably possible loss or range of loss that may result from this matter.

We continue to purchase from and supply to PSA Group certain vehicles for a period of time following closing. Total net sales and revenue of \$1.9 billion and \$853 million and purchases and expenses of \$1.4 billion and \$218 million related to transactions with the Opel/Vauxhall Business were included in continuing operations during the years ended December 31, 2018 and 2017. Cash payments of \$1.8 billion and \$242 million and cash receipts of \$2.3 billion and \$1.2 billion were recorded in Net cash provided by (used in) operating activities - continuing operations related to transactions with the Opel/Vauxhall Business during the years ended December 31, 2018 and 2017.

The following table summarizes the results of the European Business operations:

	Years	Ended Decem	ber 31,						
	2018	2018 - \$ 2017 - \$ 11,257							
Automotive net sales and revenue	\$ —	\$ 11,257	\$ 19,704						
GM Financial net sales and revenue		466	552						
Total net sales and revenue		11,723	20,256						
Automotive and other cost of sales		11,049	18,894						
GM Financial interest, operating and other expenses		342	423						
Automotive and other selling, general, and administrative expense		813	1,356						
Other income (expense) items		(72)	93						
Loss from discontinued operations before taxes		553	324						
Loss on sale of discontinued operations before taxes(a)(b)	70	2,176							
Total loss from discontinued operations before taxes	70	2,729	324						
Income tax expense (benefit)(b)(c)		1,483	(323)						
Loss from discontinued operations, net of tax		\$ 4,212	\$ 1						

⁽a) Includes contract cancellation charges associated with the disposal for the year ended December 31, 2017.

⁽b) Total loss on sale of discontinued operations, net of tax was \$3.9 billion for the year ended December 31, 2017.

⁽c) Includes \$2.0 billion of deferred tax assets that transferred to PSA Group in the year ended December 31, 2017.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Note 23. Stock Incentive Plans

GM Stock Incentive Awards

We grant to certain employees RSUs, RSAs, PSUs and stock options (collectively, stock incentive awards) under our 2016 Equity Incentive Plan and 2017 Long-Term Incentive Plan (LTIP) and prior to the 2017 LTIP, under our 2014 LTIP. The 2017 LTIP was approved by stockholders in June 2017 and replaced the 2014 LTIP. Shares awarded under the plans are subject to forfeiture if the participant leaves the company for reasons other than those permitted under the plans such as retirement, death or disability.

RSU awards granted either cliff vest or ratably vest generally over a three-year service period, as defined in the terms of each award. PSU awards vest at the end of a three-year performance period, based on performance criteria determined by the Executive Compensation Committee of the Board of Directors at the time of award. The number of shares earned may equal, exceed or be less than the targeted number of shares depending on whether the performance criteria are met, surpassed or not met. Stock options expire 10 years from the grant date. Our performance-based stock options vest ratably over 55 months based on the performance of our common stock relative to that of a specified peer group. Our service-based stock options vest ratably over 19 months to three years.

In connection with our acquisition of Cruise Automation, Inc. in May 2016, RSAs and PSUs in common shares of GM were granted to employees of GM Cruise Holdings. The RSAs vest ratably, generally over a three-year service period. The PSUs are contingent upon achievement of specific technology and commercialization milestones.

.......

	Shares (in millions)	eighted-Average rant Date Fair Value	Weighted-Average Remaining Contractual Term in Years
Units outstanding at January 1, 2018	52.9	\$ 21.75	2.0
Granted	13.7	\$ 30.41	
Settled	(10.2)	\$ 30.23	
Forfeited or expired	(8.3)	\$ 29.51	
Units outstanding at December 31, 2018(a)	48.1	\$ 19.81	1.3

⁽a) Includes the target amount of PSUs.

Our weighted-average assumptions used to value our stock options are a dividend yield of 3.69% and 4.43%, expected volatility of 28.0% and 25.0%, a risk-free interest rate of 2.73% and 1.97%, and an expected option life of 5.98 and 5.84 years for options issued during the years ended December 31, 2018 and 2017. There were no stock options issued during the year ended December 31, 2016.

Total compensation expense related to the above awards was \$316 million, \$585 million and \$627 million in the years ended December 31, 2018, 2017 and 2016.

At December 31, 2018 the total unrecognized compensation expense for nonvested equity awards granted was \$208 million. This expense is expected to be recorded over a weighted-average period of 1.3 years. The total fair value of stock incentive awards vested was \$317 million, \$421 million and \$325 million in the years ended December 31, 2018, 2017 and 2016.

GM Cruise Stock Incentive Awards

In addition to the awards noted above, stock options and RSUs were granted to GM Cruise employees in common shares of GM Cruise Holdings in the year ended December 31, 2018. These awards were granted under the 2018 Employee Incentive Plan approved by GM Cruise Holdings' Board of Directors in August 2018. Shares awarded under the plan are subject to forfeiture if the participant leaves the company for reasons other than those permitted under the plan. There were no awards granted in GM Cruise common shares for the years ended December 31, 2017 and December 31, 2016. Stock options vest ratably over four to 10 years, as defined in the terms of each award. Stock options expire 10 years from the grant date. RSU awards granted vest upon the satisfaction of both a service condition and a liquidity condition. The service condition for the majority of these awards is

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

satisfied over four years. The liquidity condition is satisfied upon the earlier of the date of a change in control transaction or the consummation of an initial public offering.

Total compensation expense related to GM Cruise Holdings' share-based awards was insignificant for the year ended December 31, 2018. As of December 31, 2018, no share-based compensation expense had been recognized for the RSUs because the liquidity condition described above was not met. Total unrecognized compensation expense for GM Cruise Holdings' nonvested equity awards granted was \$392 million at December 31, 2018, which included the RSUs for which the liquidity condition had not been met. The expense related to stock options is expected to be recorded over a weighted-average period of 8.5 years. The timing of the expense related to RSUs will depend upon the date of the satisfaction of the liquidity condition.

Note 24. Supplementary Quarterly Financial Information (Unaudited)

The following tables summarize supplementary quarterly financial information:

	1st Q		2nd Quarter		3re	d Quarter	4tl	ı Quarter
2018								
Total net sales and revenue	\$	36,099	\$	36,760	\$	35,791	\$	38,399
Automotive and other gross margin(a)	\$	2,507	\$	3,204	\$	3,743	\$	2,935
Income from continuing operations	\$	1,110	\$	2,366	\$	2,530	\$	2,069
Loss from discontinued operations, net of tax	\$	70	\$		\$		\$	_
Net income attributable to stockholders	\$	1,046	\$	2,390	\$	2,534	\$	2,044
Basic earnings per common share – continuing operations	\$	0.78	\$	1.68	\$	1.77	\$	1.42
Basic loss per common share – discontinued operations	\$	0.05	\$	_	\$	_	\$	_
Diluted earnings per common share – continuing operations	\$	0.77	\$	1.66	\$	1.75	\$	1.40
Diluted loss per common share – discontinued operations	\$	0.05	\$		\$		\$	_

⁽a) Includes our GM Cruise segment.

In the three months ended March 31, 2018 and June 30, 2018, we collectively recorded charges of \$1.1 billion related to the closure of a facility and other restructuring actions in Korea. In the three months ended September 30, 2018 we recorded charges of \$440 million for ignition switch related legal matters. In the three months ended December 31, 2018 we recorded charges of \$1.3 billion related to transformation activities including employee separation, accelerated depreciation and other charges; and a non-recurring tax benefit of \$1.0 billion related to foreign earnings.

	1st Quarter		2n	d Quarter	3rc	d Quarter	4tl	ı Quarter
2017								
Total net sales and revenue	\$	37,266	\$	36,984	\$	33,623	\$	37,715
Automotive and other gross margin(a)	\$	4,758	\$	4,463	\$	3,614	\$	4,385
Income (loss) from continuing operations	\$	2,686	\$	2,433	\$	114	\$	(4,903)
Loss from discontinued operations, net of tax	\$	69	\$	770	\$	3,096	\$	277
Net income (loss) attributable to stockholders	\$	2,608	\$	1,660	\$	(2,981)	\$	(5,151)
Basic earnings (loss) per common share – continuing operations	\$	1.78	\$	1.62	\$	0.08	\$	(3.46)
Basic loss per common share – discontinued operations	\$	0.05	\$	0.51	\$	2.14	\$	0.19
Diluted earnings (loss) per common share – continuing operations	\$	1.75	\$	1.60	\$	0.08	\$	(3.46)
Diluted loss per common share – discontinued operations	\$	0.05	\$	0.51	\$	2.11	\$	0.19

⁽a) Includes our GM Cruise segment.

In the three months ended June 30, 2017, September 30, 2017 and December 31, 2017, we collectively recorded a total charge of \$6.2 billion as a result of the sale of the European Business, of which \$3.9 billion is recorded in Loss from discontinued

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

operations, net of tax, and \$2.3 billion is related to Income tax expense. In the three months ended December 31, 2017, we recorded a \$7.3 billion tax expense related to the U.S. tax reform legislation.

Note 25. Segment Reporting

We report segment information consistent with the way the chief operating decision maker evaluates the operating results and performance of the Company. As a result of the growing importance of our autonomous vehicle operations, we moved these operations from Corporate to GM Cruise and began presenting GM Cruise as a new reportable segment in the year ended December 31, 2018. Our GMNA, GMI and GM Financial segments were not significantly impacted. All periods presented have been recast to reflect the changes.

We analyze the results of our business through the following segments: GMNA, GMI, GM Cruise and GM Financial. As discussed in Note 1, the European Business is presented as discontinued operations and is excluded from our segment results for all periods presented. The European Business was previously reported as our GM Europe (GME) segment and part of GM Financial. The chief operating decision maker evaluates the operating results and performance of our automotive segments and GM Cruise through EBIT-adjusted, which is presented net of noncontrolling interests. The chief operating decision maker evaluates GM Financial through earnings before income taxes-adjusted because interest income and interest expense are part of operating results when assessing and measuring the operational and financial performance of the segment. Each segment has a manager responsible for executing our strategic initiatives. While not all vehicles within a segment are individually profitable on a fully allocated cost basis, those vehicles attract customers to dealer showrooms and help maintain sales volumes for other, more profitable vehicles and contribute towards meeting required fuel efficiency standards. As a result of these and other factors, we do not manage our business on an individual brand or vehicle basis.

Substantially all of the trucks, crossovers, cars and automobile parts produced are marketed through retail dealers in North America and through distributors and dealers outside of North America, the substantial majority of which are independently owned. In addition to the products sold to dealers for consumer retail sales, trucks, crossovers and cars are also sold to fleet customers, including daily rental car companies, commercial fleet customers, leasing companies and governments. Fleet sales are completed through the dealer network and in some cases directly with fleet customers. Retail and fleet customers can obtain a wide range of after-sale vehicle services and products through the dealer network, such as maintenance, light repairs, collision repairs, vehicle accessories and extended service warranties.

GMNA meets the demands of customers in North America with vehicles developed, manufactured and/or marketed under the Buick, Cadillac, Chevrolet and GMC brands. GMI primarily meets the demands of customers outside North America with vehicles developed, manufactured and/or marketed under the Buick, Cadillac, Chevrolet, GMC, and Holden brands. We also have equity ownership stakes in entities that meet the demands of customers in other countries, primarily China, with vehicles developed, manufactured and/or marketed under the Baojun, Buick, Cadillac, Chevrolet, Jiefang and Wuling brands. GM Cruise is our global segment responsible for the development and commercialization of autonomous vehicle technology, and includes autonomous vehicle-related engineering and other costs.

Our automotive operations' interest income and interest expense, Maven, legacy costs from the Opel/Vauxhall Business (primarily pension costs), corporate expenditures and certain nonsegment specific revenues and expenses are recorded centrally in Corporate. Corporate assets consist primarily of cash and cash equivalents, marketable securities, our investment in Lyft, PSA warrants, Maven vehicles and intercompany balances. Retained net underfunded pension liabilities related to the European Business are also recorded in Corporate. All intersegment balances and transactions have been eliminated in consolidation.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

The following tables summarize key financial information by segment:

At and For the Year Ended December 31, 2018

					21	tt and For t		cai Enucu	Dece		010				
	GMNA	GMI	Co	orporate	Eli	minations	Αυ	Total itomotive	G	M Cruise		GM nancial	Eli	minations	Total
Net sales and revenue	\$ 113,792	\$ 19,148	\$	203			\$	133,143	\$		\$	14,016	\$	(110)	\$ 147,049
Earnings (loss) before interest and taxes-adjusted	\$ 10,769	\$ 423	\$	(570)			\$	10,622	\$	(728)	\$	1,893	\$	(4)	\$ 11,783
Adjustments(a)	\$ (1,236)	\$ (1,212)	\$	(457)			\$	(2,905)	\$	_	\$	_	\$	_	(2,905)
Automotive interest income															335
Automotive interest expense															(655)
Net (loss) attributable to noncontrolling interests															(9)
Income before income taxes															8,549
Income tax expense															(474)
Income from continuing operations															8,075
Loss from discontinued operations, net of tax															(70)
Net loss attributable to noncontrolling interests															9
Net income attributable to stockholders															\$ 8,014
Equity in net assets of nonconsolidated affiliates	\$ 75	\$ 7,761	\$	24	\$	_	\$	7,860	\$	_	\$	1,355	\$	_	\$ 9,215
Goodwill and intangibles	\$ 2,623	\$ 928	\$	1	\$	_	\$	3,552	\$	671	\$	1,356	\$	_	\$ 5,579
Total assets	\$ 109,763	\$ 24,911	\$	31,694	\$	(50,690)	\$	115,678	\$	3,195	\$	109,953	\$	(1,487)	\$ 227,339
Expenditures for property	\$ 7,784	\$ 883	\$	21	\$	(2)	\$	8,686	\$	15	\$	60	\$	_	\$ 8,761
Depreciation and amortization	\$ 4,995	\$ 562	\$	50	\$	(3)	\$	5,604	\$	7	\$	7,531	\$	_	\$ 13,142
Impairment charges	\$ 55	\$ 466	\$	6	\$	_	\$	527	\$	_	\$	_	\$	_	\$ 527
Equity income	\$ 8	\$ 1,972	\$	_	\$	_	\$	1,980	\$	_	\$	183	\$	_	\$ 2,163

⁽a) Consists of restructuring and other charges related to transformation activities of \$1.2 billion in GMNA; charges of \$1.2 billion related to restructuring actions in Korea and other countries in GMI; and charges of \$440 million for ignition switch related legal matters and other insignificant charges in Corporate.

At and For the Year Ended December 31, 2017

	_	-					Total		Total		Total		_		_				-		-				GM		GM		GM			_	
	_(GMNA	GMI	Co	rporate	Eli	iminations	Αυ	itomotive	G	M Cruise	Fi	nancial	Eli	minations		Total																
Net sales and revenue	\$	111,345	\$ 21,920	\$	342			\$	133,607	\$	_	\$	12,151	\$	(170)	\$	145,588																
Earnings (loss) before interest and taxes-adjusted	\$	11,889	\$ 1,300	\$	(921)			\$	12,268	\$	(613)	\$	1,196	\$	(7)	\$	12,844																
Adjustments(a)	\$	_	\$ (540)	\$	(114)			\$	(654)	\$	_	\$	_	\$	_		(654)																
Automotive interest income																	266																
Automotive interest expense																	(575)																
Net (loss) attributable to noncontrolling interests																	(18)																
Income before income taxes																	11,863																
Income tax expense																	(11,533)																
Income from continuing operations																	330																
Loss from discontinued operations, net of tax																	(4,212)																
Net loss attributable to noncontrolling interests																	18																
Net loss attributable to stockholders																\$	(3,864)																
Equity in net assets of nonconsolidated affiliates	\$	68	\$ 7,818	\$	_	\$	_	\$	7,886	\$	_	\$	1,187	\$	_	\$	9,073																
Goodwill and intangibles	\$	2,819	\$ 973	\$	11	\$	_	\$	3,803	\$	679	\$	1,367	\$	_	\$	5,849																
Total assets	\$	99,874	\$ 27,712	\$	30,573	\$	(42,750)	\$	115,409	\$	666	\$	97,251	\$	(844)	\$	212,482																
Expenditures for property	\$	7,704	\$ 607	\$	14	\$	_	\$	8,325	\$	34	\$	94	\$	_	\$	8,453																
Depreciation and amortization	\$	4,654	\$ 708	\$	32	\$	(1)	\$	5,393	\$	1	\$	6,573	\$	_	\$	11,967																
Impairment charges	\$	78	\$ 211	\$	5	\$	_	\$	294	\$	_	\$	_	\$	_	\$	294																
Equity income	\$	8	\$ 1,951	\$	_	\$	_	\$	1,959	\$	_	\$	173	\$	_	\$	2,132																

⁽a) Consists of charges of \$460 million related to restructuring actions in India and South Africa in GMI; charges of \$80 million associated with the deconsolidation of Venezuela in GMI and charges of \$114 million for ignition switch related legal matters in Corporate.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

At and For the Year Ended December 31, 2016

•	(GMNA	GMI	Co	rporate	Eli	minations	Au	Total itomotive	G!	M Cruise	Fi	GM nancial	Eli	iminations	Total
Net sales and revenue	\$	119,113	\$ 20,943	\$	149			\$	140,205	\$		\$	8,983	\$	(4)	\$ 149,184
Earnings (loss) before interest and taxes-adjusted	\$	12,388	\$ 767	\$	(902)			\$	12,253	\$	(171)	\$	763	\$	3	\$ 12,848
Adjustments(a)	\$	_	\$ _	\$	(300)			\$	(300)	\$	_	\$	_	\$	_	(300)
Automotive interest income																182
Automotive interest expense																(563)
Net (loss) attributable to noncontrolling interests																(159)
Income before income taxes																12,008
Income tax expense																(2,739)
Income from continuing operations																9,269
Loss from discontinued operations, net of tax																(1)
Net loss attributable to noncontrolling interests																159
Net income attributable to stockholders																\$ 9,427
Equity in net assets of nonconsolidated affiliates	\$	74	\$ 7,978	\$	_	\$	_	\$	8,052	\$	_	\$	944	\$	_	\$ 8,996
Goodwill and intangibles	\$	3,128	\$ 1,021	\$	14	\$	_	\$	4,163	\$	620	\$	1,366	\$	_	\$ 6,149
Total assets(b)	\$	103,908	\$ 27,273	\$	38,465	\$	(35,139)	\$	134,507	\$	548	\$	87,947	\$	(1,312)	\$ 221,690
Expenditures for property	\$	7,338	\$ 943	\$	8	\$	(2)	\$	8,287	\$	4	\$	93	\$	_	\$ 8,384
Depreciation and amortization	\$	4,292	\$ 702	\$	18	\$	(5)	\$	5,007	\$	1	\$	4,678	\$	_	\$ 9,686
Impairment charges	\$	65	\$ 68	\$	_	\$	_	\$	133	\$	_	\$	_	\$	_	\$ 133
Equity income	\$	159	\$ 1,971	\$	_	\$	_	\$	2,130	\$	_	\$	152	\$	_	\$ 2,282

⁽a) Consists of a net charge of \$300 million for ignition switch related legal matters.

Automotive revenue is attributed to geographic areas based on the country of sale. GM Financial revenue is attributed to the geographic area where the financing is originated. The following table summarizes information concerning principal geographic areas:

At and	For	the	Vears	Ended	December 31.

	2018				2017				2016			
		Net Sales and Revenue		Long-Lived Assets		Net Sales and Revenue		Long-Lived Assets		Net Sales and Revenue		ong-Lived Assets
Automotive												
U.S	\$	104,413	\$	25,625	\$	100,674	\$	24,473	\$	110,661	\$	22,241
Non-U.S		28,632		13,263		32,775		12,715		29,544		11,258
GM Financial												
U.S		12,169		41,334		10,489		40,674		7,462		32,506
Non-U.S		1,835		2,476		1,650		2,467		1,517		2,050
Total consolidated	\$	147,049	\$	82,698	\$	145,588	\$	80,329	\$	149,184	\$	68,055

No individual country other than the U.S. represented more than 10% of our total Net sales and revenue or Long-lived assets.

⁽b) Assets in Corporate and GM Financial include assets classified as held for sale.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Note 26. Supplemental Information for the Consolidated Statements of Cash Flows

The following table summarizes the sources (uses) of cash provided by Change in other operating assets and liabilities and Cash paid for income taxes and interest:

	Year	s En	ded Decembe	r 31	,
Change in other operating assets and liabilities	2018		2017		2016
Accounts receivable	\$ 492	\$	1,402	\$	(1,249)
Wholesale receivables funded by GM Financial, net	(2,606)		(2,099)		(2,184)
Inventories	399		440		(75)
Automotive equipment on operating leases	748		(263)		785
Change in other assets.	(529)		108		(939)
Accounts payable	(537)		(362)		3,195
Income taxes payable	(75)		(3)		(162)
Accrued and other liabilities	732		(2,238)		1,209
Total	\$ (1,376)	\$	(3,015)	\$	580
Cash paid for income taxes and interest					
Cash paid for income taxes, net	\$ 660	\$	656	\$	676
Cash paid for interest (net of amounts capitalized) – Automotive	\$ 656	\$	501	\$	460
Cash paid for interest (net of amounts capitalized) – GM Financial	2,941		2,571		1,761
Total cash paid for interest (net of amounts capitalized)	\$ 3,597	\$	3,072	\$	2,221

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Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None

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Item 9A. Controls and Procedures

Disclosure Controls and Procedures We maintain disclosure controls and procedures designed to provide reasonable assurance that information required to be disclosed in reports filed under the Exchange Act is recorded, processed, summarized and reported within the specified time periods and accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure.

Our management, with the participation of our CEO and CFO, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) or 15d-15(e) promulgated under the Exchange Act) at December 31, 2018. Based on this evaluation required by paragraph (b) of Rules 13a-15 or 15d-15, our CEO and CFO concluded that our disclosure controls and procedures were effective as of December 31, 2018.

Management's Report on Internal Control over Financial Reporting Our management is responsible for establishing and maintaining effective internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. This system is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with U.S. GAAP. Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, misstatements due to error or fraud may not be prevented or detected on a timely basis.

Our management performed an assessment of the effectiveness of our internal control over financial reporting at December 31, 2018, utilizing the criteria discussed in the "Internal Control – Integrated Framework (2013)" issued by the Committee of Sponsoring Organizations of the Treadway Commission. The objective of this assessment was to determine whether our internal control over financial reporting was effective at December 31, 2018. Based on management's assessment, we have concluded that our internal control over financial reporting was effective at December 31, 2018.

The effectiveness of our internal control over financial reporting has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in its report which is included herein.

Changes in Internal Control over Financial Reporting There have not been any changes in our internal control over financial reporting during the three months ended December 31, 2018 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Beginning in 2019, we are enhancing our close, consolidation, planning and reporting processes through the implementation of a suite of new systems and system architectures. This new suite of systems will allow for increased agility, efficiency, and integration of data across the organization. We are using a phased implementation approach in which the first phase, implemented as of January 1, 2019, impacts our forecast and planning processes, inclusive of our year-over-year operating result changes discussed in the MD&A. The second phase, planned for implementation later in 2019, will impact our close, consolidation, financial reporting processes and related internal controls. For additional information refer to Item 1A. Risk Factors.

/s/ MARY T. BARRA

Mary T. Barra Chairman and Chief Executive Officer February 6, 2019 /s/ DHIVYA SURYADEVARA

Dhivya Suryadevara Executive Vice President and Chief Financial Officer February 6, 2019

* * * * * * *

Item 9B. Other Information

As was previously announced by GM on November 29, 2018, effective January 1, 2019, Dan Ammann transitioned from President of GM to Chief Executive Officer of GM Cruise Holdings.

While Mr. Ammann is an employee of GM Cruise Holdings, all awards granted under GM's 2014 LTIP and 2017 LTIP (the Plans) will continue to vest per the terms of the award agreements. In the event of Mr. Ammann's involuntary termination of employment for reasons other than "Cause" (as defined in the Plans), following such transfer, all awards shall continue to vest under the normal conditions as outlined in the award agreements. For any other termination other than disability, death or full career status, all awards will be forfeited per the terms of the Plans. Also, other than an award for service in 2018 as President of GM, while Mr. Ammann is an employee of GM Cruise Holdings, he will not receive an annual award under the 2017 Short-Term Incentive Plan, GM's annual cash incentive plan, the terms of which have been previously disclosed and filed by GM. He will receive a base salary at a level consistent with his seniority and scope of responsibility as CEO of GM Cruise Holdings.

On February 4, 2019, the Compensation Committee of the Board of Directors (Cruise Board) of GM Cruise Holdings granted RSUs for 16,914 GM Cruise Common Shares and stock options for 101,485 GM Cruise Common Shares to Dan Ammann under the GM Cruise Holdings 2018 Employee Incentive Plan.

Vesting of the RSUs is conditioned on satisfaction of a time and service-based requirement (Time-Vesting Condition) and a liquidity event requirement (Performance-Vesting Condition). The Time-Vesting Condition will be satisfied with respect to: (1) 10.0% of the GM Cruise Common Shares on January 15, 2020; (2) 2.5% of the GM Cruise Common Shares on the 15th day of each calendar quarter thereafter; and (3) the final 5.0% vesting on October 15, 2028, provided Mr. Ammann remains a service provider of GM Cruise Holdings on each applicable vesting date. The Time-Vesting Condition will be satisfied as to 100% of the RSUs if the fair market value of the GM Cruise Common Shares meets a certain threshold, as determined by the Cruise Board. The Performance-Vesting Condition will be satisfied upon the earlier to occur of a change in control of GM Cruise Holdings and consummation of an initial public offering of GM Cruise Holdings. The RSUs will not vest unless a change of control or initial public offering occurs before the 10th anniversary of the date of grant of the RSUs. In the event of Mr. Ammann's involuntary termination for reasons other than "Cause" (as defined in his RSU award agreement), the RSUs shall be subject to accelerated vesting in the amount of RSUs that would have become vested had Mr. Ammann remained employed by GM Cruise Holdings for an additional 12 months following the date of termination.

The stock options will vest and become exercisable with respect to: (1) 10.0% of the aggregate GM Cruise Common Shares on January 15, 2020; (2) 2.5% of the aggregate GM Cruise Common Shares on the 15th day of each calendar quarter thereafter; and (3) the final 5.0% vesting on October 15, 2028, provided Mr. Ammann remains a service provider of GM Cruise Holdings on each applicable vesting date. In the event Mr. Ammann's involuntary termination for reasons other than "Cause" (as defined in his stock options award agreement), Mr. Ammann shall be eligible to receive the following: (1) continued payment of his base salary for 12 months following the date of termination; and (2) the stock options shall accelerate and become eligible for immediate exercisability in an amount equal to the number of stock options that would have vested had Mr. Ammann remained employed by GM Cruise Holdings for an additional 12 months following the date of termination.

The RSUs and stock options are subject to the following restrictive covenants: (1) nonsolicitation and noninterference with business relationships; (2) nonsolicitation and noninterference with covered persons; (3) false statements of fact; and (4) confidential information. The RSUs and stock options are also subject to the other terms and conditions of the Employee Incentive Plan.

The foregoing description of the RSUs and the stock options does not purport to be complete and is subject, and qualified in its entirety by reference, to the award agreements and Employee Incentive Plan filed herewith as Exhibits 10.20 - 10.22.

* * * * * * *

PART III

Items 10, 11, 12, 13 and 14

Information required by Items 10, 11, 12, 13 and 14 of this Form 10-K is incorporated by reference from our definitive Proxy Statement for our 2019 Annual Meeting of Stockholders, which will be filed with the SEC, pursuant to Regulation 14A, not later than 120 days after the end of the 2018 fiscal year, all of which information is hereby incorporated by reference in, and made part of, this Form 10-K, except disclosure of our executive officers, which is included in Item 1 of this report.

* * * * * * *

PART IV

ITEM 15. Exhibits

- (a) 1. All Financial Statements and Supplemental Information
 - 2. Financial Statement Schedules

All financial statement schedules are omitted as the required information is inapplicable or the information is presented in the consolidated financial statements and notes thereto in Item 8.

- 3. Exhibits
- (b) Exhibits

Exhibit Number	Exhibit Name	
1.1	Underwriting Agreement, dated February 27, 2018, by and among General Motors Company, UAW Retiree Medical Benefits Trust and Citigroup Global Markets Inc. and Barclays Capital Inc., incorporated herein by reference to Exhibit 1.1 to the Current Report on Form 8-K of General Motors Company filed March 2, 2018	Incorporated by Reference
1.2	Underwriting Agreement, dated September 5, 2018, by and among General Motors Company, as issuer, and Barclays Capital Inc., Deutsche Bank Securities Inc. and SG Americas Securities, LLC, for themselves and as representatives of the several underwriters named therein, incorporated herein by reference to Exhibit 1.1 to the Current Report on Form 8-K of General Motors Company filed on September 10, 2018	Incorporated by Reference
2.1	Master Agreement, dated as of March 5, 2017, between General Motors Holdings, LLC and Peugeot S.A., incorporated herein by reference to Exhibit 2.1 to the Quarterly Report on Form 10-Q of General Motors Company filed April 28, 2017**	Incorporated by Reference
2.2	Purchase Agreement by and among General Motors Holdings LLC, GM Cruise Holdings LLC, and Softbank Vision Fund (AIV M1), L.P. dated May 31, 2018, incorporated herein by reference to Exhibit 2.1 to the Quarterly Report on Form 10-Q of General Motors Company filed July 25, 2018**	Incorporated by Reference
2.3	Purchase Agreement by and between GM Cruise Holdings LLC and Honda Motor Co., LTD., dated October 3, 2018**	Filed Herewith
3.1	Restated Certificate of Incorporation of General Motors Company dated December 7, 2010, incorporated herein by reference to Exhibit 3.2 to the Current Report on Form 8-K of General Motors Company filed December 13, 2010	Incorporated by Reference
3.2	General Motors Company Amended and Restated Bylaws, as amended August 14, 2018, incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K of General Motors Company filed August 20, 2018	Incorporated by Reference
4.1	Indenture dated as of September 27, 2013, between General Motors Company and the Bank of New York Mellon, as Trustee, incorporated herein by reference to Exhibit 4.2 to the Registration Statement on Form S-3 of General Motors Company filed April 30, 2014	Incorporated by Reference
4.2	First Supplemental Indenture dated as of September 27, 2013 to the Indenture dated as of September 27, 2013 between General Motors Company and the Bank of New York Mellon, as Trustee, incorporated herein by reference to Exhibit 4.3 to the Registration Statement on Form S-4 of General Motors Company filed May 22, 2014	Incorporated by Reference
4.3	Second Supplemental Indenture dated as of November 12, 2014 to the Indenture dated as of September 27, 2013 between General Motors Company and the Bank of New York Mellon, as Trustee, incorporated herein by reference to Exhibit 4.4 to the Current Report on Form 8-K of General Motors Company filed November 12, 2014	Incorporated by Reference
4.4	Third Supplemental Indenture, dated as of February 23, 2016, to the Indenture, dated as of September 27, 2013, between General Motors Company, as issuer, and The Bank of New York Mellon, as Trustee, incorporated herein by reference to Exhibit 4.1 to the Current Report on Form 8-K of General Motors Company filed February 23, 2016	Incorporated by Reference

Exhibit Number	Exhibit Name	
4.5	Fourth Supplemental Indenture, dated as of August 7, 2017, to the Indenture, dated as of September 27, 2013, between General Motors Company, as issuer, and The Bank of New York Mellon, as Trustee, incorporated herein by reference to Exhibit 4.1 to the Current Report on Form 8-K of General Motors Company filed August 8, 2017	Incorporated by Reference
4.6	Fifth Supplemental Indenture, dated as of September 10, 2018, to the Indenture, dated as of September 27, 2013, between General Motors Company, as issuer, and The Bank of New York Mellon, as Trustee, incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K of General Motors Company filed September 10, 2018	Incorporated by Reference
4.7	Calculation Agency Agreement, dated as of August 7, 2017 between General Motors Company and the Bank of New York Mellon, as calculation agent, incorporated herein by reference to Exhibit 4.2 to the Current Report on Form 8-K of General Motors Company filed August 8, 2017	Incorporated by Reference
4.8	Calculation Agency Agreement, dated as of September 10, 2018 between General Motors Company and the Bank of New York Mellon, as calculation agent, incorporated herein by reference to Exhibit 4.3 to the Current Report on Form 8-K of General Motors Company filed September 10, 2018	Incorporated by Reference
10.1	Stockholders Agreement, dated as of October 15, 2009 between General Motors Company, the United States Department of the Treasury, Canada GEN Investment Corporation (fka 7176384 Canada Inc.), the UAW Retiree Medical Benefits Trust, and, for limited purposes, General Motors LLC, incorporated herein by reference to Exhibit 10.8 to the Current Report on Form 8-K of General Motors Company filed November 16, 2009	Incorporated by Reference
10.2	Equity Registration Rights Agreement, dated as of October 15, 2009, between General Motors Company, the United States Department of Treasury, Canada GEN Investment Corporation (fka 7176384 Canada Inc.), the UAW Retiree Medical Benefits Trust, Motors Liquidation Company, and, for limited purposes, General Motors LLC, incorporated herein by reference to Exhibit 10.1 to the Current Report on Form 8-K of Motors Liquidation Company filed October 21, 2009	Incorporated by Reference
10.3	Letter Agreement regarding Equity Registration Rights Agreement, dated October 21, 2010, among General Motors Company, the United States Department of Treasury, Canada GEN Investment Corporation, the UAW Retiree Medical Benefits Trust and Motors Liquidation Company, incorporated herein by reference to Exhibit 10.43 to Amendment No. 5 to the Registration Statement on Form S-1 (File No. 333-168919) of General Motors Company filed November 3, 2010	Incorporated by Reference
10.4*	Form of Compensation Statement, incorporated herein by reference to Exhibit 10.14 to the Annual Report on Form 10-K of General Motors Company filed April 7, 2010	Incorporated by Reference
10.5*	The General Motors Company Deferred Compensation Plan for Non-Employee Directors, incorporated herein by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q of General Motors Company filed May 6, 2011	Incorporated by Reference
10.6*	General Motors Company Executive Retirement Plan, with modifications through October 10, 2012, incorporated herein by reference to Exhibit 10.12 to the Annual Report on Form 10-K of General Motors Company filed February 15, 2013	Incorporated by Reference
10.7*	Amendment No. 1 to General Motors Company Executive Retirement Plan, with modifications through October 10, 2012, incorporated herein by reference to Exhibit 10.2 to the Current Report on Form 8-K of General Motors Company filed February 3, 2016	Incorporated by Reference
10.8*	General Motors Company 2014 Long-Term Incentive Plan, incorporated herein by reference to Exhibit 10.1 to the Current Report on Form 8-K of General Motors Company filed June 12, 2014	Incorporated by Reference
10.9*	Form of Non-Qualified Stock Option Agreement under the 2014 Long-Term Incentive Plan, incorporated herein by reference to Exhibit 10.1 to the Current Report on Form 8-K of General Motors Company filed July 30, 2015	Incorporated by Reference
10.10*	Form of General Motors Company Restricted Stock Unit Award Agreement under the 2014 Long-Term Incentive Plan, incorporated herein by reference to Exhibit 10.4 to the Quarterly Report on Form 10-Q of General Motors Company filed April 21, 2016	Incorporated by Reference
10.11*	Form of General Motors Company Performance Stock Unit Award Agreement under the 2014 Long-Term Incentive Plan, incorporated herein by reference to Exhibit 10.5 to the Quarterly Report on Form 10-Q of General Motors Company filed April 21, 2016	Incorporated by Reference
10.12*	Form of General Motors Company Performance Share Unit Award Agreement under the 2014 Long-Term Incentive Plan, incorporated herein by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q of General Motors Company filed April 28, 2017	Incorporated by Reference
10.13*	General Motors Company 2016 Equity Incentive Plan, incorporated herein by reference to Exhibit 99.1 to the Registration Statement on Form S-8 of General Motors Company filed May 13, 2016	Incorporated by Reference
10.14*	General Motors Company Vehicle Operations - Senior Management Vehicle Program (SMVP) Supplement, revised December 15, 2005, incorporated herein by reference to Exhibit 10(g) to the Annual Report on Form 10-K of Motors Liquidation Company filed March 28, 2006	Incorporated by Reference
10.15*	Form of Director and Officer Indemnification Agreement, incorporated herein by reference to Exhibit 10.6 to the Quarterly Report on Form 10-Q of General Motors Company filed April 21, 2016	Incorporated by Reference
10.16*	General Motors Company 2017 Short-Term Incentive Plan, incorporated herein by reference to Exhibit 10.25 to the Annual Report on Form 10-K of General Motors Company filed February 6, 2018	Incorporated by Reference

Exhibit Number	Exhibit Name	
10.17*	General Motors Company 2017 Long-Term Incentive Plan, incorporated herein by reference to Exhibit 4.1 to the Registration Statement on Form S-8 of General Motors Company filed June 16, 2017	Incorporated by Reference
10.18*	Form of Performance Share Unit Award Agreement under the General Motors Company 2017 Long-Term Incentive Plan, incorporated herein by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q of General Motors Company filed April 26, 2018	Incorporated by Reference
10.19*	Form of Non-Qualified Stock Option Award Agreement under the General Motors Company 2017 Long- Term Incentive Plan, incorporated herein by reference to Exhibit 10.2 to the Quarterly Report on Form 10- Q of General Motors Company filed April 26, 2018	Incorporated by Reference
10.20*	GM Cruise Holdings LLC 2018 Employee Incentive Plan	Filed Herewith
10.21*	Form of GM Cruise Holdings LLC 2018 Employee Incentive Plan Restricted Stock Unit Award Agreement	Filed Herewith
10.22*	Form of GM Cruise Holdings LLC 2018 Employee Incentive Plan Stock Option Award Agreement	Filed Herewith
10.23*	Amended and Restated General Motors LLC U.S. Executive Severance Program	Filed Herewith
10.24	Amended and Restated Warrant Agreement, dated as of October 16, 2009, between General Motors Company and U.S. Bank National Association, as Warrant Agent, including a Form of Warrant Certificate attached as Exhibit D thereto, relating to warrants with a \$55 original (\$18.33 after stock split) exercise price and a July 10, 2019 expiration date, incorporated herein by reference to Exhibit 10.30 to the Annual Report on Form 10-K of General Motors Company filed April 7, 2010	Incorporated by Reference
10.25	Amendment to Warrant Agreements between General Motors Company and U.S. Bank National Association, incorporated herein by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q of General Motors Company filed April 24, 2014	Incorporated by Reference
10.26†	Amended and Restated Master Agreement, dated as of December 19, 2012, between General Motors Holdings LLC and Peugeot S.A., incorporated herein by reference to Exhibit 10.24 to the Annual Report on Form 10-K of General Motors Company filed February 6, 2014	Incorporated by Reference
10.27	Amendment, dated May 2, 2017 to the Master Agreement between General Motors Holdings, LLC and Peugeot S.A., incorporated herein by reference to Exhibit 10.4 to the Quarterly Report on Form 10-Q of General Motors Company filed July 25, 2017	Incorporated by Reference
10.28	Amendment Number 2, dated July 30, 2017, to the Master Agreement between General Motors Holdings, LLC and Peugeot S.A., incorporated herein by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q of General Motors Company filed October 24, 2017	Incorporated by Reference
10.29	Amendment Number 3, dated October 30, 2017, to the Master Agreement between General Motors Holdings, LLC and Peugeot S.A., incorporated herein by reference to Exhibit 10.31 to the Annual Report on Form 10-K of General Motors Company filed February 6, 2018	Incorporated by Reference
10.30†	Third Amended and Restated 3-Year Revolving Credit Agreement, dated as of April 18, 2018, among General Motors Company, General Motors Financial Company, Inc., GM Global Treasury Centre, General Motors do Brasil Ltda., the subsidiary borrowers from time to time parties thereto, the several lenders from time to time party thereto, JPMorgan Chase Bank, N.A., as administrative agent, and Citibank, N.A., as syndication agent, incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K of General Motors Company filed April 20, 2018	Incorporated by Reference
10.31†	Third Amended and Restated 5-Year Revolving Credit Agreement, dated as of April 18, 2018, among General Motors Company, General Motors Financial Company, Inc., GM Global Treasury Centre, General Motors do Brasil Ltda., the subsidiary borrowers from time to time parties thereto, the several lenders from time to time party thereto, JPMorgan Chase Bank, N.A., as administrative agent, and Citibank, N.A., as syndication agent, incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K of General Motors Company filed April 20, 2018	Incorporated by Reference
10.32†	364-Day Revolving Credit Agreement, dated as of April 18, 2018, among General Motors Company, General Motors Financial Company, Inc., GM Global Treasury Centre, the subsidiary borrowers from time to time parties thereto, the several lenders from time to time party thereto, JPMorgan Chase Bank, N.A., as administrative agent, and Citibank, N.A., as syndication agent, incorporated by reference to Exhibit 10.3 to the Current Report on Form 8-K of General Motors Company filed April 20, 2018	Incorporated by Reference
10.33	Second Amended and Restated Limited Liability Company Agreement of GM Cruise Holdings LLC, dated October 3, 2018	Filed Herewith
16.1	Letter from Deloitte & Touche LLP, incorporated herein by reference to Exhibit 16.1 to the Current Report on Form 8-K/A of General Motors Company filed February 12, 2018	Incorporated by Reference
21	Subsidiaries and Joint Ventures of the Registrant as of December 31, 2018	Filed Herewith
23.1	Consent of Ernst & Young LLP	Filed Herewith
23.2	Consent of Deloitte & Touche LLP	Filed Herewith
24	Power of Attorney for Directors of General Motors Company	Filed Herewith
31.1	Section 302 Certification of the Chief Executive Officer	Filed Herewith
31.2	Section 302 Certification of the Chief Financial Officer	Filed Herewith

Exhibit Number	Exhibit Name	
32	Certification Pursuant to 18 U.S.C. Section 1350, As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Furnished with this Report
101.INS	XBRL Instance Document	Filed Herewith
101.SCH	XBRL Taxonomy Extension Schema Document	Filed Herewith
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document	Filed Herewith
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document	Filed Herewith
101.LAB	XBRL Taxonomy Extension Label Linkbase Document	Filed Herewith
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document	Filed Herewith

[†] Certain confidential portions have been omitted pursuant to a granted request for confidential treatment, which has been separately filed with the SEC.

* * * * * * *

Item 16. Form 10-K Summary

None

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^{*} Management contracts and compensatory plans and arrangements required to be filed as exhibits pursuant to Item 15(b) of this Report.

^{**} The Company agrees to furnish supplementally a copy of any omitted exhibit or schedule to the SEC upon request.

SIGNATURES

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

GENERAL MOTORS COMPANY (Registrant)

By: /s/ MARY T. BARRA

Mary T. Barra Chairman and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below on this 6th day of February 2019 by the following persons on behalf of the registrant and in the capacities indicated, including a majority of the directors.

Signature	Title
/s/ MARY T. BARRA Mary T. Barra	Chairman and Chief Executive Officer
/s/ DHIVYA SURYADEVARA Dhivya Suryadevara	Executive Vice President and Chief Financial Officer
/s/ CHRISTOPHER T. HATTO Christopher T. Hatto	Vice President, Controller and Chief Accounting Officer
/s/ THEODORE M. SOLSO* Theodore M. Solso	Lead Director
/s/ LINDA R. GOODEN* Linda R. Gooden	Director
/s/ JOSEPH JIMENEZ* Joseph Jimenez	Director
/s/ JANE L. MENDILLO* Jane L. Mendillo	Director
/s/ ADMIRAL MICHAEL G. MULLEN, USN (ret.)* Admiral Michael G. Mullen, USN (ret.)	Director
/s/ JUDITH A. MISCIK* Judith A. Miscik	Director
/s/ JAMES J. MULVA* James J. Mulva	Director
/s/ PATRICIA F. RUSSO* Patricia F. Russo	Director
/s/ THOMAS M. SCHOEWE* Thomas M. Schoewe	Director
/s/ CAROL M. STEPHENSON* Carol M. Stephenson	Director
/s/ DEVIN N. WENIG* Devin N. Wenig	Director
-	

*By: /s/ RICK HANSEN

Rick Hansen
Attorney-in-Fact

CERTIFICATION

- I, Mary T. Barra, certify that:
 - 1. I have reviewed this Annual Report on Form 10-K of General Motors Company;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f)) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the Audit Committee of the registrant's Board of Directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ MARY T. BARRA

Mary T. Barra Chairman and Chief Executive Officer

CERTIFICATION

- I, Dhivya Survadevara, certify that:
 - 1. I have reviewed this Annual Report on Form 10-K of General Motors Company;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the Audit Committee of the registrant's Board of Directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ DHIVYA SURYADEVARA

Dhivya Suryadevara Executive Vice President and Chief Financial Officer

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of General Motors Company (the "Company") on Form 10-K for the period ended December 31,2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned officers of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that to the best of such officer's knowledge:

- 1. The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- 2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ MARY T. BARRA

Mary T. Barra Chairman and Chief Executive Officer

/s/ DHIVYA SURYADEVARA

Dhivya Suryadevara Executive Vice President and Chief Financial Officer

