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

FORM 10-K

(Mark One)

[X] **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2019

OR

[ ] **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from __________ to __________.

Commission File No. 001-11241

CATERPILLAR FINANCIAL SERVICES CORPORATION
(Exact name of Registrant as specified in its charter)

Delaware **(State or other jurisdiction of incorporation or organization)**	**37-1105865** **(I.R.S. Employer Identification No.)**
2120 West End Ave., **Nashville, Tennessee** **(Address of principal executive offices)**	**37203-0001** **(Zip Code)**

Registrant's telephone number, including area code: (615) 341-1000

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Medium-Term Notes, Series H, 3.300% Notes Due 2024	CAT/24	New York Stock Exchange

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

The Registrant is a wholly-owned subsidiary of Caterpillar Inc. and meets the conditions set forth in General Instruction (I)(1)(a) and (b) of Form 10-K, and is therefore filing this Form with the reduced disclosure format.

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

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

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).
Yes [✓] No [ ]

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

Large accelerated filer [ ] Accelerated filer [ ] Non-accelerated filer [✓]
Smaller reporting company [ ] Emerging Growth Company [ ]

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

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

As of February 19, 2020, one share of common stock of the registrant was outstanding, which is owned by Caterpillar Inc.

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PART I

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

Certain statements contained in this Annual Report on Form 10-K may be considered "forward-looking statements" as that term is defined in the Private Securities Litigation Reform Act of 1995. These statements may relate to future events or our future financial performance, which may involve known and unknown risks and uncertainties and other factors that may cause our actual results, levels of activity, performance or achievement to be materially different from those expressed or implied by any forward-looking statements. From time to time, we may also provide forward-looking statements in oral presentations to the public or in other materials we issue to the public. Forward-looking statements give current expectations or forecasts of future events about the company. You may identify these statements by the fact that they do not relate to historical or current facts and may use words such as "believes," "expects," "estimates," "anticipates," "will," "should," "plan," "forecast," "target," "guide," "project," "intend," "could" and similar words or phrases. These statements are only predictions. Actual events or results may differ materially due to factors that affect international businesses, including changes in economic conditions, disruptions in the global financial and credit markets, and changes in laws, regulations and political stability, as well as factors specific to Cat Financial and the markets we serve, including the market's acceptance of our products and services, the creditworthiness of our customers, interest rate and currency rate fluctuations and estimated residual values of leased equipment. These risk factors may not be exhaustive. We operate in a continually changing business environment, and new risk factors emerge from time to time. We cannot predict these new risk factors, nor can we assess the impact, if any, of these new risk factors on our businesses or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those projected in any forward-looking statements. Accordingly, forward-looking statements should not be relied upon as a prediction of actual results. All of the forward-looking statements are qualified in their entirety by reference to the factors discussed under the captions "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in this Form 10-K and could cause results to differ materially from those projected in the forward-looking statements. Cat Financial undertakes no obligation to publicly update forward-looking statements, whether as a result of new information, future events or otherwise. You may, however, consult any related disclosures we may make in our subsequent Form 10-Q and Form 8-K reports filed with the Securities and Exchange Commission ("SEC").

Item 1. Business.

General

Caterpillar Financial Services Corporation was organized in 1981 in the State of Delaware (together with its subsidiaries, "Cat Financial," "the Company," "we" or "our"). We are a wholly-owned finance subsidiary of Caterpillar Inc. (together with its other subsidiaries, "Caterpillar" or "Cat") and our corporate headquarters is located in Nashville, Tennessee.

Nature of Operations

Our primary business is to provide retail and wholesale financing alternatives for Caterpillar products to customers and dealers around the world. Retail financing is primarily comprised of financing of Caterpillar equipment, machinery and engines. We also provide financing for vehicles, power generation facilities and marine vessels that, in most cases, incorporate Caterpillar products. In addition to retail financing, we also provide wholesale financing to Caterpillar dealers and purchase short-term trade receivables from Caterpillar. The various financing plans offered by Cat Financial are primarily designed to increase the opportunity for sales of Caterpillar products and generate financing income for Cat Financial. A significant portion of our activity is conducted in North America with additional offices and subsidiaries in Latin America, Asia/Pacific, Europe, Africa and the Middle East. Cat Financial has more than 35 years of experience providing financing for Caterpillar products, contributing to our knowledge of asset values, industry trends, financing structures and customer needs.

The Company's retail loans (totaling 49 percent*) include:

- Loans that allow customers and dealers to use their Caterpillar equipment or other assets as collateral to obtain financing (24 percent*).
- Installment sale contracts, which are equipment loans that enable customers to purchase equipment with a down payment or trade-in and structure payments over time (25 percent*).

The Company's retail leases (totaling 35 percent*) include:

- Finance (non-tax) leases, where the lessee for tax purposes is considered to be the owner of the equipment during the term of the lease, that either require or allow the customer to purchase the equipment for a fixed price at the end of the term (22 percent*).
- Tax leases that are classified as either operating or finance leases for financial accounting purposes, depending on the characteristics of the lease. For tax purposes, we are considered the owner of the equipment (12 percent*).
- Governmental lease-purchase plans in the U.S. that offer low interest rates and flexible terms to qualified non-federal government agencies (1 percent*).

The Company purchases short-term trade receivables from Caterpillar (14 percent*).

The Company's wholesale loans and leases (2 percent*) include inventory/rental programs, which provide assistance to dealers by financing their new Caterpillar inventory and rental fleets.

*Indicates the percentage of total portfolio as of December 31, 2019. We define total portfolio as Finance receivables, net plus Equipment on operating leases, net.

Competitive Environment

We operate in a highly competitive environment, with financing for users of Caterpillar equipment available through a variety of sources, principally commercial banks and finance and leasing companies. Our competitors include Wells Fargo Bank, N.A., Banc of America Leasing & Capital LLC, BNP Paribas Leasing Solutions Limited, Australia and New Zealand Banking Group Limited and various other banks and finance companies. In addition, many of the manufacturers that compete with Caterpillar also own financial subsidiaries, such as John Deere Capital Corporation, Komatsu Financial L.P., Volvo Financial Services and Kubota Credit Corporation, which, in some instances, utilize below-market interest rate programs (funded by the manufacturer) to support machine sales. We and Caterpillar work together to provide a broad array of financial merchandising programs to compete around the world.

We provide financing only when certain criteria are met. Credit decisions are based on a variety of credit quality factors, including prior payment experience, customer financial information, credit-rating agency ratings, loan-to-value ratios and other internal metrics. We typically maintain a security interest in retail-financed equipment and require physical damage insurance coverage on financed equipment. We finance a significant portion of Caterpillar dealers' sales and inventory of Caterpillar equipment throughout the world (see Note 15 of Notes to Consolidated Financial Statements for more information regarding our segments and geographic areas). Our competitive position is improved by marketing programs offered in conjunction with Caterpillar and/or Caterpillar dealers. Under these programs, Caterpillar, or the dealer, funds an amount at the outset of the transaction, which we then recognize as revenue over the term of the financing. We believe that these marketing programs provide Cat Financial a significant competitive advantage in financing Caterpillar products.

In certain instances, our operations are subject to supervision and regulation by state, federal and various foreign governmental authorities and may be subject to various laws and judicial and administrative decisions imposing various requirements and restrictions which, among other things, (i) regulate credit granting activities and the administration of loans, (ii) establish maximum interest rates, finance charges and other charges, (iii) require disclosures to customers and investors, (iv) govern secured transactions, (v) set collection, foreclosure, repossession and other trade practices and (vi) regulate the use and reporting of information related to a borrower's credit experience. Our ability to comply with these and other governmental and legal requirements and restrictions affects our operations.

We also have agreements with Caterpillar that are significant to our operations. These agreements provide us with certain types of operational and administrative support from Caterpillar such as the administration of employee benefit plans, financial support, funding support and various forms of corporate services that are integral to the conduct of our business. For more information on these agreements, please refer to Note 14 of Notes to Consolidated Financial Statements.

Employment

As of December 31, 2019, the Company had 1,973 full-time employees, an increase of 5 percent from December 31, 2018.

Available Information

The Company files electronically with the SEC required reports on Form 8-K, Form 10-Q, Form 10-K and registration statements on Form S-3 and other forms or reports as required. The SEC maintains a website (www.sec.gov) that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. Copies of our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to these reports filed or furnished with the SEC are available free of charge through Caterpillar Inc.'s website (www.caterpillar.com/secfilings) as soon as reasonably practicable after filing with the SEC. Copies may also be obtained free of charge by writing to: Legal Dept., Caterpillar Financial Services Corporation, 2120 West End Ave., Nashville, Tennessee 37203-0001. In addition, the public may obtain more detailed information about our parent company, Caterpillar Inc., by visiting its website (www.caterpillar.com). None of the information contained at any time on our website, Caterpillar's website or the SEC's website is incorporated by reference into this document.

Item 1A. Risk Factors.

The statements in this section describe the most significant risks to our business and may contain "forward-looking statements" that are subject to the caption "CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS" presented prior to Item 1 of this report. The statements in this section should also be considered carefully in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the "Notes to Consolidated Financial Statements" to this Form 10-K. The risk factors described below are a cautionary discussion of risks, uncertainties and assumptions that we believe are significant to our business. These are factors that, individually or in the aggregate, we believe could make our actual results differ materially from expected or past results. Because it is impossible to predict or identify all such factors, the following factors should not be considered to be a complete discussion of risks, uncertainties and assumptions.

FINANCIAL RISKS

Disruptions or volatility in global financial markets could adversely impact the industries and markets in which we serve and operate

Continuing to meet our cash requirements over the long-term could require substantial liquidity and access to varied sources of funds, including capital and credit markets. Global economic conditions may cause volatility and disruptions in the capital and credit markets. While we have continued to maintain access to key global medium-term note and commercial paper markets, there can be no assurance that such markets will continue to represent a reliable source of financing. If global economic conditions were to deteriorate, we could face materially higher financing costs, become unable to access adequate funding to operate and grow our business and/or meet our debt service obligations as they mature, and we could be required to draw upon contractually committed lending agreements primarily provided by global banks and/or by seeking other funding sources. However, under extreme market conditions, there can be no assurance that such agreements and other funding sources would be available or sufficient. Any of these events could negatively impact our business, results of operations and financial condition.

The extent of any impact on our ability to meet our funding or liquidity needs would depend on several factors, including our operating cash flows, the duration of any market disruptions, changes in counterparty credit risk, the impact of government intervention in financial markets, including the effects of any programs or legislation designed to increase or restrict liquidity for certain areas of the market, general credit conditions, the volatility of equity and debt markets, our credit ratings and credit capacity and the cost of financing and other general economic and business conditions. Market disruption and volatility may also lead to a number of other risks in connection with these events, including but not limited to:

- Market developments that may affect the demand for Caterpillar products and/or customer confidence levels and may cause declines in the demand for financing and adverse changes in payment patterns, causing increases in delinquencies and default rates, which could impact our write-offs and provision for credit losses;
- The process we use to estimate losses inherent in our credit exposure requires a high degree of management's judgment regarding numerous subjective, qualitative factors, including forecasts of economic conditions and how economic predictors might impair the ability of our borrowers to repay their loans. If financial market disruption and volatility is experienced, the accuracy of these judgments may be impacted;
- Our ability to engage in routine funding transactions or borrow from other financial institutions on acceptable terms or at all could be adversely affected by disruptions in the capital markets or other events, including actions by rating agencies and deteriorating investor expectations; and

- Because our lending agreements are primarily with financial institutions, their ability to perform in accordance with any of our underlying agreements could be adversely affected by market volatility and/or disruptions in the equity and credit markets.

Failure to maintain our credit ratings would increase our cost of borrowing and could adversely affect our cost of funds, liquidity, competitive position and access to capital markets

Each of Caterpillar and Cat Financial's costs of borrowing and their respective ability to access the capital markets are affected not only by market conditions but also by the short-term and long-term credit ratings assigned to our respective debt by the major credit rating agencies. These ratings are based, in significant part, on each of Caterpillar's and Cat Financial's performance as measured by financial metrics such as net worth, interest coverage and leverage ratios, as well as transparency with rating agencies and timeliness of financial reporting. There can be no assurance that Caterpillar and Cat Financial will be able to maintain their credit ratings. We receive debt ratings from the major credit rating agencies. Moody's long- and short-term ratings of Caterpillar and Cat Financial are A3 and Prime-2 ("low-A"), while other major credit rating agencies maintain a "mid-A" debt rating. A downgrade of our credit rating by any of the major credit rating agencies would result in increased borrowing costs and could adversely affect Caterpillar's and our liquidity, competitive position and access to the capital markets, including restricting, in whole or in part, access to the commercial paper market. There can be no assurance that the commercial paper market will continue to be a reliable source of short-term financing for Cat Financial or an available source of short-term financing for Caterpillar. An inability to access the capital markets could have a material adverse effect on our cash flows, results of operations and financial condition.

Changes in interest rates, foreign currency exchange rates or market liquidity conditions could adversely affect our earnings and/or cash flows

Changes in interest rates, foreign currency exchange rates and market liquidity conditions could have a material adverse impact on our earnings and cash flows. Because our financial results are reported in U.S. dollars, but our operations are conducted internationally, currency exchange rates can have a significant impact on our business results. Additionally, because a significant number of our loans are made at fixed interest rates, our business results are subject to fluctuations in interest rates. Certain loans made by us and various financing extended to us are made at variable rates that use LIBOR as a benchmark for establishing the interest rate. LIBOR is the subject of proposals for reform. On July 27, 2017, the United Kingdom’s Financial Conduct Authority announced that it intends to stop persuading or compelling banks to submit LIBOR rates after 2021. These reforms may cause LIBOR to cease to exist, new methods of calculating LIBOR to be established or the establishment of an alternative reference rate(s). Several offerings of securities that include such an alternative reference rate have now been completed by other companies. The consequences of these developments are uncertain and could have an adverse impact on the market value for or value of LIBOR-linked securities, loans, derivatives and other financial obligations or extensions of credit held by or due to us, as well as the revenue and expenses associated with those securities, loans and financial instruments. Cat Financial has created a cross-functional team that will assess risk across multiple categories as it relates to the use of LIBOR in securities, loans, derivatives and other financial obligations or extensions of credit held by or due to us. The team is also closely monitoring the progress of LIBOR reform and preparing to incorporate appropriate fallback language, for transitioning to an alternative reference rate(s), into new agreements with customers. The team is reviewing how to best manage customer agreements that extend beyond 2021 and utilize LIBOR. Other changes in market interest rates may influence our borrowing costs and could reduce our earnings and cash flows, our returns on financial investments and the valuation of derivative contracts. Please see "-Macroeconomic Risks - Changes in Government Monetary or Fiscal Policies May Negatively Impact Results" below for further discussion of changes in interest rates.

In addition, because we make a significant number of loans in currencies other than the U.S. dollar, fluctuations in foreign currency exchange rates could also reduce our earnings and cash flows. There has been, and may continue to be, volatility in currency exchange rates as a result of the United Kingdom’s withdrawal from the European Union (commonly known as "Brexit"), especially between the U.S. dollar and the British pound.

We also rely on a number of diversified global debt capital markets and funding programs to provide liquidity for our global operations, including commercial paper, medium-term notes, retail notes, variable denomination floating rate demand notes and bank loans. Significant changes in market liquidity conditions could impact our access to funding and the associated funding cost and reduce our earnings and cash flows.

We manage interest rate, foreign currency exchange rate and market liquidity risks with a variety of techniques that include a match-funding strategy that addresses interest rate risk by aligning the interest rate profile (fixed or floating rate and duration) of our debt portfolio with the interest rate profile of our receivables portfolio within predetermined ranges on an ongoing basis, the selective use of derivatives and a broadly diversified funding program. There can be no assurance, however, that fluctuations in interest rates, currency exchange rates and market liquidity conditions will not have a material adverse impact on our earnings and cash flows. If any of the variety of instruments and strategies we use to hedge our exposure to these various types of risk is ineffective, we may have an adverse impact on our earnings and cash flows.

Our business is significantly influenced by the credit risk associated with our customers and an increase in delinquencies, repossessions or net losses could adversely affect our results

Our business is significantly influenced by the credit risk associated with our customers. The creditworthiness of each customer and the rate of delinquencies, repossessions and net losses on customer obligations are directly impacted by several factors, including, but not limited to, relevant industry (particularly construction-related industries) and economic conditions, the availability of capital, the experience and expertise of the customer's management team, commodity prices, interest rates, political events and the sustained value of the underlying collateral. Any increase in delinquencies, repossessions and net losses on customer obligations could have a material adverse effect on our earnings and cash flows.

In addition, although we evaluate and adjust our allowance for credit losses related to past due and non-performing receivables on a regular basis, adverse economic conditions or other factors that might cause deterioration of the financial health of our customers could change the timing and level of payments received and necessitate an increase in our estimated losses, which could also have a material adverse effect on our earnings and cash flows.

A decrease in the residual value of the equipment that we finance could adversely affect our results

Declines in the residual value of equipment financed by us may reduce our earnings. The residual value of leased equipment is determined based on its estimated end-of-term market value at the time of the expiration of the lease term. We estimate the residual value of leased equipment at the inception of the lease based on a number of factors, including historical wholesale market sales prices, past remarketing experience and any known significant market/product trends. If estimated end-of-term market values significantly decline due to economic factors, obsolescence or other adverse circumstances, we may not realize such residual value, which could reduce our earnings.

Restrictive covenants in our debt agreements could limit our financial and operating flexibility

Cat Financial and certain subsidiaries have credit agreements under which we borrow or have the ability to borrow funds for use in our respective businesses that are utilized primarily for general corporate purposes. Certain of these agreements include covenants relating to our financial performance and financial position. The two most significant financial covenants included in these agreements are: (1) a leverage ratio covenant that requires us to maintain a ratio of consolidated debt to consolidated net worth of not greater than 10 to 1, calculated (i) on a monthly basis as the average of the leverage ratios determined on the last day of each of the six preceding calendar months and (ii) at each December 31; and (2) an interest coverage ratio that requires us to maintain a ratio of (i) profit excluding income taxes, interest expense and net gain/(loss) from interest rate derivatives to (ii) interest expense of not less than 1.15 to 1, in each case, calculated at the end of each calendar quarter for the rolling four-quarter period then most recently ended for us and our subsidiaries on a consolidated basis in accordance with generally accepted accounting principles. In addition, we are restricted in several of our agreements from terminating, amending or modifying our support agreement with Caterpillar. We are also restricted in our ability to incur secured indebtedness or consolidate, merge or sell assets. Similarly, we are also bound by covenants in various agreements that involve Caterpillar and its obligation to maintain a consolidated net worth of not less than $9 billion at all times during each fiscal year.

Although we do not believe any of these covenants presently materially restrict our operations, our ability to meet any one particular financial covenant may be affected by events that could be beyond our control and could result in material adverse consequences that negatively impact our business, results of operations and financial condition. These consequences may include the acceleration of repayment of amounts outstanding under certain of our credit agreements, the triggering of an obligation to redeem certain debt securities, the termination of existing unused credit commitments by our lenders, the refusal by our lenders to extend further credit under one or more of our credit agreements or the lowering or modification of our credit ratings, including those of any of our subsidiaries. We cannot provide assurance that we will continue to comply with each credit covenant, particularly if we were to encounter challenging and volatile market conditions.

MACROECONOMIC RISKS

Changes in government monetary or fiscal policies may negatively impact our results

Most countries where Caterpillar products and services are sold have established central banks to regulate monetary systems and influence economic activities, generally by adjusting interest rates. Interest rate changes affect overall economic growth, which in turn affects Caterpillar's sales and our financing activities. Interest rate changes may also affect customers' ability to finance machine purchases, can change the optimal time to keep machines in a fleet and can impact the ability of Caterpillar's suppliers to finance the production of parts and components necessary to manufacture and support Caterpillar products.

Central banks and other policy arms of many countries may take actions to vary the amount of liquidity and credit available in an economy. The impact from a change in liquidity and credit policies could negatively affect the customers and markets we serve or our suppliers, create supply chain inefficiencies and could adversely impact our business, results of operations and financial condition.

Government policies on taxes and spending also affect our business. Throughout the world, government spending finances a significant portion of infrastructure development, such as highways, rail systems, airports, sewer and water systems, waterways and dams. Tax regulations determine asset depreciation lives and impact the after-tax returns on business activity and investment, both of which influence investment decisions. Unfavorable developments, such as decisions to reduce public spending or to increase taxes, could negatively impact our results.

Our global operations are exposed to political and economic risks, commercial instability and global events beyond our control in the countries in which we operate

Our global operations are dependent upon products manufactured, purchased, sold and financed in the U.S. and internationally, including in countries with political and economic instability or uncertainty. This includes, for example, the uncertainty related to Brexit. Some countries have greater political and economic volatility and greater vulnerability to infrastructure and labor disruptions than others. Operating in different regions and countries exposes us to a number of risks, including:

- Multiple and potentially conflicting legal and regulatory requirements that are subject to change, including but not limited to, those legal and regulatory requirements described in Item 1 of this report under the heading Competitive Environment;
- Imposition of currency restrictions, restrictions on repatriation of earnings or other restraints;
- Imposition of new or additional tariffs or quotas;
- Difficulty of enforcing agreements and collecting receivables through foreign legal systems;
- Withdrawal from or modification of trade agreements or the negotiation of new trade agreements;
- Imposition of new or additional trade and economic sanctions laws imposed by the U.S. or foreign governments;
- War or acts of terrorism; and
- Political and economic instability or civil unrest that may severely disrupt economic activity in affected countries.

The occurrence of one or more of these events may negatively impact our business, results of operations and financial condition.

OPERATIONAL RISKS

The success of our business depends upon the demand for Caterpillar's products

Our primary business is to provide retail and wholesale financing alternatives for Caterpillar products to customers and dealers and is therefore largely dependent upon the demand for Caterpillar's products and customers' willingness to enter into financing or leasing agreements, which may be negatively affected by challenging global economic conditions. As a result, a significant or prolonged decrease in demand could have a material adverse effect on our business, financial condition, results of operations and cash flows. The demand for Caterpillar's products and our products and services is influenced by a number of factors, including:

- General world economic conditions and the level of energy, mining, construction and manufacturing activity;
- Changes and uncertainties in the monetary and fiscal policies of various governmental and regulatory entities;
- Fluctuations in demand and prices for certain commodities;
- Fluctuations in currency exchange rates and interest rates;
- Political, economic and legislative changes;
- Caterpillar's ability to produce products that meet customers' needs;
- Caterpillar's ability to maintain key dealer relationships;

- The ability of Caterpillar dealers to sell Caterpillar products and their practices regarding inventory control; and
- Changes in pricing policies by Caterpillar or its competitors.

Any significant adverse changes to these factors could negatively impact our results.

<u>Changes in the marketing, operational or administrative support that we receive from Caterpillar could adversely affect our results</u>

We participate in certain marketing programs offered in conjunction with Caterpillar and/or Caterpillar dealers that allow us to offer financing to customers at interest rates that are below market rates. These marketing programs provide us with a significant competitive advantage in financing Caterpillar products. Any change in these marketing programs or reduction in our ability to offer competitively priced financing to customers could reduce the percentage of Caterpillar products financed by us, which could have a material adverse effect on our business, financial condition, results of operations and cash flows. Caterpillar also provides us with other types of operational and administrative support, such as the administration of employee benefit plans, which is integral to the conduct of our business. Any changes in the levels of support from Caterpillar could also negatively impact our results.

<u>The success of our business depends on our ability to develop, produce and market quality products and services that meet our customers' needs</u>

We operate in a highly competitive environment, with financing for users of Caterpillar equipment available through a variety of sources, principally commercial banks and finance and leasing companies. Increasing competition may adversely affect our business if we are unable to match the products and services of our competitors. Also, as noted above, any changes to the marketing programs offered in conjunction with Caterpillar and/or Caterpillar dealers, which allow us to offer financing to customers at interest rates that are below market rates, could have a materially adverse effect on our business.

<u>Increased information technology security threats and more sophisticated computer crime pose a risk to our systems, networks, products and services</u>

We rely upon information technology systems and networks, some of which are managed by third parties, in connection with a variety of business activities. Additionally, we collect and store sensitive information relating to our business, customers, dealers, suppliers and employees. Operating these information technology systems and networks and processing and maintaining this data in a secure manner, is critical to our business operations and strategy. Information technology security threats -- from user error to cybersecurity attacks designed to gain unauthorized access to our systems, networks and data -- are increasing in frequency and sophistication. Cybersecurity attacks may range from random attempts to coordinated and targeted attacks, including sophisticated computer crime and advanced persistent threats. These threats pose a risk to the security of our systems and networks and the confidentiality, availability and integrity of our data. Cybersecurity attacks could also include attacks targeting customer data or the security, integrity and/or reliability of the hardware and software installed in our products. It is possible that these systems could have vulnerabilities, which could go unnoticed for a period of time. While various procedures and controls have been and are being utilized to mitigate such risks, there can be no guarantee that the actions and controls we have implemented and are implementing, or which we cause or have caused third party service providers to implement, will be sufficient to protect our systems, information or other property.

We have experienced cyber security threats and vulnerabilities in our systems and those of our third party providers, and we have experienced viruses and attacks targeting our information technology systems and networks. Such prior events, to date, have not had a material impact on our financial condition, results of operations or liquidity. However, the potential consequences of a future material cybersecurity attack include reputational damage, litigation with third parties, government enforcement actions, penalties, disruption to systems, unauthorized release of confidential or otherwise protected information, corruption of data and increased cybersecurity protection and remediation costs, which in turn could adversely affect our competitiveness, results of operations and financial condition. Due to the evolving nature of such security threats, the potential impact of any future incident cannot be predicted. Further, the amount of insurance coverage we maintain may be inadequate to cover claims or liabilities relating to a cybersecurity attack.

In addition, data we collect, store and process is subject to a variety of U.S. and international laws and regulations, such as the European Union's General Data Protection Regulation that became effective in May 2018, which carry, in many cases, significant potential penalties for noncompliance.

LEGAL & REGULATORY RISKS

Our global operations are subject to a wide-range of trade and anti-corruption laws and regulations

Due to the international scope of our operations, we are subject to a complex system of laws and regulations, including U.S. regulations issued by the Office of Foreign Assets Control. Any alleged or actual violations may subject us to increased government scrutiny, investigation and civil and criminal penalties and may limit our ability to provide financing outside the U.S. and/or potentially require us to divest portions of our existing portfolio under certain circumstances. Furthermore, embargoes and sanctions imposed by the U.S. and other governments prohibiting providing financing to specific persons or countries may expose us to potential criminal and civil sanctions. We cannot predict the nature, scope or effect of future regulatory requirements to which our operations might be subject or, in certain locations, the way existing laws might be administered or interpreted.

In addition, the U.S. Foreign Corrupt Practices Act and similar anti-corruption laws of other countries generally prohibit companies and their intermediaries from making improper payments or providing anything of value to improperly influence foreign government officials for the purpose of obtaining or retaining business or obtaining an unfair advantage. Recent years have seen a substantial increase in the global enforcement of anti-corruption laws. Our continued operation and expansion outside the U.S., including in developing countries, expose us to the risk of such violations. Violations of anti-corruption laws by our employees or intermediaries acting on our behalf may result in severe criminal or civil sanctions, could disrupt our business, and could result in an adverse effect on our reputation, business, results of operations or financial condition.

New regulations or changes in financial services regulation could adversely impact our results of operations and financial condition

Our operations are highly regulated by governmental authorities in the locations where we operate, which can impose significant additional costs and/or restrictions on our business. In the U.S. for example, certain of our activities are subject to the U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act, which includes extensive provisions regulating the financial services industry. As a result, we have become and could continue to become subject to additional regulatory costs that could be significant and could have an adverse effect on our results of operations and financial condition. Changes in or additional regulations in the U.S. or internationally impacting the financial services industry could also add significant cost or operational constraints that might have an adverse effect on our results of operations and financial condition.

We may incur additional tax expense or become subject to additional tax exposure

We are subject to income taxes in the U.S. and numerous other jurisdictions. Our future results of operations could be adversely affected by changes in the effective tax rate as a result of a change in the mix of earnings between U.S. and non-U.S. jurisdictions or among jurisdictions with differing statutory tax rates, changes in our overall profitability, changes in tax laws or treaties or in their application or interpretation, changes in tax rates, changes in generally accepted accounting principles, changes in the valuation of deferred tax assets and liabilities, changes in the amount of earnings indefinitely reinvested in certain non-U.S. jurisdictions, the results of audits and examinations of previously filed tax returns and continuing assessments of our tax exposures. We are also subject to the continuous examination of our income tax returns by the U.S. Internal Revenue Service and other tax authorities. We regularly assess the likelihood of an adverse outcome resulting from these examinations. If our effective tax rates 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.

Changes in accounting guidance could have an adverse effect on our results of operations

Our consolidated financial statements are subject to the application of generally accepted accounting principles, which is periodically revised and/or expanded. Accordingly, from time to time we are required to adopt new or revised accounting guidance and related interpretations issued by recognized authoritative bodies, including the Financial Accounting Standards Board and the SEC. Market conditions have prompted accounting standard setters to issue new guidance, which further interprets or seeks to revise accounting pronouncements related to various transactions, as well as to issue new guidance expanding disclosures. The impact of accounting pronouncements that have been issued but not yet implemented is disclosed in our annual and quarterly reports on Form 10-K and Form 10-Q. An assessment of proposed guidance is not provided, as such proposals are subject to change through the exposure process and, therefore, their effects on our financial statements cannot be meaningfully assessed. It is possible that future accounting guidance we are required to adopt or future changes in accounting principles could change the current accounting treatment that we apply to our consolidated financial statements and that such changes could have a material adverse effect on our business, results of operations and financial condition.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

Our corporate headquarters are located in Nashville, Tennessee. We maintain forty-six offices in total, of which nine are located in North America (eight in the U.S. and one in Canada), twenty-one are located in Europe, one is located in Africa, one is located in the Middle East, nine are located in Asia/Pacific and five are located in Latin America (see Note 15 of Notes to Consolidated Financial Statements for more information regarding our segments and geographic areas). All of our offices are leased, except for our corporate headquarters building, which we purchased in 2018.

Item 3. Legal Proceedings.

We are involved in unresolved legal actions that arise in the normal course of business. Although it is not possible to predict with certainty the outcome of our unresolved legal actions, we believe that these unresolved legal actions will neither individually nor in the aggregate have a material adverse effect on our consolidated results of operations, financial position or liquidity.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

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

Our stock is not publicly traded. Caterpillar Inc. is the owner of our one outstanding share. Cash dividends of $25 million, $400 million and $725 million were paid to Caterpillar in 2019, 2018 and 2017, respectively.

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

OVERVIEW

We reported revenues of $2.97 billion for 2019, an increase of $119 million, or 4 percent, compared with 2018. Profit was $410 million for 2019, a $105 million, or 34 percent, increase from 2018.

The increase in revenues was primarily due to a $108 million favorable impact from higher average financing rates and a $21 million favorable impact from higher average earning assets, partially offset by a $35 million unfavorable impact due to the termination of a committed credit facility with Caterpillar.

Profit before income taxes was $628 million for 2019, a $195 million, or 45 percent, increase from 2018. Most of the increase was due to a $192 million decrease in provision for credit losses, driven by a lower allowance rate compared with 2018. The lower allowance rate was due to write-offs of accounts in 2019 that were reserved for in 2018, primarily in the Caterpillar Power Finance portfolio. In addition, there was a $99 million increase in net yield on average earning assets. These favorable impacts were partially offset by a $73 million increase in general, operating and administrative expenses and the $35 million unfavorable impact mentioned above related to the termination of a committed credit facility with Caterpillar.

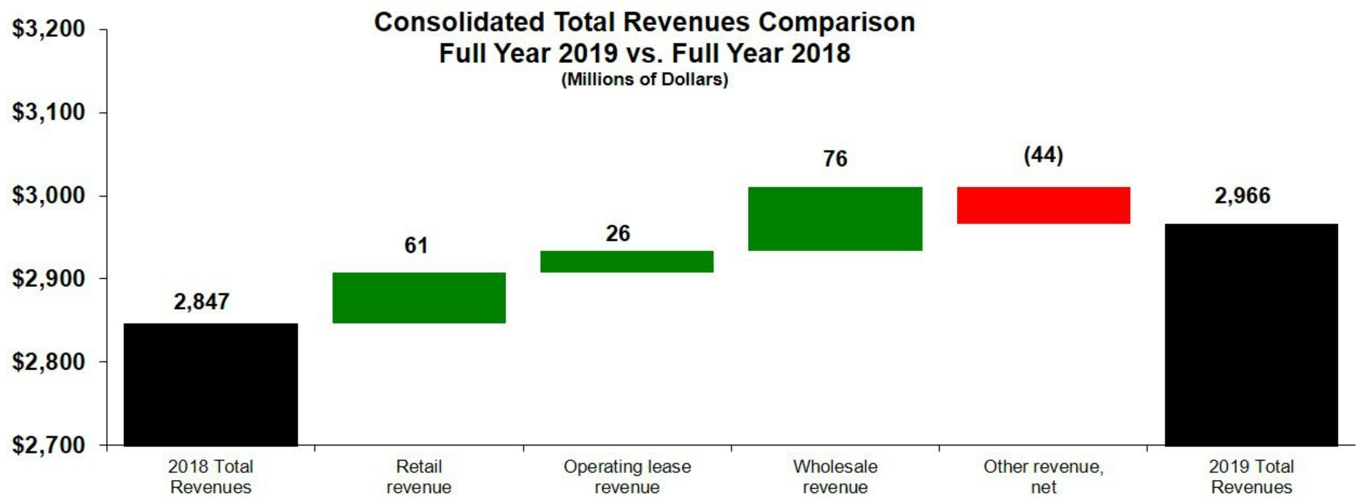
The provision for income taxes reflected an annual tax rate of 31 percent for 2019, compared with 25 percent for 2018. The increase in the annual tax rate was primarily due to changes in the geographic mix of profits.

During 2019, retail new business volume was $11.89 billion, a decrease of $189 million, or 2 percent, from 2018. The decrease was primarily driven by lower volume in Asia/Pacific and EAME, partially offset by higher volume in Mining.

At the end of 2019, past dues were 3.14 percent, compared with 3.55 percent at the end of 2018. Write-offs, net of recoveries, were $237 million for 2019, an increase from $189 million for 2018, primarily due to Mining, Caterpillar Power Finance and EAME, partially offset by a decrease in Latin America. The increase in Mining was due to a small number of customer balances written off in 2019, while the increases in Caterpillar Power Finance and EAME were concentrated in the marine portfolio and the Middle East, respectively. As of December 31, 2019, the allowance for credit losses totaled $424 million, or 1.50 percent of finance receivables, compared with $511 million, or 1.80 percent of finance receivables at December 31, 2018.

2019 COMPARED WITH 2018

Consolidated Total Revenues



The chart above graphically illustrates reasons for the change in Consolidated Total Revenues between 2018 (at left) and 2019 (at right). Items favorably impacting total revenues appear as upward stair steps with corresponding dollar amounts above each bar, while items negatively impacting total revenues appear as downward stair steps with dollar amounts reflected in parentheses above each bar. Management utilizes these charts internally to visually communicate results.

Retail revenue for 2019 was $1.37 billion, an increase of $61 million from 2018. The increase was due to a $72 million favorable impact from higher interest rates on retail finance receivables, partially offset by an $11 million unfavorable impact from lower average earning assets. For the year ended December 31, 2019, retail average earning assets were $22.89 billion, a decrease of $207 million from 2018. The average yield was 5.98 percent for 2019, compared with 5.66 percent in 2018.

Operating lease revenue for 2019 was $1.04 billion, an increase of $26 million from 2018. The increase was due to a $20 million favorable impact from property tax revenues on operating leases as a result of the new lease accounting guidance and a $16 million favorable impact from higher average rental rates on operating leases, partially offset by a $10 million unfavorable impact from lower average earning assets.

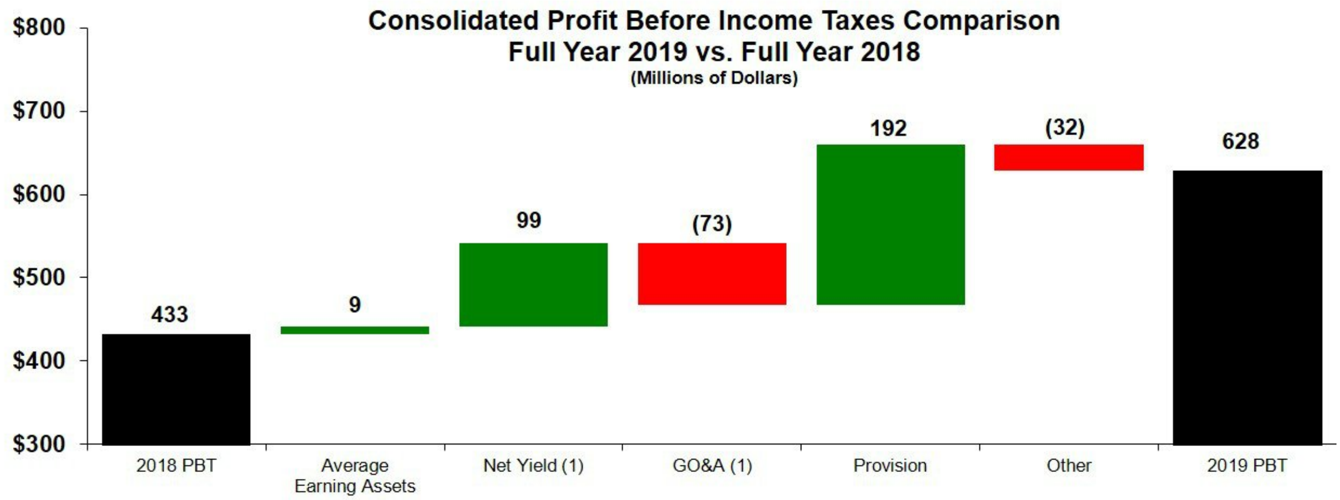
Wholesale revenue for 2019 was $491 million, an increase of $76 million from 2018. The increase was due to a $46 million favorable impact from higher average earning assets and a $30 million favorable impact from higher interest rates on wholesale finance receivables. For the year ended December 31, 2019, wholesale average earning assets were $5.39 billion, an increase of $543 million from 2018. The average yield was 9.10 percent for 2019, compared with 8.55 percent in 2018.

Other revenue, net items were as follows:

(Millions of dollars)	**2019**	**2018**	**Change**
Finance receivable and operating lease fees (including late charges)	$ 61	$ 71	$ (10)
Fees on committed credit facility extended to Caterpillar	5	40	(35)
Interest income on Notes Receivable from Caterpillar	26	30	(4)
Net loss on returned or repossessed equipment	(38)	(48)	10
Miscellaneous other revenue, net	15	20	(5)
Total Other revenue, net	$ 69	$ 113	$ (44)

There was a $42 million unfavorable impact from currency on revenues in 2019. Currency represents the net translation impact resulting from changes in foreign currency exchange rates versus the U.S. dollar and is included in all financial statement line items and each of the items included in the above analysis.

Consolidated Profit Before Income Taxes



(1) Analysis excludes $20 million in offsetting revenues and expenses for property taxes on operating leases.

The chart above graphically illustrates reasons for the change in Consolidated Profit Before Income Taxes between 2018 (at left) and 2019 (at right). Items favorably impacting profit before income taxes appear as upward stair steps with corresponding dollar amounts above each bar, while items negatively impacting profit before income taxes appear as downward stair steps with dollar amounts reflected in parentheses above each bar. Management utilizes these charts internally to visually communicate results.

Profit before income taxes was $628 million for 2019, compared with $433 million for 2018. Most of the increase was due to a $192 million decrease in provision for credit losses, driven by a lower allowance rate compared with 2018. The lower allowance rate was due to write-offs of accounts in 2019 that were reserved for in 2018, primarily in the Caterpillar Power Finance portfolio. In addition, there was a $99 million increase in net yield on average earning assets. These favorable impacts were partially offset by a $73 million increase in general, operating and administrative expenses and a $35 million unfavorable impact due to the termination of a committed credit facility with Caterpillar.

There was an $18 million unfavorable impact from currency on profit before income taxes in 2019. Currency represents the net translation impact resulting from changes in foreign currency exchange rates versus the U.S. dollar and is included in all financial statement line items and each of the items included in the above analysis.

Provision for Income Taxes

The provision for income taxes reflected an annual tax rate of 31 percent for 2019, compared with 25 percent for 2018. The increase in the annual tax rate was primarily due to changes in the geographic mix of profits. The provision for income taxes for 2019 included a $21 million charge for a valuation allowance against the deferred tax assets of non-U.S. subsidiaries.

Finance Receivables and Equipment on Operating Leases

New Business Volume

(Millions of dollars)						
		2019		2018		Change
New retail financing	$	10,320	$	10,600	$	(280)
New operating lease activity		1,571		1,484		87
New wholesale financing		43,714		43,981		(267)
Total	$	55,605	$	56,065	$	(460)

New retail financing decreased primarily due to lower volume in Asia/Pacific and EAME, partially offset by higher volume in Mining. New operating lease activity (which is substantially related to retail) increased primarily due to higher rentals of Cat equipment in Mining, Latin America and North America. New wholesale financing decreased primarily due to lower purchases of trade receivables from Caterpillar.

Total Managed Portfolio

We define total portfolio as Finance receivables, net plus Equipment on operating leases, net. We also manage and service receivables and leases that have been sold by us to third parties with limited or no recourse in order to mitigate our concentration of credit risk with certain customers. These assets are not available to pay our creditors. Total managed portfolio as of December 31, was as follows:

(Millions of dollars)						
		2019		2018		Change
Finance receivables, net	$	27,832	$	27,923	$	(91)
Equipment on operating leases, net		3,583		3,562		21
Total portfolio	$	31,415	$	31,485	$	(70)
Retail loans, net	$	186	$	130	$	56
Retail leases, net		81		100		(19)
Operating leases		26		25		1
Total off-balance sheet managed assets	$	293	$	255	$	38
Total managed portfolio	$	31,708	$	31,740	$	(32)

Total Portfolio Metrics

At the end of 2019, past dues were 3.14 percent, compared with 3.55 percent at the end of 2018. Total non-performing finance receivables, which represent finance receivables currently on non-accrual status, were $805 million and $885 million at December 31, 2019 and 2018, respectively. Total non-performing finance receivables as a percentage of our recorded investment in finance receivables were 2.85 percent and 3.11 percent at December 31, 2019 and 2018, respectively.

Our allowance for credit losses as of December 31, 2019 was $424 million or 1.50 percent of finance receivables compared with $511 million or 1.80 percent as of December 31, 2018. The lower allowance rate was due to write-offs of accounts in 2019 that were reserved for in 2018, primarily in the Caterpillar Power Finance portfolio. The allowance is subject to an ongoing evaluation based on many quantitative and qualitative factors, including past loss experience, known and inherent risks in the portfolio, adverse situations that may affect the borrower's ability to repay, estimated value of underlying collateral and current economic conditions. We believe our allowance is sufficient to provide for losses inherent in our existing finance receivable portfolio as of December 31, 2019.

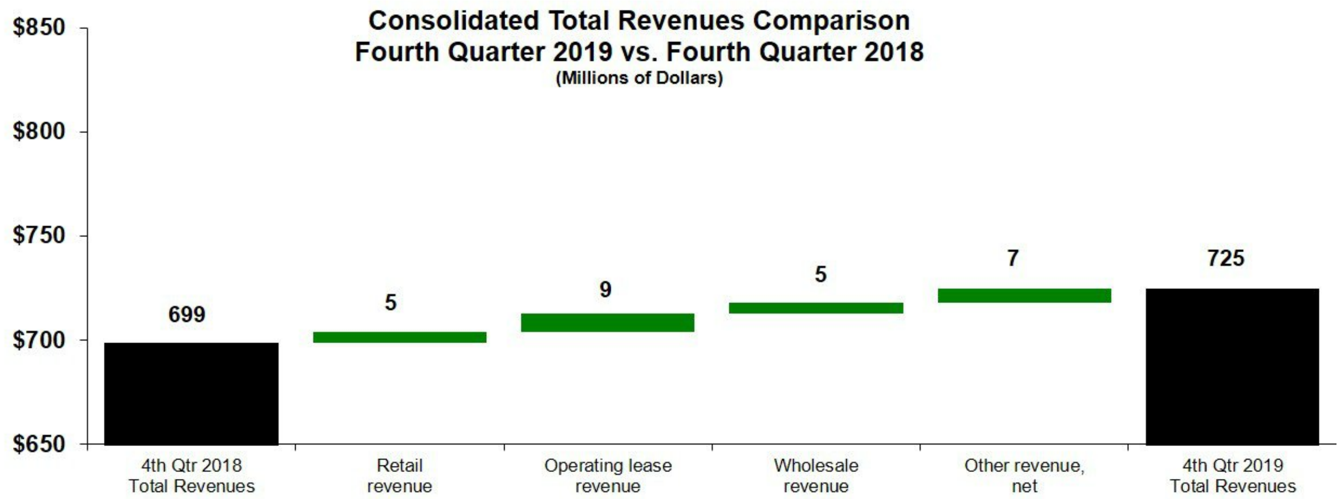
FOURTH QUARTER 2019 VS. FOURTH QUARTER 2018

CONSOLIDATED STATEMENTS OF PROFIT (UNAUDITED)
(Dollars in Millions)

	Three Months Ended December 31, 2019	Three Months Ended December 31, 2018
Revenues:		
Retail finance	$ 338	$ 333
Operating lease	260	251
Wholesale finance	116	111
Other, net	11	4
Total revenues	725	699
Expenses:		
Interest	188	199
Depreciation on equipment leased to others	202	203
General, operating and administrative	138	97
Provision for credit losses	18	136
Other	8	10
Total expenses	554	645
Other income (expense)	(10)	(8)
Profit before income taxes	161	46
Provision for income taxes	52	23
Profit of consolidated companies	109	23
Less: Profit attributable to noncontrolling interests	5	5
Profit[1]	$ 104	$ 18

[1] Profit attributable to Caterpillar Financial Services Corporation.

Consolidated Total Revenues



The chart above graphically illustrates reasons for the change in Consolidated Total Revenues between fourth quarter 2018 (at left) and fourth quarter 2019 (at right). Items favorably impacting total revenues appear as upward stair steps with corresponding dollar amounts above each bar, while items negatively impacting total revenues appear as downward stair steps with dollar amounts reflected in parentheses above each bar. Management utilizes these charts internally to visually communicate results.

Retail revenue for the fourth quarter of 2019 was $338 million, an increase of $5 million from the same period in 2018. The increase was due to a $6 million favorable impact from higher interest rates on retail finance receivables, partially offset by a $1 million unfavorable impact from lower average earning assets. For the quarter ended December 31, 2019, retail average earning assets were $22.81 billion, a decrease of $174 million from the same period in 2018. The annualized average yield was 5.92 percent for the fourth quarter of 2019, compared with 5.81 percent for the fourth quarter of 2018.

Operating lease revenue for the fourth quarter of 2019 was $260 million, an increase of $9 million from the same period in 2018. The increase was due to a $5 million favorable impact from property tax revenues on operating leases as a result of the new lease accounting guidance, a $3 million favorable impact from higher average rental rates on operating leases and a $1 million favorable impact from higher average earning assets.

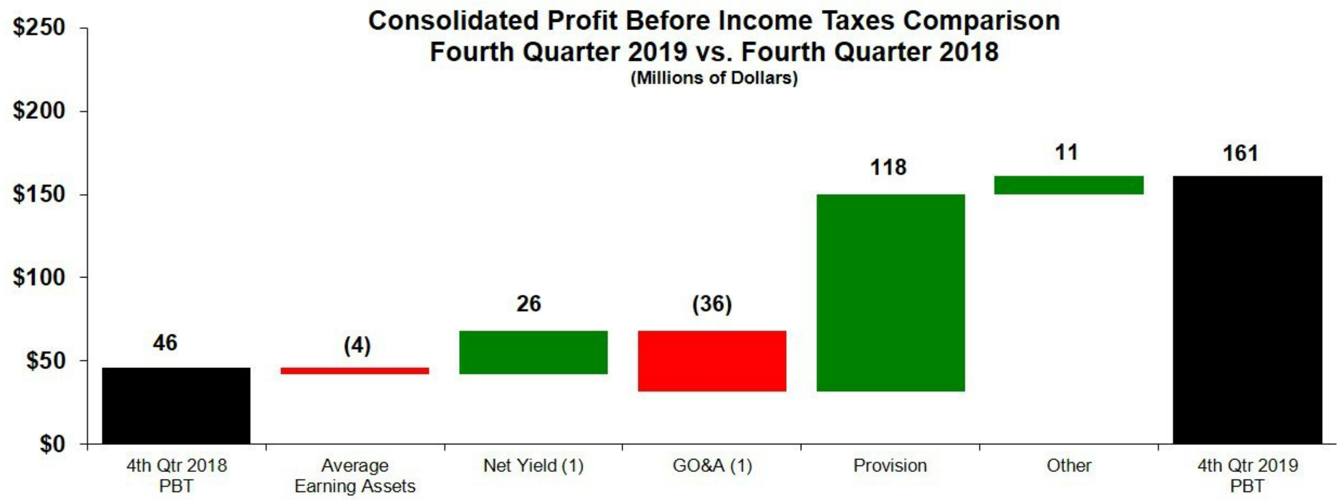
Wholesale revenue for the fourth quarter of 2019 was $116 million, an increase of $5 million from the same period in 2018. The increase was due to a $7 million favorable impact from higher interest rates on wholesale finance receivables, partially offset by a $2 million unfavorable impact from lower average earning assets. For the quarter ended December 31, 2019, wholesale average earning assets were $5.06 billion, a decrease of $90 million from the same period in 2018. The annualized average yield was 9.20 percent for the fourth quarter of 2019, compared with 8.61 percent for the fourth quarter of 2018.

Other revenue, net items were as follows:

(Millions of dollars)	**Three Months Ended December 31,**		
	2019	**2018**	**Change**
Finance receivable and operating lease fees (including late charges)	$ 15	$ 15	$ —
Fees on committed credit facility extended to Caterpillar	—	10	(10)
Interest income on Notes Receivable from Caterpillar	4	8	(4)
Net loss on returned or repossessed equipment	(11)	(34)	23
Miscellaneous other revenue, net	3	5	(2)
Total Other revenue, net	$ 11	$ 4	$ 7

There was a $5 million unfavorable impact from currency on revenues in the fourth quarter of 2019. Currency represents the net translation impact resulting from changes in foreign currency exchange rates versus the U.S. dollar and is included in all financial statement line items and each of the items included in the above analysis.

Consolidated Profit Before Income Taxes



(1) Analysis excludes $5 million in offsetting revenues and expenses for property taxes on operating leases.

The chart above graphically illustrates reasons for the change in Consolidated Profit Before Income Taxes between fourth quarter 2018 (at left) and fourth quarter 2019 (at right). Items favorably impacting profit before income taxes appear as upward stair steps with corresponding dollar amounts above each bar, while items negatively impacting profit before income taxes appear as downward stair steps with dollar amounts reflected in parentheses above each bar. Management utilizes these charts internally to visually communicate results.

Fourth-quarter 2019 profit before income taxes was $161 million, compared with $46 million for the fourth quarter of 2018. Most of the increase was due to a $118 million decrease in provision for credit losses, driven by a lower allowance rate compared with 2018. The lower allowance rate was due to write-offs of accounts in 2019 that were reserved for in 2018, primarily in the Caterpillar Power Finance portfolio. In addition, there was a $26 million increase in net yield on average earning assets and a $23 million favorable impact from returned or repossessed equipment. These favorable impacts were partially offset by a $36 million increase in general, operating and administrative expenses and a $10 million unfavorable impact due to the termination of a committed credit facility with Caterpillar.

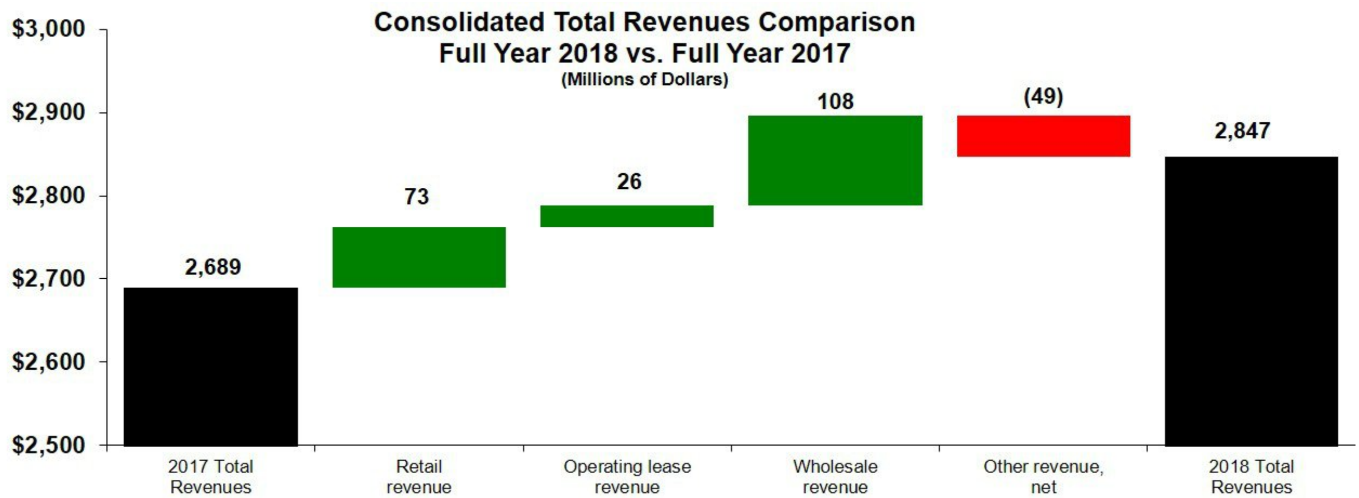
There was a $3 million unfavorable impact from currency on profit before income taxes in the fourth quarter of 2019. Currency represents the net translation impact resulting from changes in foreign currency exchange rates versus the U.S. dollar and is included in all financial statement line items and each of the items included in the above analysis.

Provision for Income Taxes

The provision for income taxes reflected an effective tax rate of 32 percent in the fourth quarter of 2019, compared with 48 percent in the fourth quarter of 2018. The decrease in the effective tax rate was primarily due to changes in the geographic mix of profits.

2018 COMPARED WITH 2017

Consolidated Total Revenues



The chart above graphically illustrates reasons for the change in Consolidated Total Revenues between 2017 (at left) and 2018 (at right). Items favorably impacting total revenues appear as upward stair steps with corresponding dollar amounts above each bar, while items negatively impacting total revenues appear as downward stair steps with dollar amounts reflected in parentheses above each bar. Management utilizes these charts internally to visually communicate results.

Retail revenue for 2018 was $1.31 billion, an increase of $73 million from 2017. The increase was due to a $73 million favorable impact from higher interest rates on retail finance receivables. For the year ended December 31, 2018, retail average earning assets were $23.10 billion, an increase of $9 million from 2017. The average yield was 5.66 percent for 2018, compared with 5.35 percent in 2017.

Operating lease revenue for 2018 was $1.01 billion, an increase of $26 million from 2017. The increase was due to a $27 million favorable impact from higher average rental rates on operating leases, partially offset by a $1 million unfavorable impact from lower average earning assets.

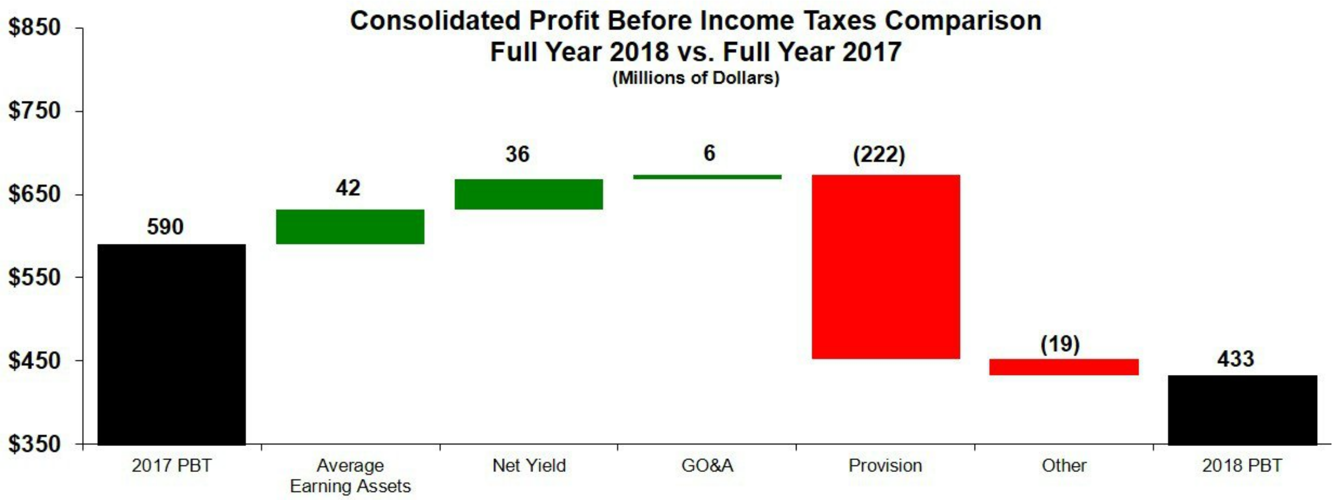
Wholesale revenue for 2018 was $415 million, an increase of $108 million from 2017. The increase was due to an $83 million favorable impact from higher average earning assets and a $25 million favorable impact from higher interest rates on wholesale finance receivables. For the year ended December 31, 2018, wholesale average earning assets were $4.85 billion, an increase of $1.04 billion from 2017. The average yield was 8.55 percent for 2018, compared with 8.04 percent in 2017.

Other revenue, net items were as follows:

(Millions of dollars)	**2018**	**2017**	**Change**
Finance receivable and operating lease fees (including late charges)	$ 71	$ 80	$ (9)
Fees on committed credit facility extended to Caterpillar	40	40	—
Interest income on Notes Receivable from Caterpillar	30	74	(44)
Net loss on returned or repossessed equipment	(48)	(48)	—
Miscellaneous other revenue, net	20	16	4
Total Other revenue, net	$ 113	$ 162	$ (49)

There was a $2 million favorable impact from currency on revenues in 2018. Currency represents the net translation impact resulting from changes in foreign currency exchange rates versus the U.S. dollar and is included in all financial statement line items and each of the items included in the above analysis.

Consolidated Profit Before Income Taxes



The chart above graphically illustrates reasons for the change in Consolidated Profit Before Income Taxes between 2017 (at left) and 2018 (at right). Items favorably impacting profit before income taxes appear as upward stair steps with corresponding dollar amounts above each bar, while items negatively impacting profit before income taxes appear as downward stair steps with dollar amounts reflected in parentheses above each bar. Management utilizes these charts internally to visually communicate results.

Profit before income taxes was $433 million for 2018, compared with $590 million for 2017. The decrease was primarily due to a $222 million increase in provision for credit losses, which was driven by a higher allowance rate and an increase in write-offs, due to continued weakening in the Caterpillar Power Finance portfolio. This decrease was partially offset by a $42 million favorable impact from higher average earning assets and a $36 million increase in net yield on average earning assets primarily due to changes in portfolio mix.

There was a $4 million favorable impact from currency on profit before income taxes in 2018. Currency represents the net translation impact resulting from changes in foreign currency exchange rates versus the U.S. dollar and is included in all financial statement line items and each of the items included in the above analysis.

Provision for Income Taxes

The provision for income taxes reflected an annual tax rate of 25 percent for 2018, compared with negative 1 percent for 2017. The increase in the annual tax rate was primarily due to the overall impact of U.S. tax reform in 2017, along with changes in the geographic mix of profits.

We completed our accounting for the income tax effects of U.S. tax reform legislation with a resulting 2018 measurement period adjustment of $12 million that increased the provisionally estimated net benefit of $151 million recognized during the fourth quarter of 2017. We recorded a $7 million benefit in the third quarter of 2018, resulting from the 2017 tax year return to provision adjustments, which revised the estimated impact of the write-down of U.S. net deferred tax liabilities to reflect the reduction in the U.S. corporate tax rate from 35 percent to 21 percent. In the fourth quarter of 2018, we recorded a $5 million benefit to revise the estimated cost of a mandatory deemed repatriation of non-U.S. earnings.

Finance Receivables and Equipment on Operating Leases

New Business Volume

(Millions of dollars)	2018	2017	Change
New retail financing	$ 10,600	$ 9,844	$ 756
New operating lease activity	1,484	1,388	96
New wholesale financing	43,981	36,299	7,682
Total	$ 56,065	$ 47,531	$ 8,534

New retail financing increased primarily due to higher volume in Asia/Pacific, EAME and North America, partially offset by a decrease in Caterpillar Power Finance. New operating lease activity (which is substantially related to retail) increased primarily due to higher rentals of Cat equipment in North America, partially offset by lower rentals in Latin America. New wholesale financing increased primarily due to higher purchases of trade receivables from Caterpillar.

Total Managed Portfolio

We define total portfolio as Finance receivables, net plus Equipment on operating leases, net. We also manage and service receivables and leases that have been sold by us to third parties with limited or no recourse in order to mitigate our concentration of credit risk with certain customers. These assets are not available to pay our creditors. Total managed portfolio as of December 31, was as follows:

(Millions of dollars)	2018	2017	Change
Finance receivables, net	$ 27,923	$ 27,126	$ 797
Equipment on operating leases, net	3,562	3,568	(6)
Total portfolio	$ 31,485	$ 30,694	$ 791
Retail loans, net	$ 130	$ 129	$ 1
Retail leases, net	100	103	(3)
Operating leases	25	39	(14)
Total off-balance sheet managed assets	$ 255	$ 271	$ (16)
Total managed portfolio	$ 31,740	$ 30,965	$ 775

Total Portfolio Metrics

At the end of 2018, past dues were 3.55 percent, compared with 2.78 percent at the end of 2017. Total non-performing finance receivables, which represent finance receivables currently on non-accrual status, were $885 million and $683 million at December 31, 2018 and 2017, respectively. Total non-performing finance receivables as a percentage of our recorded investment in finance receivables were 3.11 percent and 2.48 percent at December 31, 2018 and 2017, respectively.

Our allowance for credit losses as of December 31, 2018 was $511 million or 1.80 percent of finance receivables compared with $365 million or 1.33 percent as of December 31, 2017. During 2018, our allowance for loan losses (ALLL) estimate increased $146 million, primarily due to a $153 million increase in specific reserves on impaired finance receivables that were individually evaluated. The increase in specific reserves was mainly driven by continued weaknesses in the Caterpillar Power Finance portfolio. The allowance is subject to an ongoing evaluation based on many quantitative and qualitative factors, including past loss experience, known and inherent risks in the portfolio, adverse situations that may affect the borrower's ability to repay, estimated value of underlying collateral and current economic conditions. We believe our allowance is sufficient to provide for losses inherent in our existing finance receivable portfolio as of December 31, 2018.

CAPITAL RESOURCES AND LIQUIDITY

Capital resources and liquidity provide us with the ability to meet our financial obligations on a timely basis. Maintaining and managing adequate capital and liquidity resources includes management of funding sources and their utilization based on current, future and contingent needs. Throughout 2019, we experienced favorable liquidity conditions. We ended 2019 with $690 million of cash, a decrease of $76 million from year-end 2018. Our cash balances are held in numerous locations throughout the world with approximately $174 million held by our non-U.S. subsidiaries. Amounts held by non-U.S. subsidiaries are available for general corporate use and could be used in the U.S. without incurring significant additional U.S. taxes. We expect to meet our U.S. funding needs without repatriating undistributed profits that are indefinitely reinvested outside the U.S.

BORROWINGS

Borrowings consist primarily of medium-term notes and commercial paper, the combination of which is used to manage interest rate risk and funding requirements. (Please refer to Notes 6, 7 and 8 of Notes to Consolidated Financial Statements for additional discussion.)

We receive debt ratings from the major credit rating agencies. Moody's long- and short-term ratings of our debt are A3 and Prime-2, while Fitch and S&P maintain a "mid-A" debt rating. This split rating has not had a material impact on our borrowing costs or our overall financial health. However, a downgrade of our credit ratings by any of the major credit rating agencies would result in increased borrowing costs and could make access to certain credit markets more difficult. In the event economic conditions deteriorate such that access to debt markets becomes unavailable, we would rely on cash flows from our existing portfolio, existing cash balances, access to our revolving credit facilities and other credit line facilities and potential borrowings from Caterpillar. In addition, Caterpillar maintains a support agreement with us, which requires Caterpillar to remain our sole owner and may, under certain circumstances, require Caterpillar to make payments to us should we fail to maintain certain financial ratios.

Total borrowings outstanding as of December 31, 2019, were $29.11 billion, a decrease of $943 million over December 31, 2018. Outstanding borrowings as of December 31 were as follows:

(Millions of dollars)	2019	2018
Medium-term notes, net of unamortized discount and debt issuance costs	$ 22,692	$ 22,169
Commercial paper, net of unamortized discount	4,168	4,759
Bank borrowings – long-term	642	646
Bank borrowings – short-term	605	526
Variable denomination floating rate demand notes	388	438
Notes payable to Caterpillar	618	1,518
Total outstanding borrowings	$ 29,113	$ 30,056

Medium-term notes

We issue medium-term unsecured notes through securities dealers or underwriters in the U.S., Canada, Europe, Australia, Japan, Hong Kong, and China to both retail and institutional investors. These notes are offered in several currencies and with a variety of maturities. These notes are senior unsecured obligations of the Company. Medium-term notes issued totaled $6.09 billion and redeemed totaled $5.59 billion for the year ended December 31, 2019. Medium-term notes outstanding as of December 31, 2019, mature as follows:

(Millions of dollars)	
2020	$ 5,973
2021	7,517
2022	4,569
2023	2,153
2024	2,150
Thereafter	330
Total	$ 22,692

Medium-term notes of $1.50 billion matured January 10, 2020 and were excluded from Current maturities of long-term debt as of December 31, 2019 due to an issuance on January 9, 2020 of two $750 million medium-term notes, maturing in 2021 and 2022. The above table reflects the maturity dates of the new medium-term notes.

Commercial paper

We issue unsecured commercial paper in the U.S., Europe and other international capital markets. These short-term promissory notes are issued on a discounted basis and are payable at maturity. As of December 31, 2019, there was $4.17 billion outstanding in commercial paper.

Revolving credit facilities

We have three global credit facilities with a syndicate of banks totaling $10.50 billion (Credit Facility) available in the aggregate to both Caterpillar and us for general liquidity purposes. Based on management's allocation decision, which can be revised from time to time, the portion of the Credit Facility available to us as of December 31, 2019 was $7.75 billion. Information on our Credit Facility is as follows:

- The 364-day facility of $3.15 billion (of which $2.33 billion is available to us) expires in September 2020.
- The three-year facility, as amended and restated in September 2019, of $2.73 billion (of which $2.01 billion is available to us) expires in September 2022.
- The five-year facility, as amended and restated in September 2019, of $4.62 billion (of which $3.41 billion is available to us) expires in September 2024.

At December 31, 2019, Caterpillar’s consolidated net worth was $14.63 billion, which was above the $9.00 billion required under the Credit Facility. The consolidated net worth is defined in the Credit Facility as the consolidated shareholders' equity including preferred stock but excluding the pension and other postretirement benefits balance within Accumulated other comprehensive income/(loss).

At December 31, 2019, our covenant interest coverage ratio was 1.77 to 1. This is above the 1.15 to 1 minimum ratio, calculated as (1) profit excluding income taxes, interest expense and net gain/(loss) from interest rate derivatives to (2) interest expense, calculated at the end of each calendar quarter for the rolling four quarter period then most recently ended, required by the Credit Facility.

In addition, at December 31, 2019, our six-month covenant leverage ratio was 7.65 to 1 and our year-end covenant leverage ratio was 7.46 to 1. This is below the maximum ratio of debt to net worth of 10 to 1, calculated (1) on a monthly basis as the average of the leverage ratios determined on the last day of each of the six preceding calendar months and (2) at each December 31, required by the Credit Facility.

In the event that either Caterpillar or we do not meet one or more of our respective financial covenants under the Credit Facility in the future (and are unable to obtain a consent or waiver), the syndicate of banks may terminate the commitments allocated to the party that does not meet its covenants. Additionally, in such event, certain of our other lenders under other loan agreements where similar financial covenants or cross default provisions are applicable, may, at their election, choose to pursue remedies under those loan agreements, including accelerating the repayment of outstanding borrowings. At December 31, 2019, there were no borrowings under the Credit Facility.

Bank borrowings

Available credit lines with banks as of December 31, 2019 totaled $4.81 billion. These committed and uncommitted credit lines, which may be eligible for renewal at various future dates or have no specified expiration date, are used primarily by our non-U.S. subsidiaries for local funding requirements. As of December 31, 2019, we had $1.25 billion outstanding against these credit lines and were in compliance with all debt covenants under these credit lines. The remaining available credit commitments may be withdrawn any time at the lenders' discretion.

Variable denomination floating rate demand notes

We obtain funding from the sale of variable denomination floating rate demand notes, which may be redeemed at any time at the option of the holder without any material restriction. We do not hold reserves to fund the payment of the demand notes. The notes are offered on a continuous basis. As of December 31, 2019, there was $388 million of variable denomination floating rate demand notes outstanding. The maximum amount of variable denomination floating rate demand notes that we may have outstanding at any time may not exceed $1.25 billion.

Notes receivable from/payable to Caterpillar

Under our variable amount and term lending agreements and other notes receivable with Caterpillar, we may borrow up to $2.61 billion from Caterpillar and Caterpillar may borrow up to $2.05 billion from us. The variable amount lending agreements are in effect for indefinite periods of time and may be changed or terminated by either party with 30 days notice. The term lending agreements have remaining maturities ranging up to nine years. We had notes payable of $618 million and notes receivable of $296 million outstanding under these agreements as of December 31, 2019.

OFF-BALANCE SHEET ARRANGEMENTS

We have potential payment exposure for guarantees issued to third parties totaling $65 million as of December 31, 2019. Please refer to Note 11 of Notes to Consolidated Financial Statements for further information.

Managed assets

Certain finance receivables and equipment on operating leases are sold by us to third parties with limited or no recourse in order to mitigate our concentration of credit risk with certain customers. In 2019, we received $255 million of cash proceeds from the sale of such assets. We typically maintain servicing responsibilities for these assets.

CONTRACTUAL OBLIGATIONS

We have committed cash outflow related to long-term debt, operating lease agreements and purchase obligations. Minimum payments for these obligations are:

(Millions of dollars)	2020	2021-2022	2023-2024	After 2024	Total
Long-term debt[(1)]	$ 6,198	$ 12,508	$ 4,334	$ 341	$ 23,381
Interest payable on long-term debt	488	545	165	21	1,219
Operating leases	7	8	4	3	22
Purchase obligations[(2)]	9	3	—	—	12
Total contractual obligations	$ 6,702	$ 13,064	$ 4,503	$ 365	$ 24,634

[(1)]Excludes debt issuance costs, unamortized discounts and fair value adjustments.

[(2)]Represents short-term contractual obligations made in the ordinary course of business for contracted services at December 31, 2019.

These contractual obligations do not include unused commitments for dealers and customers discussed in Note 11 of Notes to Consolidated Financial Statements.

CASH FLOWS

Operating cash flow for 2019 was $1.21 billion, compared with $1.29 billion for 2018. Net cash used for investing activities in 2019 was $288 million, compared with $2.51 billion in 2018. The change was primarily due to the impact of Caterpillar purchased receivables and higher collections of finance receivables. Net cash used for financing activities was $991 million in 2019, compared with net cash provided by financing activities of $1.28 billion in 2018. The change was primarily due to lower portfolio funding requirements.

CRITICAL ACCOUNTING POLICIES

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect reported amounts. The more significant estimates include: residual values for leased assets, allowance for credit losses and income taxes. We have incorporated many years of data into the determination of each of these estimates and we have not historically experienced significant adjustments. These assumptions are reviewed at least annually with the Audit Committee of the Caterpillar Inc. Board of Directors. Following are the methods and assumptions used in determining our estimates and an indication of the risks inherent in each.

Residual values for leased assets

The residual value of leased equipment is determined based on its estimated end-of-term market value. We estimate the residual value of leased equipment at the inception of the lease based on a number of factors, including historical wholesale market sales prices, past remarketing experience and any known significant market/product trends. The following critical factors are also considered in our residual value estimates: lease term, market size and demand, total expected hours of usage, machine configuration, application, location, model changes, quantities, third-party residual guarantees and contractual customer purchase options.

Upon termination of the lease, the equipment is either purchased by the lessee or sold to a third party, in which case we may record a gain or a loss for the difference between the estimated residual value and the sale price.

During the term of our leases, we monitor residual values. For operating leases, adjustments to depreciation expense reflecting changes in residual value estimates are recorded prospectively on a straight-line basis. For finance leases, residual value adjustments are recognized through a reduction of finance revenue over the remaining lease term.

We evaluate the carrying value of equipment on operating leases for potential impairment when we determine a triggering event has occurred. When a triggering event occurs, a test for recoverability is performed by comparing projected undiscounted future cash flows to the carrying value of the equipment on operating leases. If the test for recoverability identifies a possible impairment, the fair value of the equipment on operating leases is measured in accordance with the fair value measurement framework. An impairment charge is recognized for the amount by which the carrying value of the equipment on operating leases exceeds its estimated fair value.

At December 31, 2019, the aggregate residual value of equipment on operating leases was $2.15 billion. Without consideration of other factors such as third-party residual guarantees or contractual customer purchase options, a 10 percent non-temporary decrease in the market value of our equipment subject to operating leases would reduce residual value estimates and result in the recognition of approximately $80 million of additional annual depreciation expense.

Allowance for credit losses

The allowance for credit losses is an estimate of the losses inherent in our finance receivable portfolio and includes consideration of accounts that have been individually identified as impaired, as well as pools of finance receivables where it is probable that certain receivables in the pool are impaired but the individual accounts cannot yet be identified. In identifying and measuring impairment, management takes into consideration past loss experience, known and inherent risks in the portfolio, adverse situations that may affect the borrower's ability to repay, estimated value of underlying collateral and current economic conditions.

Accounts are identified for individual review based on past-due status and information available about the customer, such as financial statements, news reports and published credit ratings, as well as general information regarding industry trends and the economic environment in which our customers operate. The allowance for credit losses attributable to finance receivables that are individually evaluated and determined to be impaired is based on the present value of expected future cash flows discounted at the receivables' effective interest rate, the fair value of the collateral for collateral-dependent receivables or the observable market price of the receivable. In determining collateral value, we estimate the current fair market value of the collateral less selling costs. We also consider credit enhancements such as additional collateral and contractual third-party guarantees. The allowance for credit losses attributable to the remaining accounts not yet individually identified as impaired is estimated based on loss forecast models utilizing probabilities of default, our estimate of the loss emergence period and the estimated loss given default. In addition, qualitative factors not able to be fully captured in our loss forecast models including industry trends, macroeconomic factors and model imprecision are considered in the evaluation of the adequacy of the allowance for credit losses. These qualitative factors are subjective and require a degree of management judgment.

While management believes it has exercised prudent judgment and applied reasonable assumptions, there can be no assurance that in the future, changes in economic conditions or other factors would not cause changes in the financial health of our customers. If the financial health of our customers deteriorates, the timing and level of payments received could be impacted and therefore, could result in a change to our estimated losses.

Income taxes

We are subject to the income tax laws of the many jurisdictions in which we operate. These tax laws are complex, and the manner in which they apply to our facts is sometimes open to interpretation. In establishing the provision for income taxes, we must make judgments about the application of these inherently complex tax laws. Our income tax positions and analysis are based on currently enacted tax law. Future changes in tax law or related interpretations could significantly impact the provision for income taxes, the amount of taxes payable, and the deferred tax asset and liability balances. Changes in tax law are reflected in the period of enactment with related interpretations considered in the period received.

Despite our belief that our tax return positions are consistent with applicable tax laws, we believe that taxing authorities could challenge certain positions. Settlement of any challenge can result in no change, a complete disallowance, or some partial adjustment reached through negotiations or litigation. We record tax benefits for uncertain tax positions based upon management's evaluation of the information available at the reporting date. To be recognized in the financial statements, a tax benefit must be at least more likely than not of being sustained based on technical merits. The benefit for positions meeting the recognition threshold is measured as the largest benefit more likely than not of being realized upon ultimate settlement with a taxing authority that has full knowledge of all relevant information. Significant judgment is required in making these determinations and adjustments to unrecognized tax benefits may be necessary to reflect actual taxes payable upon settlement. Adjustments related to positions impacting the effective tax rate affect the provision for income taxes. Adjustments related to positions impacting the timing of deductions impact deferred tax assets and liabilities.

Deferred tax assets generally represent tax benefits for tax deductions or credits available in future tax returns. Certain estimates and assumptions are required to determine whether it is more likely than not that all or some portion of the benefit of a deferred tax asset will not be realized. In making this assessment, management analyzes the trend of U.S. GAAP earnings and estimates the impact of future taxable income, reversing temporary differences and available prudent and feasible tax planning strategies. Should a change in facts or circumstances lead to a change in judgment about the ultimate realizability of a deferred tax asset, we record or adjust the related valuation allowance in the period that the change in facts and circumstances occurs, along with a corresponding increase or decrease in the provision for income taxes.

Income taxes are based on the statutory tax rate of the jurisdiction in which earnings are subject to taxation. That statutory rate may differ from the statutory rate of the jurisdiction in which that entity is incorporated. Taxes are paid in the jurisdictions where earnings are subject to taxation.

Additional information related to income taxes is included in Note 12 in the Notes to Consolidated Financial Statements.

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

Our earnings and cash flow are subject to fluctuations due to changes in foreign currency exchange rates and interest rates. Our Risk Management Policy (policy) allows for the use of derivative financial instruments to manage foreign currency exchange rate and interest rate exposures. Our policy specifies that derivatives are not to be used for speculative purposes.

Interest rate risk

Interest rate movements create a degree of risk by affecting the amount of our interest payments and the value of our fixed-rate debt. Our practice is to use interest rate contracts to manage our exposure to interest rate changes.

We have a match-funding policy that addresses interest rate risk by aligning the interest rate profile (fixed or floating rate and duration) of our debt portfolio with the interest rate profile of our finance receivable portfolio within predetermined ranges on an ongoing basis. In connection with that policy, we use interest rate derivative instruments to modify the debt structure to match assets within the finance receivable portfolio. This matched funding reduces the volatility of margins between interest-bearing assets and interest-bearing liabilities, regardless of which direction interest rates move.

In order to properly manage sensitivity to changes in interest rates, we measure the potential impact of different interest rate assumptions on pre-tax earnings. All on-balance sheet positions, including derivative financial instruments, are included in the analysis. The primary assumptions included in the analysis are that there are no new fixed rate assets or liabilities, the proportion of fixed rate debt to fixed rate assets remains unchanged and the level of floating rate assets and debt remain constant. An analysis of the December 31, 2019 balance sheet, using these assumptions, estimates the impact of a 100 basis point immediate and sustained adverse change in interest rates to have an $18 million adverse impact on 2019 pre-tax earnings. Last year, similar assumptions and calculations yielded a potential $4 million adverse impact to 2018 pre-tax earnings. The increase in the impact on pre-tax earnings was driven by a lower matched funding rate on our fixed rate portfolios.

This analysis does not necessarily represent our current outlook of future market interest rate movement, nor does it consider any actions management could undertake in response to changes in interest rates. Accordingly, no assurance can be given that actual results would be consistent with the results of our estimate.

Foreign currency exchange rate risk

We have balance sheet positions and expected future transactions denominated in foreign currencies, thereby creating exposure to movements in exchange rates. In managing foreign currency risk, our objective is to minimize earnings volatility resulting from conversion and the remeasurement of net foreign currency balance sheet positions and future transactions denominated in foreign currencies. Since our policy allows the use of foreign currency forward, option and cross currency contracts to offset the risk of currency mismatch between our assets and liabilities and exchange rate risk associated with future transactions denominated in foreign currencies, a 10 percent adverse change in the value of the U.S. dollar relative to all other currencies would not have a material effect on our consolidated financial position, profit or cash flow. Neither our policy nor the effect of a 10 percent change in the value of the U.S. dollar has changed from that reported at the end of last year.

This analysis does not necessarily represent our current outlook for the U.S. dollar relative to all other currencies, nor does it consider any actions management could undertake in response to changes in the foreign currency markets. Accordingly, no assurance can be given that actual results would be consistent with the results of our estimate.

Item 8. Financial Statements and Supplementary Data.

Information required by Item 8 is included following the Report of Independent Registered Public Accounting Firm.

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

None.

Item 9A. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

An evaluation was performed under the supervision and with the participation of our management, including our Chief Executive Officer (CEO) and our Chief Financial Officer (CFO), of the effectiveness of the design and operation of our disclosure controls and procedures, as such term is defined under Rule 13a-15(e) of the Securities Exchange Act of 1934, as amended, as of December 31, 2019. Based on that evaluation, our CEO and CFO concluded that our disclosure controls and procedures were effective as of December 31, 2019.

Management's Report on Internal Control over Financial Reporting

The management of Cat Financial is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined under Exchange Act Rule 13a-15(f). Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Our internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our 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.

Management assessed the effectiveness of our internal control over financial reporting as of December 31, 2019. In making this assessment, we used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control - Integrated Framework (2013).* Based on our assessment, we concluded that, as of December 31, 2019, our internal control over financial reporting was effective based on those criteria.

The effectiveness of our internal control over financial reporting as of December 31, 2019 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which appears herein.

Changes in Internal Control over Financial Reporting

There have been no changes in the Company's internal control over financial reporting during the fourth quarter of 2019 covered by this Annual Report on Form 10-K that materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Item 9B. Other Information.

None.

PART III

Item 14. Principal Accounting Fees and Services.

As a wholly-owned subsidiary of Caterpillar, our principal accounting fees and services are subject to Caterpillar's Audit Committee pre-approval policies and procedures described in its Proxy Statement. This Proxy Statement can be located at Caterpillar's Internet site (www.caterpillar.com), under Investors, Financial Information, Proxy Statement. Other than these policies and procedures, the information contained at that Internet site is not incorporated by reference in this filing. During 2019, all services provided by the external auditor were pre-approved by Caterpillar's Audit Committee in accordance with such policy.

Fees for professional services provided by our auditors include the following:

(Millions of dollars)	2019	2018
Audit fees[1]	$ 6.8	$ 6.6
Audit-related fees[2]	.5	.3
Tax fees[3]	—	—
Total	$ 7.3	$ 6.9

(1) "Audit fees" principally includes audit and review of financial statements (including internal control over financial reporting), statutory and subsidiary audits, SEC registration statements, comfort letters and consents.
(2) "Audit-related fees" principally includes accounting consultations and pre- or post- implementation reviews of processes or systems.
(3) "Tax fees" includes fees related to tax compliance, tax advice and tax planning.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

The following documents are filed as part of this report.

1 Financial Statements:

- Report of Independent Registered Public Accounting Firm
- Consolidated Statements of Profit
- Consolidated Statements of Comprehensive Income
- Consolidated Statements of Financial Position
- Consolidated Statements of Changes in Shareholder's Equity
- Consolidated Statements of Cash Flows
- Notes to Consolidated Financial Statements

2 Financial Statement Schedules:

- All schedules are omitted because the required information is shown in the financial statements or the notes thereto or considered to be immaterial.

3 Exhibits

3.1 Certificate of Incorporation of the Company, as amended (incorporated by reference from Exhibit 3.1 to the Company's Form 10 for the year ended December 31, 1984).

3.2 Bylaws of the Company, as amended (incorporated by reference from Exhibit 3.2 to the Company's Quarterly Report on Form 10-Q, for the quarter ended June 30, 2005).

4.1 Indenture, dated as of April 15, 1985, between the Company and Morgan Guaranty Trust Company of New York, as Trustee (incorporated by reference from Exhibit 4.1 to the Company's Registration Statement on Form S-3).

4.2 First Supplemental Indenture, dated as of May 22, 1986, amending the Indenture dated as of April 15, 1985, between the Company and Morgan Guaranty Trust Company of New York, as Trustee (incorporated by reference from Exhibit 4.1 to the Company's Quarterly Report on Form 10-Q, for the quarter ended June 20, 1986).

4.3 Second Supplemental Indenture, dated as of March 15, 1987, amending the Indenture dated as of April 15, 1985, between the Company and Morgan Guaranty Trust Company of New York, as Trustee (incorporated by reference from Exhibit 4.3 to the Company's Current Report on Form 8-K, dated April 24, 1987).

4.4 Third Supplemental Indenture, dated as of October 2, 1989, amending the Indenture dated as of April 15, 1985, between the Company and Morgan Guaranty Trust Company of New York, as Trustee (incorporated by reference from Exhibit 4.3 to the Company's Current Report on Form 8-K, dated October 16, 1989).

4.5 Fourth Supplemental Indenture, dated as of October 1, 1990, amending the Indenture dated April 15, 1985, between the Company and Morgan Guaranty Trust Company of New York, as Trustee (incorporated by reference from Exhibit 4.3 to the Company's Current Report on Form 8-K, dated October 29, 1990).

4.6 Indenture, dated as of July 15, 1991, between the Company and Continental Bank, National Association, as Trustee (incorporated by reference from Exhibit 4.1 to the Company's Current Report on Form 8-K, dated July 25, 1991).

4.7 First Supplemental Indenture, dated as of October 1, 2005, amending the Indenture dated as of July 15, 1991, between the Company and U.S. Bank Trust National Association (as successor to the former Trustee) (incorporated by reference from Exhibit 4.3 to Amendment No. 5 to the Company's Registration Statement on Form S-3 filed October 20, 2005).

4.8 Support Agreement, dated as of December 21, 1984, between the Company and Caterpillar (incorporated by reference from Exhibit 10.2 to the Company's amended Form 10, for the year ended December 31, 1984).

4.9 First Amendment to the Support Agreement dated June 14, 1995, between the Company and Caterpillar (incorporated by reference from Exhibit 4 to the Company's Current Report on Form 8-K, dated June 15, 1995).

4.10 Description of the registrant's Medium-Term Notes, Series H, 3.300% Notes Due 2024

The registrant hereby undertakes upon request to furnish the Commission with a copy of any instrument with respect to long-term debt where the total amount of securities authorized thereunder does not exceed 10% of the total assets of the registrant and its subsidiaries on a consolidated basis.

10.1 Amended and Restated Tax Sharing Agreement, dated as of May 31, 2018, between the Company and Caterpillar (incorporated by reference from Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q, for the quarter ended June 30, 2018).

10.2 Credit Agreement (2019 364-Day Facility), dated as of September 5, 2019, among the Company, Caterpillar, Caterpillar International Finance Designated Activity Company and Caterpillar Finance Kabushiki Kaisha, certain financial institutions named therein, Citibank, N.A., as Agent, Citibank Europe plc, UK Branch, as Local Currency Agent, and MUFG Bank, Ltd., as Japan Local Currency Agent (incorporated by reference from Exhibit 10.1 to the Company's Current Report on Form 8-K filed September 10, 2019).

10.3 Local Currency Addendum to the Credit Agreement (2019 364-Day Facility), dated as of September 5, 2019, among the Company, Caterpillar International Finance Designated Activity Company, the Local Currency Banks named therein, Citibank, N.A. and Citibank Europe plc, UK Branch (incorporated by reference from Exhibit 10.2 to the Company's Current Report on Form 8-K filed on September 10, 2019).

10.4 Japan Local Currency Addendum to the Credit Agreement (2019 364-Day Facility), dated as of September 5, 2019, among the Company, Caterpillar Finance Kabushiki Kaisha, the Japan Local Currency Banks named therein, Citibank, N.A. and MUFG Bank, Ltd. (incorporated by reference from Exhibit 10.3 to the Company's Current Report on Form 8-K filed on September 10, 2019).

10.5 Second Amended and Restated Credit Agreement (Three-Year Facility), dated as of September 5, 2019, by and among the Company, Caterpillar, Caterpillar International Finance Designated Activity Company and Caterpillar Finance Kabushiki Kaisha, certain financial institutions named therein, Citibank, N.A., as Agent, Citibank Europe plc, UK Branch, as Local Currency Agent, and MUFG Bank, Ltd., as Japan Local Currency Agent (incorporated by reference from Exhibit 10.4 to the Company's Current Report on Form 8-K filed September 10, 2019).

10.6 Local Currency Addendum to the Second Amended and Restated Credit Agreement (Three-Year Facility), dated as of September 5, 2019, among the Company, Caterpillar International Finance Designated Activity Company, the Local Currency Banks named therein, Citibank, N.A. and Citibank Europe plc, UK Branch (incorporated by reference from Exhibit 10.5 to the Company's Current Report on Form 8-K filed on September 10, 2019).

10.7 Japan Local Currency Addendum to the Second Amended and Restated Credit Agreement (Three-Year Facility), dated as of September 5, 2019, among the Company, Caterpillar Finance Kabushiki Kaisha, the Japan Local Currency Banks named therein, Citibank, N.A. and MUFG Bank, Ltd. (incorporated by reference from Exhibit 10.6 to the Company's Current Report on Form 8-K filed on September 10, 2019).

10.8 Second Amended and Restated Credit Agreement (Five-Year Facility), dated as of September 5, 2019, by and among the Company, Caterpillar, Caterpillar International Finance Designated Activity Company and Caterpillar Finance Kabushiki Kaisha, certain financial institutions named therein, Citibank, N.A., as Agent, Citibank Europe plc, UK Branch, as Local Currency Agent, and MUFG Bank, Ltd., as Japan Local Currency Agent (incorporated by reference from Exhibit 10.7 to the Company's Current Report on Form 8-K filed September 10, 2019).

10.9 Local Currency Addendum to the Second Amended and Restated Credit Agreement (Five-Year Facility), dated as of September 5, 2019, among the Company, Caterpillar International Finance Designated Activity Company, the Local Currency Banks named therein, Citibank, N.A. and Citibank Europe plc, UK Branch (incorporated by reference from Exhibit 10.8 to the Company's Current Report on Form 8-K filed on September 10, 2019).

10.10	Japan Local Currency Addendum to the Second Amended and Restated Credit Agreement (Five-Year Facility), dated as of September 5, 2019, among the Company, Caterpillar Finance Kabushiki Kaisha, the Japan Local Currency Banks named therein, Citibank, N.A. and MUFG Bank, Ltd. (incorporated by reference from Exhibit 10.9 to the Company's Current Report on Form 8-K filed on September 10, 2019).
23	Consent of Independent Registered Public Accounting Firm.
31.1	Certification of David T. Walton, President, Director and Chief Executive Officer of Caterpillar Financial Services Corporation, as required pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Patrick T. McCartan, Executive Vice President and Chief Financial Officer of Caterpillar Financial Services Corporation, as required pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32	Certifications of David T. Walton, President, Director and Chief Executive Officer of Caterpillar Financial Services Corporation, and Patrick T. McCartan, Executive Vice President and Chief Financial Officer of Caterpillar Financial Services Corporation, as required pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

Item 16. Form 10-K Summary

Not applicable.

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.

Caterpillar Financial Services Corporation

Date: February 19, 2020

/s/Michael G. Sposato

Michael G. Sposato, Secretary

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Date	**Signature**	**Title**
February 19, 2020	*/s/David T. Walton* David T. Walton	President, Director and Chief Executive Officer
February 19, 2020	*/s/Andrew R.J. Bonfield* Andrew R.J. Bonfield	Director
February 19, 2020	*/s/Patrick T. McCartan* Patrick T. McCartan	Executive Vice President and Chief Financial Officer (Principal Financial Officer)
February 19, 2020	*/s/Jeffry D. Everett* Jeffry D. Everett	Controller (Principal Accounting Officer)

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholder of Caterpillar Financial Services Corporation:

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated statements of financial position of Caterpillar Financial Services Corporation and its subsidiaries (the "Company") as of December 31, 2019 and 2018, and the related consolidated statements of profit, comprehensive income, changes in shareholder's equity and cash flows for each of the three years in the period ended December 31, 2019, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018**,** and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, 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 opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (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 audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated 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 consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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

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

/s/ PricewaterhouseCoopers LLP
Nashville, Tennessee
February 19, 2020

We have served as the Company's auditor since 1984.

Caterpillar Financial Services Corporation
CONSOLIDATED STATEMENTS OF PROFIT
For the Years Ended December 31,
(Dollars in Millions)

	2019	2018	2017
Revenues:			
Retail finance	$ 1,369	$ 1,308	$ 1,235
Operating lease	1,037	1,011	985
Wholesale finance	491	415	307
Other, net	69	113	162
Total revenues	2,966	2,847	2,689
Expenses:			
Interest	787	757	667
Depreciation on equipment leased to others	813	819	810
General, operating and administrative	516	423	429
Provision for credit losses	162	354	132
Other	36	38	46
Total expenses	2,314	2,391	2,084
Other income (expense)	(24)	(23)	(15)
Profit before income taxes	628	433	590
Provision (benefit) for income taxes	196	108	(4)
Profit of consolidated companies	432	325	594
Less: Profit attributable to noncontrolling interests	22	20	8
Profit[(1)]	$ 410	$ 305	$ 586

(1) Profit attributable to Caterpillar Financial Services Corporation.

See Notes to Consolidated Financial Statements.

Caterpillar Financial Services Corporation
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
For the Years Ended December 31,
(Dollars in Millions)

	2019	2018	2017
Profit of consolidated companies	$ 432	$ 325	$ 594
Other comprehensive income (loss), net of tax:			
Foreign currency translation, net of tax (expense)/benefit of: 2019-$4; 2018-$25; 2017-$106	11	(309)	414
Derivative financial instruments:			
Gains (losses) deferred, net of tax (expense)/benefit of: 2019-$(6); 2018-$(29); 2017-$28	17	98	(49)
(Gains) losses reclassified to earnings, net of tax expense/(benefit) of: 2019-$14; 2018-$38; 2017-$(27)	(48)	(129)	45
Total Other comprehensive income (loss), net of tax	(20)	(340)	410
Comprehensive income (loss)	412	(15)	1,004
Less: Comprehensive income (loss) attributable to the noncontrolling interests	19	13	15
Comprehensive income (loss) attributable to Caterpillar Financial Services Corporation	$ 393	$ (28)	$ 989

See Notes to Consolidated Financial Statements.

Caterpillar Financial Services Corporation
CONSOLIDATED STATEMENTS OF FINANCIAL POSITION
At December 31,
(Dollars in Millions, except share data)

	2019	2018
Assets:		
Cash and cash equivalents	$ 690	$ 766
Finance receivables, net	27,832	27,923
Notes receivable from Caterpillar	296	662
Equipment on operating leases, net	3,583	3,562
Other assets	1,292	1,268
Total assets	$ 33,693	$ 34,181
Liabilities and shareholder's equity:		
Payable to dealers and others	$ 135	$ 117
Payable to Caterpillar – borrowings and other	693	1,601
Accrued expenses	241	259
Short-term borrowings	5,161	5,723
Current maturities of long-term debt	6,194	5,820
Long-term debt	17,140	16,995
Other liabilities	893	817
Total liabilities	30,457	31,332
Commitments and contingent liabilities (Note 11)		
Common stock - $1 par value		
Authorized: 2,000 shares; Issued and		
outstanding: one share (at paid-in amount)	745	745
Additional paid-in capital	2	2
Retained earnings	3,162	2,874
Accumulated other comprehensive income/(loss)	(845)	(925)
Noncontrolling interests	172	153
Total shareholder's equity	3,236	2,849
Total liabilities and shareholder's equity	$ 33,693	$ 34,181

See Notes to Consolidated Financial Statements.

Caterpillar Financial Services Corporation
CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDER'S EQUITY
For the Years Ended December 31,
(Dollars in Millions)

	Common stock	Additional paid-in capital	Retained earnings	Accumulated other comprehensive income/(loss)	Noncontrolling interests	Total
Balance at December 31, 2016	$ 745	$ 2	$ 3,108	$ (995)	$ 125	$ 2,985
Profit of consolidated companies			586		8	594
Dividend paid to Caterpillar			(725)			(725)
Foreign currency translation, net of tax				407	7	414
Derivative financial instruments, net of tax				(4)		(4)
Balance at December 31, 2017	$ 745	$ 2	$ 2,969	$ (592)	$ 140	$ 3,264
Profit of consolidated companies			305		20	325
Dividend paid to Caterpillar			(400)			(400)
Foreign currency translation, net of tax				(302)	(7)	(309)
Derivative financial instruments, net of tax				(31)		(31)
Balance at December 31, 2018	$ 745	$ 2	$ 2,874	$ (925)	$ 153	$ 2,849
Profit of consolidated companies			410		22	432
Dividend paid to Caterpillar			(25)			(25)
Foreign currency translation, net of tax				14	(3)	11
Derivative financial instruments, net of tax				(31)		(31)
Adjustment to adopt new accounting guidance[1]			(97)	97		—
Balance at December 31, 2019	$ 745	$ 2	$ 3,162	$ (845)	$ 172	$ 3,236

[1] See Note 1 regarding new accounting guidance related to reclassification of certain tax effects from accumulated other comprehensive income/(loss).

See Notes to Consolidated Financial Statements.

Caterpillar Financial Services Corporation
CONSOLIDATED STATEMENTS OF CASH FLOWS
For the Years Ended December 31,
(Dollars in Millions)

	2019	2018	2017
Cash flows from operating activities:			
Profit of consolidated companies	$ 432	$ 325	$ 594
Adjustments for non-cash items:			
Depreciation and amortization	827	832	820
Amortization of receivables purchase discount	(455)	(375)	(253)
Provision for credit losses	162	354	132
Other, net	131	164	61
Changes in assets and liabilities:			
Other assets	99	44	60
Payable to dealers and others	18	(57)	(66)
Accrued expenses	(93)	(6)	31
Other payables with Caterpillar	(9)	(10)	36
Other liabilities	93	16	(188)
Net cash provided by operating activities	1,205	1,287	1,227
Cash flows from investing activities:			
Expenditures for equipment on operating leases	(1,514)	(1,451)	(1,362)
Capital expenditures - excluding equipment on operating leases	(20)	(108)	(11)
Proceeds from disposals of equipment	769	793	1,003
Additions to finance receivables	(14,270)	(13,595)	(13,920)
Collections of finance receivables	13,531	12,511	14,353
Net changes in Caterpillar purchased receivables	640	(1,046)	(732)
Proceeds from sales of receivables	235	477	127
Net change in variable lending to Caterpillar	69	(58)	(51)
Additions to other notes receivable with Caterpillar	(80)	(390)	(53)
Collections on other notes receivable with Caterpillar	377	345	75
Settlements of undesignated derivatives	(25)	10	45
Other, net	—	—	(6)
Net cash provided by (used for) investing activities	(288)	(2,512)	(532)
Cash flows from financing activities:			
Net change in variable lending from Caterpillar	(807)	(109)	40
Payments on borrowings with Caterpillar	(93)	—	(49)
Proceeds from debt issued (original maturities greater than three months)	8,362	8,850	8,702
Payments on debt issued (original maturities greater than three months)	(8,285)	(7,822)	(6,923)
Short-term borrowings, net (original maturities three months or less)	(143)	762	(2,854)
Dividend paid to Caterpillar	(25)	(400)	(725)
Net cash provided by (used for) financing activities	(991)	1,281	(1,809)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(4)	(15)	22
Increase/(decrease) in cash, cash equivalents and restricted cash	**(78)**	**41**	**(1,092)**
Cash, cash equivalents and restricted cash at beginning of period [1]	773	732	1,824
Cash, cash equivalents and restricted cash at end of period [1]	$ 695	$ 773	$ 732
Cash paid for interest	$ 810	$ 743	$ 647
Cash paid for taxes	$ 79	$ 79	$ 159

All short-term investments, which consist primarily of highly liquid investments with original maturities of three months or less, are considered to be cash equivalents.

[1] As of December 31, 2019, 2018 and 2017, restricted cash, which is included in Other assets in the Consolidated Statements of Financial Position, was $5 million, $7 million and $24 million, respectively. Restricted cash primarily includes cash related to syndication activities and certain tax deferred transactions which were discontinued in 2018 due to U.S. tax reform legislation.

See Notes to Consolidated Financial Statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Nature of Operations

Caterpillar Financial Services Corporation was organized in 1981 in the State of Delaware (together with its subsidiaries, "Cat Financial," "the Company," "we" or "our"). We are a wholly-owned finance subsidiary of Caterpillar Inc. (together with its other subsidiaries, "Caterpillar" or "Cat"). Our primary business is to provide retail and wholesale financing alternatives for Caterpillar products to customers and dealers around the world. Retail financing is primarily comprised of financing of Caterpillar equipment, machinery and engines. We also provide financing for vehicles, power generation facilities and marine vessels that, in most cases, incorporate Caterpillar products. In addition to retail financing, we provide wholesale financing to Caterpillar dealers and purchase short-term trade receivables from Caterpillar. The various financing plans offered by Cat Financial are primarily designed to increase the opportunity for sales of Caterpillar products and generate financing income for Cat Financial. A significant portion of our activities is conducted in North America with additional offices and subsidiaries in Latin America, Asia/Pacific, Europe, Africa and the Middle East.

B. Basis of Presentation

The accompanying consolidated financial statements include the accounts of Cat Financial and consolidated variable interest entities (VIEs) in which Cat Financial is the primary beneficiary.

We consolidate all VIEs where we are the primary beneficiary. For VIEs, we assess whether we are the primary beneficiary as prescribed by the accounting guidance on the consolidation of VIEs. The primary beneficiary of a VIE is the party that has both the power to direct the activities that most significantly impact the entity's economic performance and the obligation to absorb losses or the right to receive benefits that could potentially be significant to the entity. Please refer to Note 11 for more information.

We have customers and dealers that are VIEs of which we are not the primary beneficiary. Although we have provided financial support to these entities and therefore have a variable interest, we do not have the power to direct the activities that most significantly impact their economic performance. Our maximum exposure to loss from our involvement with these VIEs is limited to the credit risk inherently present in the financial support that we have provided. These risks are evaluated and reflected in our financial statements as part of our overall portfolio of finance receivables and related allowance for credit losses.

Certain amounts for prior periods have been reclassified to conform with current period financial statement presentation.

C. Revenue Recognition

Finance revenue is recorded over the life of the related finance receivable using the interest method, including the accretion of purchased receivables discount and certain direct origination costs that are deferred. Revenue from rental payments received on operating leases is recognized on a straight-line basis over the term of the lease.

Recognition of finance revenue and operating lease revenue is suspended and the account is placed on non-accrual status when management determines that collection of future income is not probable (generally after 120 days past due). Recognition is resumed and previously suspended income is recognized when the account becomes current and collection of remaining amounts is considered probable. Interest earned but uncollected prior to the receivable being placed on non-accrual status is written off through Provision for credit losses when, in the judgment of management, it is considered uncollectible.

We participate in certain marketing programs offered in conjunction with Caterpillar and/or Caterpillar dealers that allow us to periodically offer financing to customers at interest rates that are below market rates. Under these marketing programs, Caterpillar and/or the dealer funds an amount at the outset of the transaction, which we then recognize as revenue over the term of the financing. The funds we receive from Caterpillar and/or the dealer equal an amount that when combined with the customer's contractual interest provides us with a market interest rate.

Other revenue includes: (1) late charges, (2) fee revenue, primarily commitment fees and fees on committed lines of credit or letters of credit, (3) gains and losses on sales of returned or repossessed equipment, (4) impairments on returned or repossessed equipment held for sale, (5) gains and losses on loan and lease sales and (6) other miscellaneous revenues. Other revenue items are recognized in accordance with relevant authoritative pronouncements.

D. Depreciation

Depreciation for equipment on operating leases is recognized using the straight-line method over the lease term, typically one to seven years. The depreciable basis is the original cost of the equipment less the estimated residual value of the equipment at the end of the lease term.

E. Residual Values

The residuals for leases classified as operating leases are included in Equipment on operating leases, net in the Consolidated Statements of Financial Position. The residuals for leases classified as finance leases are included in Finance receivables, net in the Consolidated Statements of Financial Position.

During the term of our leases, we monitor residual values. For operating leases, adjustments to depreciation expense reflecting changes in residual value estimates are recorded prospectively on a straight-line basis. For finance leases, residual value adjustments are recognized through a reduction of finance revenue over the remaining lease term.

We evaluate the carrying value of equipment on operating leases for potential impairment when we determine a triggering event has occurred. When a triggering event occurs, a test for recoverability is performed by comparing projected undiscounted future cash flows to the carrying value of the equipment on operating leases. If the test for recoverability identifies a possible impairment, the fair value of the equipment on operating leases is measured in accordance with the fair value measurement framework. An impairment charge is recognized for the amount by which the carrying value of the equipment on operating leases exceeds its estimated fair value.

F. Derivative Financial Instruments

Our earnings and cash flow are subject to fluctuations due to changes in foreign currency exchange rates and interest rates. Our Risk Management Policy (policy) allows for the use of derivative financial instruments to manage foreign currency exchange rate and interest rate exposures. Our policy specifies that derivatives are not to be used for speculative purposes. Derivatives that we use are primarily foreign currency forward, option and cross currency contracts and interest rate contracts. All derivatives are recorded at fair value. See Note 9 for additional information.

G. Allowance for Credit Losses

The allowance for credit losses is an estimate of the losses inherent in our finance receivable portfolio and includes consideration of accounts that have been individually identified as impaired, as well as pools of finance receivables where it is probable that certain receivables in the pool are impaired but the individual accounts cannot yet be identified. In identifying and measuring impairment, management takes into consideration past loss experience, known and inherent risks in the portfolio, adverse situations that may affect the borrower’s ability to repay, estimated value of underlying collateral and current economic conditions.

Accounts are identified for individual review based on past-due status and information available about the customer, such as financial statements, news reports and published credit ratings, as well as general information regarding industry trends and the economic environment in which our customers operate. The allowance for credit losses attributable to finance receivables that are individually evaluated and determined to be impaired is based on the present value of expected future cash flows discounted at the receivables' effective interest rate, the fair value of the collateral for collateral-dependent receivables or the observable market price of the receivable. In determining collateral value, we estimate the current fair market value of the collateral less selling costs. We also consider credit enhancements such as additional collateral and contractual third-party guarantees. The allowance for credit losses attributable to the remaining accounts not yet individually identified as impaired is estimated based on loss forecast models utilizing probabilities of default, our estimate of the loss emergence period and the estimated loss given default. In addition, qualitative factors not able to be fully captured in our loss forecast models including industry trends, macroeconomic factors and model imprecision are considered in the evaluation of the adequacy of the allowance for credit losses. These qualitative factors are subjective and require a degree of management judgment.

Receivable balances, including accrued interest, are written off against the allowance for credit losses when, in the judgment of management, they are considered uncollectible (generally upon repossession of the collateral). The amount of the write-off is determined by comparing the fair value of the collateral, less cost to sell, to the recorded investment. Subsequent recoveries, if any, are credited to the allowance for credit losses when received.

H. Income Taxes

The provision for income taxes is determined using the asset and liability approach taking into account guidance related to uncertain tax positions. Tax laws require items to be included in tax filings at different times than the items are reflected in the financial statements. A current liability is recognized for the estimated taxes payable for the current year. Deferred taxes represent the future tax consequences expected to occur when the reported amounts of assets and liabilities are recovered or paid. Deferred taxes are adjusted for enacted changes in tax rates and tax laws. Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not that a tax benefit will not be realized. See Note 12 for further discussion.

We join Caterpillar in the filing of a consolidated U.S. Federal income tax return and certain state income tax returns. In accordance with our tax sharing agreement with Caterpillar, we generally pay to or receive from Caterpillar our allocated share of income taxes or credits reflected in these consolidated filings. This amount is calculated on a separate return basis by taking taxable income times the applicable statutory tax rate and includes payment for certain tax attributes earned during the year.

I. Foreign Currency Translation

The functional currency for most of our subsidiaries is the respective local currency. Gains and losses resulting from the remeasurement of foreign currency amounts to the functional currency are included in Other income (expense) in the Consolidated Statements of Profit. Gains and losses resulting from translating assets and liabilities from the functional currency to U.S. dollars are included in Accumulated other comprehensive income/(loss) in the Consolidated Statements of Financial Position.

J. Estimates in Financial Statements

The preparation of financial statements, in conformity with generally accepted accounting principles, requires management to make estimates and assumptions that affect the reported amounts. Significant estimates include residual values for leased assets, allowance for credit losses and income taxes. Actual results may differ from these estimates.

K. New Accounting Pronouncements

Adoption of new accounting standards

Lease accounting (Accounting Standards Update (ASU) 2016-02) – In February 2016, the Financial Accounting Standards Board (FASB) issued accounting guidance that revises the accounting for leases. Under the new guidance, lessees are required to recognize a right-of-use asset and a lease liability for substantially all leases. The new guidance continues to classify leases as either financing or operating, with classification affecting the pattern of expense recognition. The accounting applied by a lessor under the new guidance is substantially equivalent to current lease accounting guidance. The new guidance was effective January 1, 2019 and was applied using a modified retrospective approach through a cumulative effect adjustment to retained earnings as of January 1, 2019. The prior period comparative information has not been recast and continues to be reported under the accounting guidance in effect for those periods.

The new guidance provides a number of optional practical expedients in transition. We elected the "package of practical expedients," which allows us not to reassess under the new guidance our prior conclusions about lease identification, lease classification and initial direct costs. We did not elect the use-of-hindsight practical expedient. In addition, the new guidance provides practical expedients for an entity’s ongoing lessee accounting. We have elected not to separate lease and non-lease components for the majority of our asset classes. We have elected the short-term lease recognition exemption for all leases that qualify, which means we have not recognized right-of-use assets or lease liabilities for these leases with a term of twelve months or less.

The most significant effects of adoption relate to the recognition of right-of-use assets and lease liabilities on our balance sheet for operating leases and providing new disclosures about our leasing activities. The adoption did not have a material impact on our financial statements.

In March 2019, the FASB issued Leases - Codification improvements (ASU 2019-01) which amended the new leasing guidance. Under these amendments, lessors that are not manufacturers or dealers will use their cost, less any discounts that may apply, as the fair value of the underlying asset, and lessors within the scope of Financial Services-Depository and Lending guidance will present all principal payments received under leases within investment activities on the statement of cash flows. We adopted the new guidance effective January 1, 2019, and the adoption did not have a material impact to our financial statements.

See Notes 3 and 11 for additional information.

Reclassification of certain tax effects from accumulated other comprehensive income (ASU 2018-02) – In February 2018, the FASB issued accounting guidance to allow a reclassification from accumulated other comprehensive income (AOCI) to retained earnings for stranded tax effects resulting from U.S. tax reform legislation. We adopted the guidance effective January 1, 2019 and the resulting reclassification was included in the period of adoption. The reclassification resulted in decreased retained earnings and increased AOCI of $97 million.

We adopted the following ASU effective January 1, 2019, which did not have a material impact on our financial statements:

ASU	Description
2017-12	Derivatives and hedging - Targeted improvements

Accounting standards issued but not yet adopted

Credit losses (ASU 2016-13) – In June 2016, the FASB issued accounting guidance to introduce a new model for recognizing credit losses on financial instruments based on an estimate of current expected credit losses. The new guidance will apply to loans, accounts receivable, trade receivables, other financial assets measured at amortized cost, loan commitments and other off-balance sheet credit exposures. The new guidance will also apply to debt securities and other financial assets measured at fair value through other comprehensive income. The new guidance was effective January 1, 2020. We do not expect the adoption to have a material impact on our financial statements.

We consider the applicability and impact of all ASUs. ASUs not listed above were assessed and either determined to be not applicable or not expected to have a material impact on our financial statements.

NOTE 2 – FINANCE RECEIVABLES

A summary of finance receivables included in the Consolidated Statements of Financial Position as of December 31, was as follows:

(Millions of dollars)	2019	2018
Retail loans, net[1]	$ 15,424	$ 15,509
Retail leases, net	7,660	7,499
Caterpillar purchased receivables, net	4,448	4,691
Wholesale loans, net[1]	664	626
Wholesale leases, net	60	109
Recorded investment in finance receivables	28,256	28,434
Less: Allowance for credit losses	(424)	(511)
Total finance receivables, net	$ 27,832	$ 27,923

[1] Includes failed sale leasebacks.

Maturities of our finance receivables, as of December 31, 2019, reflect contractual repayments due from borrowers and were as follows:

(Millions of dollars)

Amounts due in	Retail loans	Retail leases	Caterpillar purchased receivables	Wholesale loans	Wholesale leases	Total
2020	$ 6,486	$ 3,184	$ 4,505	$ 424	$ 17	$ 14,616
2021	3,696	2,043	—	121	12	5,872
2022	2,693	1,105	—	83	5	3,886
2023	1,688	494	—	7	2	2,191
2024	648	196	—	1	1	846
Thereafter	435	80	—	3	1	519
Total	15,646	7,102	4,505	639	38	27,930
Guaranteed residual value[1]	53	416	—	25	24	518
Unguaranteed residual value	—	829	—	—	2	831
Unearned income	(275)	(687)	(57)	—	(4)	(1,023)
Total	$ 15,424	$ 7,660	$ 4,448	$ 664	$ 60	$ 28,256

[1] For Retail loans and Wholesale loans, represents residual value on failed sale leasebacks.

Our finance receivables generally may be repaid or refinanced without penalty prior to contractual maturity and we also sell finance receivables to third parties to mitigate the concentration of credit risk with certain customers. Accordingly, this presentation should not be regarded as a forecast of future cash collections.

Revenues from finance leases were $518 million for the year ended December 31, 2019 and are included in retail and wholesale finance revenue in the Consolidated Statements of Profit. The residuals for leases classified as finance leases are included in Finance receivables, net in the Consolidated Statements of Financial Position. For finance leases, residual value adjustments are recognized through a reduction of finance revenue over the remaining lease term.

Allowance for credit losses

The allowance for credit losses is an estimate of the losses inherent in our finance receivable portfolio and includes consideration of accounts that have been individually identified as impaired, as well as pools of finance receivables where it is probable that certain receivables in the pool are impaired but the individual accounts cannot yet be identified. In identifying and measuring impairment, management takes into consideration past loss experience, known and inherent risks in the portfolio, adverse situations that may affect the borrower's ability to repay, estimated value of underlying collateral and current economic conditions.

Accounts are identified for individual review based on past-due status and information available about the customer, such as financial statements, news reports and published credit ratings, as well as general information regarding industry trends and the economic environment in which our customers operate. The allowance for credit losses attributable to finance receivables that are individually evaluated and determined to be impaired is based on the present value of expected future cash flows discounted at the receivables' effective interest rate, the fair value of the collateral for collateral-dependent receivables or the observable market price of the receivable. In determining collateral value, we estimate the current fair market value of the collateral less selling costs. We also consider credit enhancements such as additional collateral and contractual third-party guarantees. The allowance for credit losses attributable to the remaining accounts not yet individually identified as impaired is estimated based on loss forecast models utilizing probabilities of default, our estimate of the loss emergence period and the estimated loss given default. In addition, qualitative factors not able to be fully captured in our loss forecast models including industry trends, macroeconomic factors and model imprecision are considered in the evaluation of the adequacy of the allowance for credit losses. These qualitative factors are subjective and require a degree of management judgment.

Our allowance for credit losses is segregated into three portfolio segments:

- **Customer** - Finance receivables with end-user customers.
- **Dealer** - Finance receivables with Caterpillar dealers.
- **Caterpillar Purchased Receivables** - Trade receivables purchased from Caterpillar entities.

A portfolio segment is the level at which the Company develops a systematic methodology for determining its allowance for credit losses.

We further evaluate our portfolio segments by the class of finance receivables, which is defined as a level of information (below a portfolio segment) in which the finance receivables have the same initial measurement attribute and a similar method for assessing and monitoring credit risk. Typically, our finance receivables within a geographic area have similar credit risk profiles and methods for assessing and monitoring credit risk. Our classes, which align with management reporting for credit losses, are as follows:

- **North America** - Finance receivables originated in the United States and Canada.
- **EAME** - Finance receivables originated in Europe, Africa, the Middle East and the Commonwealth of Independent States.
- **Asia/Pacific** - Finance receivables originated in Australia, New Zealand, China, Japan, Southeast Asia and India.
- **Mining** - Finance receivables related to large mining customers worldwide.
- **Latin America** - Finance receivables originated in Mexico and Central and South American countries.
- **Caterpillar Power Finance** - Finance receivables originated worldwide related to marine vessels with Caterpillar engines and Caterpillar electrical power generation, gas compression and co-generation systems and non-Caterpillar equipment that is powered by these systems.

Our allowance for credit losses as of December 31, 2019 was $424 million or 1.50 percent of our recorded investment in finance receivables compared with $511 million or 1.80 percent as of December 31, 2018. An analysis of the allowance for credit losses was as follows:

(Millions of dollars)	December 31, 2019			
Allowance for Credit Losses:	**Customer**	**Dealer**	**Caterpillar Purchased Receivables**	**Total**
Balance at beginning of year	$ 486	$ 21	$ 4	$ 511
Receivables written off	(281)	—	—	(281)
Recoveries on receivables previously written off	44	—	—	44
Provision for credit losses	138	24	—	162
Adjustment due to sale of receivables	(11)	—	—	(11)
Foreign currency translation adjustment	(1)	—	—	(1)
Balance at end of year	$ 375	$ 45	$ 4	$ 424
Individually evaluated for impairment	$ 178	$ 39	$ —	$ 217
Collectively evaluated for impairment	197	6	4	207
Ending Balance	$ 375	$ 45	$ 4	$ 424
Recorded Investment in Finance Receivables:				
Individually evaluated for impairment	$ 594	$ 78	$ —	$ 672
Collectively evaluated for impairment	18,770	4,366	4,448	27,584
Ending Balance	$ 19,364	$ 4,444	$ 4,448	$ 28,256

(Millions of dollars)	December 31, 2018			
Allowance for Credit Losses:	**Customer**	**Dealer**	**Caterpillar Purchased Receivables**	**Total**
Balance at beginning of year	$ 353	$ 9	$ 3	$ 365
Receivables written off	(235)	—	—	(235)
Recoveries on receivables previously written off	46	—	—	46
Provision for credit losses	337	12	1	350
Adjustment due to sale of receivables	(7)	—	—	(7)
Foreign currency translation adjustment	(8)	—	—	(8)
Balance at end of year	$ 486	$ 21	$ 4	$ 511
Individually evaluated for impairment	$ 288	$ 14	$ —	$ 302
Collectively evaluated for impairment	198	7	4	209
Ending Balance	$ 486	$ 21	$ 4	$ 511
Recorded Investment in Finance Receivables:				
Individually evaluated for impairment	$ 859	$ 78	$ —	$ 937
Collectively evaluated for impairment	18,724	4,082	4,691	27,497
Ending Balance	$ 19,583	$ 4,160	$ 4,691	$ 28,434

Credit quality of finance receivables

At origination, we evaluate credit risk based on a variety of credit quality factors including prior payment experience, customer financial information, credit-rating agency ratings, loan-to-value ratios and other internal metrics. On an ongoing basis, we monitor credit quality based on past-due status and collection experience as there is a meaningful correlation between the past-due status of customers and the risk of loss.

In determining past-due status, we consider the entire recorded investment in finance receivables past due when any installment is over 30 days past due. The tables below summarize our recorded investment in finance receivables by aging category.

(Millions of dollars)	December 31, 2019						
	31-60 Days Past Due	61-90 Days Past Due	91+ Days Past Due	Total Past Due	Current	Recorded Investment in Finance Receivables	91+ Still Accruing
Customer							
North America	$ 72	$ 23	$ 55	$ 150	$ 8,121	$ 8,271	$ 15
EAME	30	31	141	202	2,955	3,157	4
Asia/Pacific	40	14	29	83	2,992	3,075	8
Mining	5	—	19	24	1,851	1,875	—
Latin America	41	23	80	144	1,178	1,322	2
Caterpillar Power Finance	10	10	225	245	1,419	1,664	—
Dealer							
North America	—	—	—	—	2,514	2,514	—
EAME	—	—	—	—	600	600	—
Asia/Pacific	—	—	—	—	487	487	—
Mining	—	—	—	—	4	4	—
Latin America	—	—	78	78	758	836	—
Caterpillar Power Finance	—	—	—	—	3	3	—
Caterpillar Purchased Receivables(1)							
North America	15	6	18	39	2,450	2,489	
EAME	1	—	2	3	574	577	
Asia/Pacific	1	—	—	1	891	892	
Mining	—	—	—	—	—	—	
Latin America	—	—	—	—	475	475	
Caterpillar Power Finance	—	—	—	—	15	15	
Total	$ 215	$ 107	$ 647	$ 969	$ 27,287	$ 28,256	$ 29

(1) Caterpillar Purchased Receivables are non-interest bearing trade receivables purchased at a discount.

(Millions of dollars)

	December 31, 2018						
	31-60 Days Past Due	61-90 Days Past Due	91+ Days Past Due	Total Past Due	Current	Recorded Investment in Finance Receivables	91+ Still Accruing
Customer							
North America	$ 65	$ 18	$ 84	$ 167	$ 7,883	$ 8,050	$ 14
EAME	19	9	153	181	2,850	3,031	5
Asia/Pacific	25	9	8	42	2,923	2,965	5
Mining	28	1	9	38	1,642	1,680	—
Latin America	38	29	71	138	1,421	1,559	—
Caterpillar Power Finance	10	1	384	395	1,903	2,298	—
Dealer							
North America	—	—	—	—	2,210	2,210	—
EAME	—	—	—	—	619	619	—
Asia/Pacific	—	—	—	—	514	514	—
Mining	—	—	—	—	4	4	—
Latin America	—	—	78	78	731	809	—
Caterpillar Power Finance	—	—	—	—	4	4	—
Caterpillar Purchased Receivables[(1)]							
North America	22	12	18	52	2,982	3,034	
EAME	1	—	1	2	546	548	
Asia/Pacific	5	1	1	7	756	763	
Mining	—	—	—	—	—	—	
Latin America	—	—	—	—	338	338	
Caterpillar Power Finance	—	—	—	—	8	8	
Total	$ 213	$ 80	$ 807	$ 1,100	$ 27,334	$ 28,434	$ 24

(1) Caterpillar Purchased Receivables are non-interest bearing trade receivables purchased at a discount.

Impaired finance receivables

For all classes, a finance receivable is considered impaired, based on current information and events, if it is probable that we will be unable to collect all amounts due according to the contractual terms. Impaired finance receivables include finance receivables that have been restructured and are considered to be troubled debt restructures.

There were $78 million in impaired finance receivables with a related allowance of $39 million and $14 million as of December 31, 2019 and 2018, respectively, for the Dealer portfolio segment, all of which was in Latin America. There were no impaired finance receivables, as of December 31, 2017, for the Dealer portfolio segment. There were no impaired finance receivables as of December 31, 2019, 2018 and 2017, for the Caterpillar Purchased Receivables portfolio segment. Our recorded investment in impaired finance receivables and the related unpaid principal balances and allowance for the Customer portfolio segment were as follows:

(Millions of dollars)	**As of December 31, 2019**			**As of December 31, 2018**		
Impaired Finance Receivables With No Allowance Recorded	**Recorded Investment**	**Unpaid Principal Balance**	**Related Allowance**	**Recorded Investment**	**Unpaid Principal Balance**	**Related Allowance**
North America	$ 6	$ 6	$ —	$ 10	$ 10	$ —
EAME	—	—	—	1	1	—
Asia/Pacific	—	—	—	1	1	—
Mining	22	22	—	33	33	—
Latin America	8	8	—	29	29	—
Caterpillar Power Finance	58	58	—	69	83	—
Total	$ 94	$ 94	$ —	$ 143	$ 157	$ —
Impaired Finance Receivables With An Allowance Recorded						
North America	$ 30	$ 30	$ 11	$ 40	$ 41	$ 14
EAME	61	61	29	92	92	57
Asia/Pacific	8	8	2	4	4	2
Mining	37	36	9	56	55	26
Latin America	58	58	20	75	75	25
Caterpillar Power Finance	306	319	107	449	455	164
Total	$ 500	$ 512	$ 178	$ 716	$ 722	$ 288
Total Impaired Finance Receivables						
North America	$ 36	$ 36	$ 11	$ 50	$ 51	$ 14
EAME	61	61	29	93	93	57
Asia/Pacific	8	8	2	5	5	2
Mining	59	58	9	89	88	26
Latin America	66	66	20	104	104	25
Caterpillar Power Finance	364	377	107	518	538	164
Total	$ 594	$ 606	$ 178	$ 859	$ 879	$ 288

(Millions of dollars)	Year Ended December 31, 2019		Year Ended December 31, 2018		Year Ended December 31, 2017	
Impaired Finance Receivables With No Allowance Recorded	**Average Recorded Investment**	**Interest Income Recognized**	**Average Recorded Investment**	**Interest Income Recognized**	**Average Recorded Investment**	**Interest Income Recognized**
North America	$ 9	$ —	$ 16	$ 1	$ 13	$ 1
EAME	6	—	14	—	48	1
Asia/Pacific	—	—	28	3	24	2
Mining	27	1	57	2	126	7
Latin America	21	1	38	2	64	3
Caterpillar Power Finance	54	3	130	7	221	9
Total	$ 117	$ 5	$ 283	$ 15	$ 496	$ 23
Impaired Finance Receivables With An Allowance Recorded						
North America	$ 34	$ 2	$ 49	$ 2	$ 49	$ 1
EAME	81	2	53	2	6	—
Asia/Pacific	9	1	5	—	31	2
Mining	48	2	46	3	—	—
Latin America	72	5	67	3	99	4
Caterpillar Power Finance	396	11	378	12	180	6
Total	$ 640	$ 23	$ 598	$ 22	$ 365	$ 13
Total Impaired Finance Receivables						
North America	$ 43	$ 2	$ 65	$ 3	$ 62	$ 2
EAME	87	2	67	2	54	1
Asia/Pacific	9	1	33	3	55	4
Mining	75	3	103	5	126	7
Latin America	93	6	105	5	163	7
Caterpillar Power Finance	450	14	508	19	401	15
Total	$ 757	$ 28	$ 881	$ 37	$ 861	$ 36

Recognition of income is suspended and the finance receivable is placed on non-accrual status when management determines that collection of future income is not probable (generally after 120 days past due). Recognition is resumed and previously suspended income is recognized when the finance receivable becomes current and collection of remaining amounts is considered probable. Payments received while the finance receivable is on non-accrual status are applied to interest and principal in accordance with the contractual terms. Interest earned but uncollected prior to the receivable being placed on non-accrual status is written off through Provision for credit losses when, in the judgment of management, it is considered uncollectible.

As of December 31, 2019 and 2018, there were $78 million in finance receivables on non-accrual status for the Dealer portfolio segment, all of which was in Latin America. The recorded investment in Customer finance receivables on non-accrual status as of December 31, was as follows:

(Millions of dollars)	2019	2018
North America	$ 44	$ 77
EAME	165	154
Asia/Pacific	21	4
Mining	47	50
Latin America	89	106
Caterpillar Power Finance	361	416
Total	$ 727	$ 807

Troubled debt restructurings

A restructuring of a finance receivable constitutes a troubled debt restructuring (TDR) when the lender grants a concession it would not otherwise consider to a borrower experiencing financial difficulties. Concessions granted may include extended contract maturities, inclusion of interest only periods, below market interest rates, extended skip payment periods and reduction of principal and/or accrued interest.

There were no finance receivables modified as TDRs during the years ended December 31, 2019, 2018 and 2017 for the Dealer or Caterpillar Purchased Receivables portfolio segments. Our recorded investment in finance receivables in the Customer portfolio segment modified as TDRs during the years ended December 31, 2019, 2018 and 2017, was as follows:

(Dollars in millions)	Year Ended December 31, 2019		
	Number of Contracts	Pre-TDR Recorded Investment	Post-TDR Recorded Investment
North America	15	$ 11	$ 11
EAME	19	17	17
Asia/Pacific	—	—	—
Mining	2	8	8
Latin America	5	5	3
Caterpillar Power Finance	21	168	165
Total	62	$ 209	$ 204
	Year Ended December 31, 2018		
	Number of Contracts	Pre-TDR Recorded Investment	Post-TDR Recorded Investment
North America	38	$ 21	$ 21
EAME	—	—	—
Asia/Pacific	—	—	—
Mining	1	29	29
Latin America	1	3	3
Caterpillar Power Finance	12	133	99
Total	52	$ 186	$ 152
	Year Ended December 31, 2017		
	Number of Contracts	Pre-TDR Recorded Investment	Post-TDR Recorded Investment
North America	43	$ 34	$ 35
EAME	4	1	1
Asia/Pacific	10	39	31
Mining	2	57	56
Latin America	17	26	27
Caterpillar Power Finance[1]	68	422	407
Total	144	$ 579	$ 557

[1] In Caterpillar Power Finance, 48 contracts with a pre-TDR recorded investment of $265 million and a post-TDR recorded investment of $258 million were related to six customers.

TDRs in the Customer portfolio segment with a payment default (defined as 91+ days past due) during the years ended December 31, 2019, 2018 and 2017, which had been modified within twelve months prior to the default date, were as follows:

(Dollars in millions)	Year Ended December 31, 2019		Year Ended December 31, 2018		Year Ended December 31, 2017	
	Number of Contracts	Post-TDR Recorded Investment	Number of Contracts	Post-TDR Recorded Investment	Number of Contracts	Post-TDR Recorded Investment
North America	11	$ 5	10	$ 10	4	$ 3
EAME	—	—	—	—	1	—
Asia/Pacific	—	—	—	—	4	1
Latin America[(1)]	—	—	3	1	243	17
Caterpillar Power Finance	1	10	3	33	—	—
Total	12	$ 15	16	$ 44	252	$ 21

[(1)] In Latin America, 238 contracts with a post-TDR recorded investment of $16 million were related to two customers for the year ended December 31, 2017.

NOTE 3 – EQUIPMENT ON OPERATING LEASES

The carrying amount of Equipment on operating leases, net in the Consolidated Statements of Financial Position as of December 31, was as follows:

(Millions of dollars)	2019	2018
Equipment on operating leases, at cost	$ 5,171	$ 5,201
Less: Accumulated depreciation	(1,588)	(1,639)
Equipment on operating leases, net	$ 3,583	$ 3,562

Our lease agreements may include options for the lessee to purchase the underlying asset at the end of the lease term for either a stated fixed price or fair market value.

The residual value of leased equipment is determined based on its estimated end-of-term market value. We estimate the residual value of leased equipment at the inception of the lease based on a number of factors, including historical wholesale market sales prices, past remarketing experience and any known significant market/product trends. The following critical factors are also considered in our residual value estimates: lease term, market size and demand, total expected hours of usage, machine configuration, application, location, model changes, quantities, third-party residual guarantees and contractual customer purchase options. The residuals for leases classified as operating leases are included in Equipment on operating leases, net in the Consolidated Statements of Financial Position.

During the term of our leases, we monitor residual values. For operating leases, adjustments to depreciation expense reflecting changes in residual value estimates are recorded prospectively on a straight-line basis.

The carrying amount of residual assets covered by residual value guarantees and subject to operating leases was $11 million and $25 million as of December 31, 2019 and 2018, respectively.

At December 31, 2019, payments due for operating leases were as follows:

(Millions of dollars)

2020	2021	2022	2023	2024	Thereafter	Total
$ 812	$ 511	$ 268	$ 129	$ 59	$ 35	$ 1,814

At December 31, 2018, scheduled minimum rental payments for operating leases were as follows:

(Millions of dollars)						
2019	2020	2021	2022	2023	Thereafter	Total
$ 808	$ 503	$ 257	$ 115	$ 41	$ 15	$ 1,739

We sell operating lease receivables to third parties to mitigate the concentration of credit risk with certain customers. Accordingly, this presentation should not be regarded as a forecast of future cash collections.

Revenues from operating leases were $1.04 billion for the year ended December 31, 2019. We typically pay property taxes on tax leases directly to the taxing authorities and invoice the lessee for reimbursement. These property tax reimbursements are accounted for as variable lease payments and are included in Operating lease revenues in the Consolidated Statements of Profit. We individually assess our operating lease receivables for impairment. If collectability of a recorded operating lease receivable is not considered probable, we recognize a current-period adjustment against operating lease revenue.

NOTE 4 – OTHER ASSETS

The components of Other assets as of December 31, were as follows:

(Millions of dollars)	2019	2018
Customer and other miscellaneous receivables	$ 494	$ 480
Collateral held for resale, at net realizable value	383	316
Deferred and refundable income taxes	142	191
Property and equipment, net	135	128
Other	138	153
Total Other assets	$ 1,292	$ 1,268

NOTE 5 – CONCENTRATION OF CREDIT RISK

Financial instruments with potential credit risk consist primarily of finance receivables. Additionally, to a lesser extent, we have potential credit risk associated with counterparties to derivative contracts.

As of December 31, 2019 and 2018, receivables from customers in construction-related industries made up approximately one-third of our total portfolio of which customers in North America were approximately 60 percent. No single customer or dealer represented a significant concentration of credit risk. We typically maintain a security interest in retail financed equipment and, in some instances, wholesale financed equipment. We also require physical damage insurance coverage on all financed equipment. See Note 15 for further information concerning business segments.

For derivative contracts, collateral is generally not required of the counterparties or of us. We enter into International Swaps and Derivatives Association (ISDA) master netting agreements that permit the net settlement of amounts owed under their respective derivative contracts. Our exposure to credit loss in the event of nonperformance by the counterparties is limited to only those gains that we have recorded, but for which we have not yet received cash payment. The master netting agreements reduce the amount of loss the company would incur should the counterparties fail to meet their obligations. At December 31, 2019 and 2018, the maximum exposure to credit loss, was $84 million and $112 million, respectively, before the application of any master netting agreements. See Note 9 for further information concerning derivatives.

NOTE 6 – CREDIT COMMITMENTS

Revolving credit facilities

We have three global credit facilities with a syndicate of banks totaling $10.50 billion (Credit Facility) available in the aggregate to both Caterpillar and us for general liquidity purposes. Based on management's allocation decision, which can be revised from time to time, the portion of the Credit Facility available to us as of December 31, 2019 was $7.75 billion. Information on our Credit Facility is as follows:

- The 364-day facility of $3.15 billion (of which $2.33 billion is available to us) expires in September 2020.
- The three-year facility, as amended and restated in September 2019, of $2.73 billion (of which $2.01 billion is available to us) expires in September 2022.
- The five-year facility, as amended and restated in September 2019, of $4.62 billion (of which $3.41 billion is available to us) expires in September 2024.

At December 31, 2019, Caterpillar’s consolidated net worth was $14.63 billion, which was above the $9.00 billion required under the Credit Facility. The consolidated net worth is defined in the Credit Facility as the consolidated shareholders' equity including preferred stock but excluding the pension and other postretirement benefits balance within Accumulated other comprehensive income/(loss).

At December 31, 2019, our covenant interest coverage ratio was 1.77 to 1. This is above the 1.15 to 1 minimum ratio, calculated as (1) profit excluding income taxes, interest expense and net gain/(loss) from interest rate derivatives to (2) interest expense, calculated at the end of each calendar quarter for the rolling four quarter period then most recently ended, required by the Credit Facility.

In addition, at December 31, 2019, our six-month covenant leverage ratio was 7.65 to 1 and our year-end covenant leverage ratio was 7.46 to 1. This is below the maximum ratio of debt to net worth of 10 to 1, calculated (1) on a monthly basis as the average of the leverage ratios determined on the last day of each of the six preceding calendar months and (2) at each December 31, required by the Credit Facility.

In the event that either Caterpillar or we do not meet one or more of our respective financial covenants under the Credit Facility in the future (and are unable to obtain a consent or waiver), the syndicate of banks may terminate the commitments allocated to the party that does not meet its covenants. Additionally, in such event, certain of our other lenders under other loan agreements where similar financial covenants or cross default provisions are applicable, may, at their election, choose to pursue remedies under those loan agreements, including accelerating the repayment of outstanding borrowings. At December 31, 2019, there were no borrowings under the Credit Facility.

Bank borrowings

Available credit lines with banks as of December 31, 2019 totaled $4.81 billion. These committed and uncommitted credit lines, which may be eligible for renewal at various future dates or have no specified expiration date, are used primarily by our non-U.S. subsidiaries for local funding requirements. As of December 31, 2019 and 2018, we had $1.25 billion and $1.17 billion, respectively, outstanding against these credit lines and were in compliance with all debt covenants under these credit lines. The remaining available credit commitments may be withdrawn any time at the lenders' discretion.

Variable denomination floating rate demand notes

We obtain funding from the sale of variable denomination floating rate demand notes, which may be redeemed at any time at the option of the holder without any material restriction. We do not hold reserves to fund the payment of the demand notes. The notes are offered on a continuous basis. As of December 31, 2019 and 2018, there was $388 million and $438 million of variable denomination floating rate demand notes outstanding. The maximum amount of variable denomination floating rate demand notes that we may have outstanding at any time may not exceed $1.25 billion.

Notes receivable from/payable to Caterpillar

Under our variable amount and term lending agreements and other notes receivable with Caterpillar, we may borrow up to $2.61 billion from Caterpillar and Caterpillar may borrow up to $2.05 billion from us. The variable amount lending agreements are in effect for indefinite periods of time and may be changed or terminated by either party with 30 days notice. The term lending agreements have remaining maturities ranging up to nine years. We had notes payable of $618 million and notes receivable of $296 million outstanding under these agreements as of December 31, 2019, compared with notes payable of $1.52 billion and notes receivable of $662 million as of December 31, 2018.

NOTE 7 – SHORT-TERM BORROWINGS

Short-term borrowings outstanding as of December 31, were comprised of the following:

(Millions of dollars)	2019		2018	
	Balance	Avg. Rate	Balance	Avg. Rate
Commercial paper, net	$ 4,168	1.3%	$ 4,759	2.0%
Bank borrowings	605	5.0%	526	5.3%
Variable denomination floating rate demand notes	388	1.7%	438	2.2%
Total	$ 5,161		$ 5,723	

NOTE 8 – LONG-TERM DEBT

During 2019, we issued $6.09 billion of medium-term notes, of which $3.59 billion were at fixed interest rates and $2.50 billion were at floating interest rates, primarily indexed to LIBOR. At December 31, 2019, the outstanding medium-term notes had remaining maturities ranging up to 8 years. Debt issuance costs are capitalized and amortized to Interest expense using the effective yield method over the term of the debt issuance. The balance of our medium-term notes contains unamortized fair value adjustments for debt in a fair value hedge relationship.

Long-term debt outstanding as of December 31, was comprised of the following:

(Millions of dollars)	2019		2018	
	Balance	Avg. Rate	Balance	Avg. Rate
Medium-term notes	$ 22,739	2.6%	$ 22,226	2.6%
Unamortized discount and debt issuance costs	(47)		(57)	
Medium-term notes, net	22,692		22,169	
Bank borrowings	642	6.6%	646	5.8%
Total	$ 23,334		$ 22,815	

Long-term debt outstanding as of December 31, 2019, matures as follows:

(Millions of dollars)	
2020	$ 6,194
2021	7,732
2022	4,744
2023	2,167
2024	2,157
Thereafter	340
Total	$ 23,334

The above table includes $29 million of medium-term notes that could be called by us at some point in the future at par.

Medium-term notes of $1.50 billion matured January 10, 2020 and were excluded from Current maturities of long-term debt as of December 31, 2019 due to an issuance on January 9, 2020 of two $750 million medium-term notes, maturing in 2021 and 2022. The table above reflects the maturity dates of the new medium-term notes.

NOTE 9 – DERIVATIVE FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

Our earnings and cash flow are subject to fluctuations due to changes in foreign currency exchange rates and interest rates. Our Risk Management Policy (policy) allows for the use of derivative financial instruments to manage foreign currency exchange rate and interest rate exposures. Our policy specifies that derivatives are not to be used for speculative purposes. Derivatives that we use are primarily foreign currency forward, option and cross currency contracts and interest rate contracts. Our derivative activities are subject to the management, direction and control of our senior financial officers. Risk management practices, including the use of financial derivative instruments, are presented to our Board of Directors and the Audit Committee of the Caterpillar Inc. Board of Directors at least annually.

All derivatives are recognized on the Consolidated Statements of Financial Position at their fair value. On the date the derivative contract is entered into, the derivative instrument is (1) designated as a hedge of the fair value of a recognized asset or liability (fair value hedge), (2) designated as a hedge of a forecasted transaction or the variability of cash flows (cash flow hedge) or (3) undesignated. Changes in the fair value of a derivative that is qualified, designated and highly effective as a fair value hedge, along with the gain or loss on the hedged recognized asset or liability that is attributable to the hedged risk, are recorded in current earnings. Changes in the fair value of a derivative that is qualified, designated and highly effective as a cash flow hedge are recorded in Accumulated other comprehensive income/(loss) (AOCI), to the extent effective, on the Consolidated Statements of Financial Position until they are reclassified to earnings in the same period or periods during which the hedged transaction affects earnings. Changes in the fair value of undesignated derivative instruments are reported in current earnings. Cash flows from designated derivative financial instruments are classified within the same category as the item being hedged on the Consolidated Statements of Cash Flows. Cash flows from undesignated derivative financial instruments are included in the investing category on the Consolidated Statements of Cash Flows.

We formally document all relationships between hedging instruments and hedged items, as well as the risk-management objective and strategy for undertaking various hedge transactions. This process includes linking all derivatives that are designated as fair value hedges to specific assets and liabilities on the Consolidated Statements of Financial Position and linking cash flow hedges to specific forecasted transactions or variability of cash flow.

We also formally assess, both at the hedge's inception and on an ongoing basis, whether the designated derivatives that are used in hedging transactions are highly effective in offsetting changes in fair value or cash flow of hedged items. When a derivative is determined not to be highly effective as a hedge or the underlying hedged transaction is no longer probable, we discontinue hedge accounting prospectively in accordance with derecognition criteria for hedge accounting.

Foreign currency exchange rate risk

We have balance sheet positions and expected future transactions denominated in foreign currencies, thereby creating exposure to movements in exchange rates. In managing foreign currency risk, our objective is to minimize earnings volatility resulting from conversion and the remeasurement of net foreign currency balance sheet positions and future transactions denominated in foreign currencies. Our policy allows the use of foreign currency forward, option and cross currency contracts to offset the risk of currency mismatch between our assets and liabilities and exchange rate risk associated with future transactions denominated in foreign currencies. Our foreign currency forward and option contracts are primarily undesignated. We designate fixed-to-fixed cross currency contracts as cash flow hedges to protect against movements in exchange rates on foreign currency fixed-rate assets and liabilities.

Interest rate risk

Interest rate movements create a degree of risk by affecting the amount of our interest payments and the value of our fixed-rate debt. Our practice is to use interest rate contracts to manage our exposure to interest rate changes.

We have a match-funding policy that addresses interest rate risk by aligning the interest rate profile (fixed or floating rate and duration) of our debt portfolio with the interest rate profile of our finance receivable portfolio within predetermined ranges on an ongoing basis. In connection with that policy, we use interest rate derivative instruments to modify the debt structure to match assets within the finance receivable portfolio. This matched funding reduces the volatility of margins between interest-bearing assets and interest-bearing liabilities, regardless of which direction interest rates move.

Our policy allows us to use fixed-to-floating, floating-to-fixed and floating-to-floating interest rate contracts to meet the match-funding objective. We designate fixed-to-floating interest rate contracts as fair value hedges to protect debt against changes in fair value due to changes in the benchmark interest rate. We designate most floating-to-fixed interest rate contracts as cash flow hedges to protect against the variability of cash flows due to changes in the benchmark interest rate.

As of December 31, 2019, $16 million of deferred net losses, net of tax, included in equity (AOCI in the Consolidated Statements of Financial Position), related to our floating-to-fixed interest rate contracts, are expected to be reclassified to Interest expense over the next twelve months. The actual amount recorded in Interest expense will vary based on interest rates at the time the hedged transactions impact earnings.

We have, at certain times, liquidated fixed-to-floating interest rate contracts that resulted in deferred gains at the time of liquidation. The deferred gains associated with these interest rate contracts are included in Long-term debt in the Consolidated Statements of Financial Position and are being amortized to Interest expense over the remaining term of the previously designated hedged item.

The location and fair value of derivative instruments reported in the Consolidated Statements of Financial Position as of December 31, were as follows:

(Millions of dollars)		**Asset (Liability) Fair Value**	
	Consolidated Statements of Financial Position Location	**2019**	**2018**
Designated derivatives			
Interest rate contracts	Other assets	$ 5	$ 4
Interest rate contracts	Accrued expenses	(25)	(40)
Cross currency contracts	Other assets	67	88
Cross currency contracts	Accrued expenses	(3)	(9)
		$ 44	$ 43
Undesignated derivatives			
Foreign exchange contracts	Other assets	$ 7	$ 15
Foreign exchange contracts	Accrued expenses	(21)	(12)
Cross currency contracts	Other assets	5	5
Cross currency contracts	Accrued expenses	(1)	(2)
		$ (10)	$ 6

The total notional amount of our derivative instruments was $8.93 billion and $10.21 billion as of December 31, 2019 and 2018, respectively. The notional amounts of derivative financial instruments do not represent amounts exchanged by the parties. The amounts exchanged by the parties are calculated by reference to the notional amounts and by other terms of the derivatives, such as foreign currency exchange rates and interest rates.

The effect of derivatives designated as hedging instruments on the Consolidated Statements of Profit was as follows:

Cash Flow Hedges (Millions of dollars)	Year Ended December 31, 2019			
		Recognized in Earnings		
	Amount of Gains (Losses) Recognized in AOCI	Classification	Amount of Gains (Losses) Reclassified from AOCI	Amount of the line items in the Consolidated Statements of Profit
Interest rate contracts	$ (70)	Interest expense	$ (8)	$ (787)
Cross currency contracts	93	Other income (expense)	37	(24)
		Interest expense	33	(787)
	$ 23		$ 62	

	Year Ended December 31, 2018			
		Recognized in Earnings		
	Amount of Gains (Losses) Recognized in AOCI (Effective Portion)	Classification	Reclassified from AOCI to Earnings (Effective Portion)	Recognized in Earnings (Ineffective Portion)
Interest rate contracts	$ (38)	Interest expense	$ —	$ —
Cross currency contracts	165	Other income (expense)	148	—
		Interest expense	19	—
	$ 127		$ 167	$ —

	Year Ended December 31, 2017			
		Recognized in Earnings		
	Amount of Gains (Losses) Recognized in AOCI (Effective Portion)	Classification	Reclassified from AOCI to Earnings (Effective Portion)	Recognized in Earnings (Ineffective Portion)
Interest rate contracts	$ —	Interest expense	$ 3	$ —
Cross currency contracts	(77)	Other income (expense)	(81)	—
		Interest expense	6	—
	$ (77)		$ (72)	$ —

The effect of derivatives not designated as hedging instruments on the Consolidated Statements of Profit was as follows for the years ended December 31:

(Millions of dollars)	Classification	2019	2018	2017
Foreign exchange contracts	Other income (expense)	$ (38)	$ 16	$ 14
Cross currency contracts	Other income (expense)	1	3	(5)
		$ (37)	$ 19	$ 9

We enter into International Swaps and Derivatives Association (ISDA) master netting agreements that permit the net settlement of amounts owed under their respective derivative contracts. Under these master netting agreements, net settlement generally permits us or the counterparty to determine the net amount payable for contracts due on the same date and in the same currency for similar types of derivative transactions. The master netting agreements generally also provide for net settlement of all outstanding contracts with a counterparty in the case of an event of default or a termination event.

Collateral is generally not required of the counterparties or us under the master netting agreements. As of December 31, 2019 and 2018, no cash collateral was received or pledged under the master netting agreements.

The effect of net settlement provisions of the master netting agreements on our derivative balances upon an event of default or a termination event as of December 31, was as follows:

(Millions of dollars)	2019	2018
Derivative Assets		
Gross Amount of Recognized Assets	$ 84	$ 112
Gross Amounts Offset	—	—
Net Amount of Assets[1]	84	112
Gross Amounts Not Offset	(21)	(34)
Net Amount	$ 63	$ 78
Derivative Liabilities		
Gross Amount of Recognized Liabilities	$ (50)	$ (63)
Gross Amounts Offset	—	—
Net Amount of Liabilities[1]	(50)	(63)
Gross Amounts Not Offset	21	34
Net Amount	$ (29)	$ (29)

[1] As presented in the Consolidated Statements of Financial Position.

NOTE 10 – ACCUMULATED OTHER COMPREHENSIVE INCOME/(LOSS)

Comprehensive income/(loss) and its components are presented in the Consolidated Statements of Comprehensive Income. Changes in Accumulated other comprehensive income/(loss), net of tax, included in the Consolidated Statements of Changes in Shareholder's Equity, consisted of the following:

(Millions of dollars)	Foreign currency translation	Derivative financial instruments	Total
Balance at December 31, 2016	$ (994)	$ (1)	$ (995)
Other comprehensive income/(loss) before reclassifications	407	(49)	358
Amounts reclassified from accumulated other comprehensive (income)/loss	—	45	45
Other comprehensive income/(loss)	407	(4)	403
Balance at December 31, 2017	$ (587)	$ (5)	$ (592)
Other comprehensive income/(loss) before reclassifications	(302)	98	(204)
Amounts reclassified from accumulated other comprehensive (income)/loss	—	(129)	(129)
Other comprehensive income/(loss)	(302)	(31)	(333)
Balance at December 31, 2018	$ (889)	$ (36)	$ (925)
Other comprehensive income/(loss) before reclassifications	14	17	31
Amounts reclassified from accumulated other comprehensive (income)/loss	—	(48)	(48)
Adjustment to adopt new accounting guidance[1]	98	(1)	97
Other comprehensive income/(loss)	112	(32)	80
Balance at December 31, 2019	$ (777)	$ (68)	$ (845)

[1] See Note 1 regarding new accounting guidance related to reclassification of certain tax effects from accumulated other comprehensive income/(loss).

The effect of the reclassifications out of Accumulated other comprehensive income/(loss) on the Consolidated Statements of Profit during the years ended December 31, 2019, 2018 and 2017 was as follows:

(Millions of dollars)				
Derivative financial instruments	Classification of income (expense)	2019	2018	2017
Cross currency contracts	Other income (expense)	$ 37	$ 148	$ (81)
Cross currency contracts	Interest expense	33	19	6
Interest rate contracts	Interest expense	(8)	—	3
Reclassifications before tax		62	167	(72)
Tax (provision) benefit		(14)	(38)	27
Total reclassifications from Accumulated other comprehensive income/(loss)		$ 48	$ 129	$ (45)

NOTE 11 – COMMITMENTS AND CONTINGENT LIABILITIES

Guarantees

We provide loan guarantees to third-party lenders for financing associated with machinery purchased by customers. These guarantees have varying terms and are secured by the machinery being financed. We also provide residual value guarantees to third-party lenders associated with machinery leased to customers. These guarantees have varying terms. In addition, we participate in standby letters of credit issued to third parties on behalf of our customers. These standby letters of credit have varying terms and beneficiaries and are secured by customer assets.

No significant loss has been experienced or is anticipated under any of these guarantees. At December 31, 2019 and 2018, the related recorded liability was less than $1 million. The maximum potential amount of future payments (undiscounted and without reduction for any amounts that may possibly be recovered under recourse or collateralized provisions) we could be required to make under the guarantees was $65 million and $97 million at December 31, 2019 and 2018, respectively.

We provide guarantees to repurchase certain loans of Caterpillar dealers from a special-purpose corporation (SPC) that qualifies as a VIE (see Note 1 for additional information regarding the accounting guidance on the consolidation of VIEs). The purpose of the SPC is to provide short-term working capital loans to Caterpillar dealers. This SPC issues commercial paper and uses the proceeds to fund its loan program. We have a loan purchase agreement with the SPC that obligates us to purchase certain loans that are not paid at maturity. We receive a fee for providing this guarantee, which provides a source of liquidity for the SPC. We are the primary beneficiary of the SPC as our guarantees result in us having both the power to direct the activities that most significantly impact the SPC's economic performance and the obligation to absorb losses and therefore we have consolidated the financial statements of the SPC. As of December 31, 2019 and 2018, the SPC's assets of $1.45 billion and $1.15 billion, respectively, were primarily comprised of loans to dealers, which are included in Finance receivables, net in the Consolidated Statements of Financial Position, and the SPC's liabilities of $1.45 billion and $1.15 billion, respectively, were primarily comprised of commercial paper, which is included in Short-term borrowings in the Consolidated Statements of Financial Position. The assets of the SPC are not available to pay our creditors. We may be obligated to perform under the guarantee if the SPC experiences losses. No loss has been experienced or is anticipated under this loan purchase agreement.

Lending commitments

We have commitments to extend credit to customers and Caterpillar dealers through lines of credit and other pre-approved credit arrangements. We apply the same credit policies and approval process for these commitments to extend credit as we do for other financing. Collateral is not required for these commitments, but if credit is extended, collateral may be required upon funding. The amount of unused commitments to extend credit to Caterpillar dealers was $11.22 billion at December 31, 2019. The amount of unused commitments to extend credit to customers was $693 million at December 31, 2019. A significant portion of these commitments is not expected to be fully drawn upon; therefore, the total commitment amounts do not represent a future cash requirement. We generally have the right to unconditionally cancel, alter, or amend the terms of these commitments at any time.

Lease commitments

We lease certain property, vehicles and other equipment through operating leases. We recognize a lease liability and corresponding right-of-use asset based on the present value of lease payments. To determine the present value of lease payments for most of our leases, we use our incremental borrowing rate based on information available on the lease commencement date. We have elected not to separate payments for lease components from non-lease components. Our lease agreements may include options to extend or terminate the lease. When it is reasonably certain that we will exercise that option, we have included the option in the recognition of right-of-use assets and lease liabilities. Our variable lease costs primarily include maintenance, taxes and insurance. We have elected not to recognize right-of-use assets or lease liabilities for leases with a term of twelve months or less.

The components of lease cost were as follows:

(Millions of dollars)	Year Ended December 31, 2019
Operating lease cost	$ 9
Short-term lease cost	$ 1
Variable lease cost	$ 1

Operating lease right-of-use assets are recognized in Other assets in the Consolidated Statements of Financial Position. The operating lease liabilities are recognized in Other liabilities in the Consolidated Statements of Financial Position. Supplemental information related to operating leases was as follows:

(Millions of dollars)	December 31, 2019	January 1, 2019
Other assets	$ 21	$ 22
Other liabilities	$ 21	$ 23
Weighted average remaining lease term	5 years	4 years
Weighted average discount rates	2.4%	2.6%

At December 31, 2019, maturities of operating lease liabilities were as follows:

(Millions of dollars)	
2020	$ 7
2021	5
2022	3
2023	3
2024	1
Thereafter	3
Total lease payments	22
Less: imputed interest	(1)
Total	$ 21

At December 31, 2018, minimum payments for operating leases having initial non-cancelable terms in excess of one year were as follows:

(Millions of dollars)		
2019	$	8
2020		6
2021		4
2022		2
2023		2
Thereafter		2
Total	$	24

Supplemental cash flow information related to operating leases was as follows:

(Millions of dollars)	Year Ended December 31, 2019	
Cash paid for amounts included in the measurement of operating lease liabilities	$	8
Right-of-use assets obtained in exchange for operating lease obligations	$	2

Litigation and claims

We are involved in unresolved legal actions that arise in the normal course of business. Although it is not possible to predict with certainty the outcome of our unresolved legal actions, we believe that these unresolved legal actions will neither individually nor in the aggregate have a material adverse effect on our consolidated results of operations, financial position or liquidity.

NOTE 12 – INCOME TAXES

On December 22, 2017, U.S. tax legislation was enacted containing a broad range of tax reform provisions including a corporate tax rate reduction and changes in the U.S. taxation of non-U.S. earnings. In 2018, measurement period adjustments of $12 million increased the provisionally estimated net benefit of $151 million recognized during the fourth quarter of 2017. A $7 million benefit, resulting from the 2017 tax year return to provision adjustments, revised the estimated impact of the write-down of U.S. net deferred tax liabilities to reflect the reduction in the U.S. corporate tax rate from 35 percent to 21 percent. A $5 million benefit revised the estimated cost of a mandatory deemed repatriation of non-U.S. earnings.

As a result of U.S. tax reform legislation, distributions of profits from non-U.S. subsidiaries are not expected to cause a significant incremental U.S. tax impact in the future. However, these distributions may be subject to non-U.S. withholding taxes if profits are distributed from certain jurisdictions. We have not recorded a deferred tax liability for withholding taxes in non-U.S. jurisdictions where earnings are considered indefinitely reinvested. If management intentions or U.S. tax law changes in the future, there could be an impact on the provision for income taxes to record an incremental tax liability in the period the change occurs.

A reconciliation of the U.S. federal statutory rate to the effective rate for the years ended December 31, was as follows:

(Millions of dollars)	2019		2018		2017	
Taxes computed at U.S. statutory rates	$ 132	21.0 %	$ 91	21.0 %	$ 206	35.0 %
(Decreases) increases in taxes resulting from:						
State Income Tax, net of Federal Tax	1	0.2 %	1	0.2 %	2	0.3 %
Subsidiaries' results subject to tax rates other than U.S. statutory rates	32	5.1 %	28	6.5 %	(31)	(5.3)%
Income from non-U.S. subsidiaries taxed at U.S. statutory rates, net of foreign tax credits[1]	2	0.3 %	—	— %	(16)	(2.7)%
Foreign currency translation taxed at non-U.S. subsidiaries	(1)	(0.2)%	(1)	(0.2)%	(12)	(2.0)%
U.S. deferred tax rate change	—	— %	(7)	(1.6)%	(334)	(56.6)%
Mandatory deemed repatriation of non-U.S. earnings	—	— %	(5)	(1.2)%	183	31.0 %
Prior year tax adjustments	9	1.4 %	11	2.5 %	—	— %
Valuation allowances	21	3.4 %	(7)	(1.6)%	—	— %
Other, net	—	— %	(3)	(0.7)%	(2)	(0.4)%
Provision (benefit) for income taxes	$ 196	31.2 %	$ 108	24.9 %	$ (4)	(0.7)%

[1] Excludes provisionally estimated net benefit from 2017 U.S. tax reform.

The provision for income taxes includes a prior year net tax charge of $9 million for 2019, compared with $11 million for 2018, to reduce non-U.S. deferred tax assets in certain jurisdictions to balances supporting the expected reversal of temporary differences between tax and U.S. GAAP balances.

The provision for income taxes for 2019 also includes an increase in valuation allowance for non-U.S. deferred tax assets due to a decrease in consistent and/or sustainable profitability to support their recognition in certain jurisdictions, resulting in a $21 million non-cash expense.

The provision for income taxes for 2018 includes a decrease in the valuation allowance for non-U.S. deferred tax assets due to improved U.S. GAAP profits expected to recur in certain jurisdictions, resulting in a $7 million non-cash benefit.

The components of Profit before income taxes for the years ended December 31, were as follows:

(Millions of dollars)	2019	2018	2017
U.S.	$ 257	$ 213	$ 285
Non-U.S.	371	220	305
Total	$ 628	$ 433	$ 590

Profit before income taxes, as shown above, is based on the location of the entity to which such earnings are attributable. Where an entity's earnings are subject to taxation, however, may not correlate solely to where an entity is located. Thus, the income tax provision shown below as U.S. or non-U.S. may not correspond to the earnings shown above.

The components of the Provision (benefit) for income taxes were as follows for the years ended December 31:

(Millions of dollars)	2019	2018	2017
Current income tax provision (benefit):			
U.S.	$ 13	$ (46)	$ 157
Non-U.S.	161	112	102
State (U.S.)	2	1	1
	176	67	260
Deferred income tax provision (benefit):			
U.S.	32	67	(239)
Non-U.S.	(11)	(26)	(28)
State (U.S.)	(1)	—	3
	20	41	(264)
Total Provision (benefit) for income taxes	$ 196	$ 108	$ (4)

Current income tax provision is the amount of income taxes reported or expected to be reported on our income tax returns. We join Caterpillar in the filing of a consolidated U.S. Federal income tax return and certain state income tax returns. In accordance with our tax sharing agreement with Caterpillar, we generally pay to or receive from Caterpillar our allocated share of income taxes or credits reflected in these consolidated filings. This amount is calculated on a separate return basis by taking taxable income times the applicable statutory tax rate and includes payment for certain tax attributes earned during the year.

Income taxes payable were $160 million and $135 million as of December 31, 2019 and 2018, respectively, and are included in Other liabilities in the Consolidated Statements of Financial Position.

Accounting for income taxes under generally accepted accounting principles requires individual tax-paying entities of the Company to offset deferred income tax assets and liabilities within each particular tax jurisdiction and present them as a single amount in the Consolidated Statements of Financial Position. Amounts in different tax jurisdictions cannot be offset against each other. The amounts of deferred income taxes at December 31, included in the following lines in our Consolidated Statements of Financial Position were:

(Millions of dollars)	2019	2018
Assets:		
Other assets	$ 118	$ 108
Liabilities:		
Other liabilities	(680)	(653)
Deferred income taxes, net	$ (562)	$ (545)

Our consolidated deferred income taxes consisted of the following components as of December 31:

(Millions of dollars)	2019	2018
Deferred income tax assets:		
Allowance for credit losses	$ 124	$ 111
Tax carryforwards	39	44
	163	155
Deferred income tax liabilities (primarily lease basis differences)	(508)	(508)
Valuation allowance for deferred income tax assets	(23)	(2)
Deferred income tax on translation adjustment	(194)	(190)
Deferred income taxes, net	$ (562)	$ (545)

As of December 31, 2019, amounts and expiration dates of net operating loss (NOL) carryforwards in various U.S. state taxing jurisdictions were:

(Millions of dollars)

2020	2021	2022	2023	2024-2039	Unlimited	Total
$ —	$ 5	$ 5	$ 6	$ 93	$ 5	$ 114

The gross deferred income tax asset associated with these NOL carryforwards is $9 million as of December 31, 2019, partially offset by a valuation allowance of $2 million.

In some U.S. state income tax jurisdictions, we join with other Caterpillar entities in filing combined income tax returns. In other U.S. state income tax jurisdictions, we file on a separate, stand-alone basis.

At December 31, 2019, approximately $6 million of U.S. foreign tax credits were available for carryforward. These credits expire in 2028.

As of December 31, 2019, amounts and expiration dates of NOL carryforwards in various non-U.S. taxing jurisdictions were:

(Millions of dollars)

2020	2021	2022	2023	2024-2034	Unlimited	Total
$ —	$ 9	$ 2	$ 6	$ 6	$ 121	$ 144

Valuation allowances of $21 million have been recorded at certain non-U.S. subsidiaries that have not yet demonstrated consistent and/or sustainable profitability to support the recognition of net deferred income tax assets.

A reconciliation of the beginning and ending amounts of gross unrecognized income tax benefits for uncertain income tax positions, including positions impacting only the timing of income tax benefits was as follows:

(Millions of dollars)	2019	2018	2017
Reconciliation of unrecognized income tax benefits[1]**:**			
Balance at beginning of year	$ 119	$ —	$ 4
Additions for income tax positions related to current year	—	119	—
Reductions for income tax positions related to settlements[2]	—	—	(4)
Balance at end of year	$ 119	$ 119	$ —
Amount that, if recognized, would impact the effective tax rate	$ 119	$ 119	$ —

[1] Foreign currency translation amounts are included within each line as applicable.
[2] Includes cash payment or other reduction of assets to settle liability.

We classify interest and penalties on income taxes as a component of the provision for income taxes. During the years ended December 31, 2019, 2018 and 2017, we recognized an expense of less than $1 million, a benefit of $1 million and an expense of $2 million in interest and penalties, respectively. As of December 31, 2019 and 2018, the total amount of accrued interest and penalties was less than $1 million.

On January 31, 2018, Caterpillar received a Revenue Agent's Report (RAR) from the IRS indicating the end of field examination of our U.S. tax returns for 2010 to 2012. Tax years prior to 2007 are generally no longer subject to U.S. tax assessment. In our major non-U.S. jurisdictions, tax years are typically subject to examination for three to ten years. Due to the uncertainty related to the timing and potential outcome of audits, we cannot estimate the range of reasonably possible change in unrecognized tax benefits in the next 12 months.

NOTE 13 – FAIR VALUE MEASUREMENTS

A. Fair Value Measurements

The guidance on fair value measurements defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants. This guidance also specifies a fair value hierarchy based upon the observability of inputs used in valuation techniques. Observable inputs (highest level) reflect market data obtained from independent sources, while unobservable inputs (lowest level) reflect internally developed market assumptions. In accordance with this guidance, fair value measurements are classified under the following 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 in which all significant inputs or significant value-drivers are observable in active markets.
- **Level 3** – Model-derived valuations in which one or more significant inputs or significant value-drivers are unobservable.

When available, we use quoted market prices to determine fair value and we classify such measurements within Level 1. In some cases where market prices are not available, we make use of observable market-based inputs to calculate fair value, in which case the measurements are classified within Level 2. If quoted or observable market prices are not available, fair value is based upon valuations in which one or more significant inputs are unobservable, including internally developed models that use, where possible, current market-based parameters such as interest rates, yield curves and currency rates. These measurements are classified within Level 3.

Fair value measurements are classified according to the lowest level input or value-driver that is significant to the valuation. A measurement may therefore be classified within Level 3 even though there may be significant inputs that are readily observable.

Fair value measurement includes the consideration of nonperformance risk. Nonperformance risk refers to the risk that an obligation (either by a counterparty or us) will not be fulfilled. For financial assets traded in an active market (Level 1), the nonperformance risk is included in the market price. For certain other financial assets and liabilities (Level 2 and 3), our fair value calculations have been adjusted accordingly.

Derivative financial instruments

The fair value of interest rate contracts is primarily based on standard industry accepted models that utilize the appropriate market-based forward swap curves and zero-coupon interest rates to determine discounted cash flows. The fair value of foreign currency forward and cross currency contracts is based on standard industry accepted valuation models that discount cash flows resulting from the differential between the contract price and the market-based forward rate.

Derivative financial instruments are measured on a recurring basis at fair value and are classified as Level 2 measurements. We had derivative financial instruments in a net asset position included in our Consolidated Statements of Financial Position of $34 million and $49 million as of December 31, 2019 and 2018, respectively.

Impaired loans

Our impaired loans are subject to measurement at fair value on a nonrecurring basis and are classified as Level 3 measurements. A loan is considered impaired when management determines that collection of contractual amounts due is not probable. In these cases, an allowance for credit losses may be established based either on the present value of expected future cash flows discounted at the receivables' effective interest rate, the fair value of the collateral for collateral-dependent receivables or the observable market price of the receivable. In determining collateral value, we estimate the current fair market value of the collateral less selling costs. We had impaired loans carried at the fair value of $343 million and $469 million as of December 31, 2019 and 2018, respectively.

B. Fair Values of Financial Instruments

In addition to the methods and assumptions we use to record the fair value of financial instruments as discussed in the Fair Value Measurements section above, we used the following methods and assumptions to estimate the fair value of our financial instruments:

Cash and cash equivalents – carrying amount approximated fair value.

Finance receivables, net – fair value was estimated by discounting the future cash flows using current rates representative of receivables with similar remaining maturities.

Restricted cash and cash equivalents – carrying amount approximated fair value.

Short-term borrowings – carrying amount approximated fair value.

Long-term debt – fair value for fixed and floating-rate debt was estimated based on quoted market prices.

Guarantees – fair value of guarantees is based on our estimate of the premium a market participant would require to issue the same guarantee in a stand-alone, arms-length transaction with an unrelated party. If quoted or observable market prices are not available, fair value is based upon internally developed models that utilize current market-based assumptions.

Fair values of our financial instruments were as follows:

(Millions of dollars)	2019		2018			
	Carrying Amount	Fair Value	Carrying Amount	Fair Value	Fair Value Levels	Reference
Cash and cash equivalents	$ 690	$ 690	$ 766	$ 766	1	
Restricted cash and cash equivalents[2]	$ 5	$ 5	$ 7	$ 7	1	
Finance receivables, net (excluding finance leases[1])	$ 20,022	$ 20,133	$ 20,451	$ 20,510	3	Note 2
Interest rate contracts:						
In a receivable position	$ 5	$ 5	$ 4	$ 4	2	Note 9
In a payable position	$ (25)	$ (25)	$ (40)	$ (40)	2	Note 9
Cross currency contracts						
In a receivable position	$ 72	$ 72	$ 93	$ 93	2	Note 9
In a payable position	$ (4)	$ (4)	$ (11)	$ (11)	2	Note 9
Foreign exchange contracts:						
In a receivable position	$ 7	$ 7	$ 15	$ 15	2	Note 9
In a payable position	$ (21)	$ (21)	$ (12)	$ (12)	2	Note 9
Short-term borrowings	$ (5,161)	$ (5,161)	$ (5,723)	$ (5,723)	1	Note 7
Long-term debt	$ (23,334)	$ (23,655)	$ (22,815)	$ (22,684)	2	Note 8
Guarantees	$ —	$ —	$ —	$ —	3	Note 11

(1) Represents finance leases and failed sale leasebacks of $7.81 billion as of December 31, 2019 and finance leases of $7.47 billion as of December 31, 2018.
(2) Included in Other assets in the Consolidated Statements of Financial Position.

NOTE 14 – TRANSACTIONS WITH RELATED PARTIES

We have a Support Agreement with Caterpillar, which provides that Caterpillar will (1) remain, directly or indirectly, our sole owner; (2) cause us to maintain a tangible net worth of at least $20 million and (3) ensure that we maintain a ratio of profit before income taxes and interest expense to interest expense (as defined by the Support Agreement) of not less than 1.15 to 1, calculated on an annual basis. Although this agreement can be modified or terminated by either party, any termination or any modification which would adversely affect holders of our debt requires the consent of holders of 66-2/3 percent in principal amount of outstanding debt of each series so affected. Any modification or termination which would adversely affect the lenders under the Credit Facility requires their consent. Caterpillar's obligation under this agreement is not directly enforceable by any of our creditors and does not constitute a guarantee of any of our obligations. Cash dividends of $25 million, $400 million and $725 million were paid to Caterpillar in 2019, 2018 and 2017, respectively.

We have variable amount and term lending agreements and other notes receivable with Caterpillar. Under these agreements, we may borrow up to $2.61 billion from Caterpillar, and Caterpillar may borrow up to $2.05 billion from us. The variable amount lending agreements are in effect for indefinite periods of time and may be changed or terminated by either party with 30 days notice. The term lending agreements have remaining maturities ranging up to nine years. We extended a $2 billion committed credit facility to Caterpillar, which expired in February 2019. Under this agreement, we received a fee from Caterpillar based on amounts drawn under the credit facility and a commitment fee for the undrawn amounts under the credit facility. Information concerning these agreements was as follows:

(Millions of dollars)	**2019**	**2018**	**2017**
Payable to Caterpillar - borrowings as of December 31,	$ 618	$ 1,518	$ 1,638
Payable to Caterpillar - other as of December 31,	$ 75	$ 83	$ 85
Notes receivable from Caterpillar as of December 31,	$ 296	$ 662	$ 559
Other receivables from Caterpillar as of December 31,[2]	$ 64	$ 33	$ 31
Interest expense	$ 32	$ 35	$ 21
Interest income on Notes Receivable with Caterpillar[1]	$ 26	$ 30	$ 74
Fees on committed credit facility extended to Caterpillar[1]	$ 5	$ 40	$ 40

[1] Included in Other revenues, net in the Consolidated Statements of Profit.
[2] Included in Other assets in the Consolidated Statements of Financial Position.

We have agreements with Caterpillar to purchase certain trade receivables at a discount. Information pertaining to these purchases was as follows:

(Millions of dollars)	**2019**	**2018**	**2017**
Purchases made	$ 42,817	$ 42,961	$ 34,667
Discounts earned	$ 455	$ 375	$ 253
Purchased Receivables as of December 31,	$ 4,448	$ 4,691	$ 3,461

We participate in certain marketing programs offered in conjunction with Caterpillar that allow us to periodically offer financing to customers at interest rates that are below market rates. Under these marketing programs, Caterpillar funds an amount at the outset of the transaction, which we then recognize as revenue over the term of the financing. During 2019, 2018 and 2017, relative to such programs, we received $351 million, $335 million and $277 million, respectively. We have Finance receivables, net and Equipment on operating leases, net with Caterpillar of $139 million and $56 million as of December 31, 2019 and 2018, respectively. For the years ended December 31, 2019, 2018 and 2017, we recognized revenues of $16 million, $9 million and $4 million, respectively, related to these finance receivables and operating leases. For the years ended December 31, 2019, 2018 and 2017, we recognized depreciation related to these operating leases of $11 million, $5 million and $3 million, respectively. At December 31, 2019 and 2018, $562 million and $450 million, respectively, of our portfolio was subject to guarantees by Caterpillar and affiliates.

We participate in various benefit plans, which are administered by Caterpillar. These plans include employee medical plans and postretirement benefit plans. We reimburse Caterpillar for these charges. During 2019, 2018 and 2017, these charges amounted to $35 million, $34 million and $31 million, respectively. Included in these charges are contributions to defined benefit plans in the amount of $9 million, $9 million and $8 million in 2019, 2018 and 2017, respectively. These contributions are related to our participation in the following defined benefit plans that are administered by Caterpillar: the Caterpillar Inc. Retirement Income Plan, the Caterpillar Inc. Supplemental Retirement Plan and the Caterpillar Inc. Retiree Benefit Program. The total cost of the defined benefit plans is determined by actuarial valuation and we receive an allocation of the service and prior service cost based on headcount. We participate in the Caterpillar stock incentive plans. In 2019, 2018 and 2017, Caterpillar allocated to us $8 million annually in expenses related to stock based compensation. Further information about these plans is available in Caterpillar's 2019 Annual Report on Form 10-K filed separately with the Securities and Exchange Commission.

Caterpillar provides operational and administrative support, which is integral to the conduct of our business. In 2019, 2018 and 2017, these operational and support charges for which we reimburse Caterpillar amounted to $46 million, $35 million and $30 million, respectively. In addition, we provide administrative support services to certain Caterpillar subsidiaries. Caterpillar reimburses us for these charges. During 2019, 2018 and 2017, these charges amounted to $13 million, $11 million and $9 million, respectively.

We join Caterpillar in the filing of a consolidated U.S. Federal income tax return and certain state income tax returns. In accordance with our tax sharing agreement with Caterpillar, we generally pay to or receive from Caterpillar our allocated share of income taxes or credits reflected in these consolidated filings. This amount is calculated on a separate return basis by taking taxable income times the applicable statutory tax rate and includes payment for certain tax attributes earned during the year.

NOTE 15 – SEGMENT AND GEOGRAPHIC INFORMATION

A. Basis for Segment Information

We report information internally for operating segments based on management responsibility. Our operating segments provide financing alternatives to customers and dealers around the world for Caterpillar products, as well as financing for vehicles, power generation facilities and marine vessels that, in most cases, incorporate Caterpillar products. Financing plans include operating and finance leases, installment sale contracts, working capital loans and wholesale financing plans within each of the operating segments.

B. Description of Segments

We have six operating segments that offer financing services. Following is a brief description of our segments:

- **North America** - Includes our operations in the United States and Canada.
- **EAME** - Includes our operations in Europe, Africa, the Middle East and the Commonwealth of Independent States.
- **Asia/Pacific** - Includes our operations in Australia, New Zealand, China, Japan, Southeast Asia and India.
- **Latin America** - Includes our operations in Mexico and Central and South American countries.
- **Caterpillar Power Finance** - Provides financing worldwide for marine vessels with Caterpillar engines and for Caterpillar electrical power generation, gas compression and co-generation systems and non-Caterpillar equipment that is powered by these systems.
- **Mining** - Provides financing for large mining customers worldwide.

C. Segment Measurement and Reconciliations

Cash, debt and other expenses are allocated to our segments based on their respective portfolios. The related Interest expense is calculated based on the amount of allocated debt and the rates associated with that debt. The performance of each segment is assessed based on a consistent leverage ratio. The Provision for credit losses is based on each segment's respective finance receivable portfolio. Capital expenditures include expenditures for equipment on operating leases and other miscellaneous capital expenditures.

Reconciling items are created based on accounting differences between segment reporting and consolidated external reporting. For the reconciliation of Profit before income taxes, we have grouped the reconciling items as follows:

- **Unallocated** - This item is related to corporate requirements and strategies that are considered to be for the benefit of the entire organization. Also included are the consolidated results of the special purpose corporation (see Note 11 for additional information) and other miscellaneous items.
- **Timing** - Timing differences in the recognition of costs between segment reporting and consolidated external reporting.
- **Methodology** - Methodology differences between segment reporting and consolidated external reporting are as follows:
    - Segment assets include off-balance sheet managed assets for which we maintain servicing responsibilities.
    - The impact of differences between the actual leverage and the segment leverage ratios.
    - Interest expense includes realized forward points on foreign currency forward contracts.
    - The net gain or loss from interest rate derivatives is excluded from segment reporting.

Supplemental segment data and reconciliations to consolidated external reporting for the years ended December 31:

(Millions of dollars) 2019	External Revenues	Profit before income taxes	Interest Expense	Depreciation on equipment leased to others	Provision for credit losses	Assets at December 31, 2019	Capital expenditures
North America	$ 1,633	$ 493	$ 390	$ 583	$ 19	$ 15,540	$ 1,106
EAME	289	75	56	65	4	4,991	92
Asia/Pacific	386	181	112	11	15	4,801	11
Latin America	251	43	98	24	29	2,909	55
Caterpillar Power Finance	101	(41)	42	3	71	1,673	—
Mining	277	40	57	127	24	2,488	254
Total Segments	2,937	791	755	813	162	32,402	1,518
Unallocated	59	(342)	256	—	—	1,896	16
Timing	(30)	(17)	—	—	—	16	—
Methodology	—	196	(224)	—	—	(216)	—
Inter-segment Eliminations [1]	—	—	—	—	—	(405)	—
Total	$ 2,966	$ 628	$ 787	$ 813	$ 162	$ 33,693	$ 1,534

2018	External Revenues	Profit before income taxes	Interest Expense	Depreciation on equipment leased to others	Provision for credit losses	Assets at December 31, 2018	Capital expenditures
North America	$ 1,533	$ 434	$ 363	$ 572	$ 42	$ 15,632	$ 1,108
EAME	279	14	50	71	58	4,862	108
Asia/Pacific	357	168	111	18	(5)	4,639	14
Latin America	254	(3)	101	27	73	2,972	32
Caterpillar Power Finance	110	(143)	55	2	171	2,259	—
Mining	256	34	60	128	8	2,234	192
Total Segments	2,789	504	740	818	347	32,598	1,454
Unallocated	92	(267)	248	1	—	1,957	104
Timing	(34)	(1)	—	—	7	55	1
Methodology	—	197	(231)	—	—	(159)	—
Inter-segment Eliminations [1]	—	—	—	—	—	(270)	—
Total	$ 2,847	$ 433	$ 757	$ 819	$ 354	$ 34,181	$ 1,559

2017	External Revenues	Profit before income taxes	Interest Expense	Depreciation on equipment leased to others	Provision for credit losses	Assets at December 31, 2017	Capital expenditures
North America	$ 1,337	$ 353	$ 306	$ 520	$ 36	$ 14,790	$ 992
EAME	307	116	37	80	4	4,332	103
Asia/Pacific	267	99	87	25	(5)	4,214	6
Latin America	292	5	121	38	55	3,407	54
Caterpillar Power Finance	155	42	44	3	39	2,746	—
Mining	272	49	50	142	8	2,399	210
Total Segments	2,630	664	645	808	137	31,888	1,365
Unallocated	90	(220)	193	—	—	1,719	8
Timing	(31)	(6)	—	2	(5)	53	—
Methodology	—	152	(171)	—	—	(256)	—
Inter-segment Eliminations [1]	—	—	—	—	—	(244)	—
Total	$ 2,689	$ 590	$ 667	$ 810	$ 132	$ 33,160	$ 1,373

[1] Elimination is primarily related to intercompany loans.

Geographic information:

(Millions of dollars)	2019	2018	2017
Revenues			
Inside U.S.	$ 1,756	$ 1,684	$ 1,551
All other	1,210	1,163	1,138
Total	$ 2,966	$ 2,847	$ 2,689

Equipment on operating leases, net and property and equipment, net (included in Other assets)	2019	2018
Inside U.S.	$ 2,686	$ 2,775
Inside Canada	479	402
All other	553	513
Total	$ 3,718	$ 3,690

NOTE 16 – SELECTED QUARTERLY FINANCIAL DATA (UNAUDITED)

(Millions of dollars)

2019	First quarter	Second quarter	Third quarter	Fourth quarter
Total revenues	$ 736	$ 757	$ 748	$ 725
Profit before income taxes	$ 142	$ 141	$ 184	$ 161
Profit	$ 98	$ 79	$ 129	$ 104
2018	**First quarter**	**Second quarter**	**Third quarter**	**Fourth quarter**
Total revenues	$ 690	$ 723	$ 735	$ 699
Profit before income taxes	$ 124	$ 100	$ 163	$ 46
Profit	$ 91	$ 71	$ 125	$ 18

EXHIBIT 4.10

Description of Medium-Term Notes, Series H, 3.300% Notes Due 2024

The following is a description of Caterpillar Financial Service Corporation's Medium-Term Notes, Series H, 3.300% Notes Due 2024 (the "Notes"). The following summary of specified provisions of the Indenture (defined below) and the Notes does not purport to be complete. It is subject to, and qualified in its entirety by reference to, the actual provisions of the Indenture, including the definitions contained in the Indenture of some of the terms used below, and the Notes. A copy of the Indenture has been filed as an exhibit to this Annual Report on Form 10-K and the form of Medium-Term Note (Fixed Rate) was filed as an exhibit to the Registration Statement on Form S-3 filed by Caterpillar Financial Services Corporation ("Cat Financial") with the Securities and Exchange Commission on April 4, 2014.

General

Cat Financial issued the Notes as a part of a series of debt securities (designated Medium-Term Notes, Series H) under an Indenture, dated as of April 15, 1985, as supplemented by the First, Second, Third and Fourth Supplemental Indentures, dated as of May 22, 1986, March 15, 1987, October 2, 1989 and October 1, 1990, respectively (collectively, the "Indenture"), between the Company and U.S. Bank Trust National Association, as successor trustee (the "Trustee"). The term "debt securities," as used in this Exhibit, refers to all securities that may be issued under the Indenture, including the Notes.

The Notes are unsecured obligations of Cat Financial and rank equally with its other unsecured and unsubordinated indebtedness from time to time outstanding. Cat Financial may issue as many distinct series of debt securities under the Indenture as it wishes. The Indenture does not limit the aggregate principal amount of debt securities that Cat Financial may issue.

The Notes are part of the same series of debt securities as Cat Financial's previously issued Medium-Term Notes, Series H. As the Notes constitute a single series of debt securities under the Indenture, holders of the Notes will vote with holders of all other tranches of the Medium Term Notes, Series H, as a single class. Cat Financial may issue an unlimited principal amount of its Medium-Term Notes, Series H.

The Notes are not subject to any sinking fund. The Notes are not subject to mandatory or optional redemption or to repayment at the option of the holders.

Reopened Issues

Cat Financial may "reopen" the issuance of the Notes at any time by offering additional notes with terms identical (other than issue date and issue price) to those of existing Notes, provided that any new notes would be treated as fungible with the original notes for United States federal income tax purposes.

Book-Entry Notes and Form

The Notes were issued in the form of one or more fully registered global note (the "Global Note") deposited with, or on behalf of, The Depository Trust Company, New York, New York (the "Depository") and registered in the name of Cede & Co., the Depository's nominee. Beneficial interests in the Global Note are represented through book-entry accounts of financial institutions acting on behalf of beneficial owners as direct or indirect participants in the Depository.

Terms of the Notes

As of December 31, 2019, the aggregate outstanding principal amount of the Notes was $450,000,000. Notes in the principal amount of $250,000,000 were issued on June 9, 2014 and additional Notes in the principal amount of $200,000,000 were issued on May 11, 2017.

The Notes are listed on the New York Stock Exchange under the symbol CAT/24.

The Notes mature on June 9, 2024 (the "Maturity Date"). The Notes bear interest at 3.300% per annum until the principal is paid or made available for payment. Interest on the Notes is payable semi-annually on the 9th of June and December of each year (each, an "Interest Payment Date"), ending on the Maturity Date.

Interest payments on the Notes equal the amount of interest accrued from and including the immediately preceding Interest Payment Date in respect of which interest has been paid or duly provided for, to but excluding the related Interest Payment Date or date of maturity, as the case may be.

Interest on the Notes is computed on the basis of a 360-day year of twelve 30-day months. If any Interest Payment Date or the maturity of the Notes falls on a day that is not a Business Day (as defined below), the payment of principal, premium, if any, and interest may be made on the next succeeding Business Day, and no interest on such payment shall accrue for the period from and after such Interest Payment Date or maturity, as the case may be.

The Notes were issued in denominations of $1,000 and integral multiples of $1,000 above that amount. The Notes are denominated in U.S. dollars and payments of principal, premium and interest on the notes are made in U.S. dollars.

"Business Day" means any day, other than a Saturday or Sunday, that is neither a legal holiday nor a day on which commercial banks are authorized or required by law, regulation or executive order to close in The City of New York.

Certain Restrictions

Support Agreement. Cat Financial has a support agreement with Caterpillar Inc. ("Caterpillar") which provides, among other things, that Caterpillar will:

- remain directly or indirectly, Cat Financial's sole owner;
- ensure that Cat Financial will maintain a tangible net worth of at least $20 million;
- permit Cat Financial to use (and Cat Financial is required to use) the name "Caterpillar" in the conduct of its business; and
- ensure that Cat Financial maintains a ratio of earnings and interest expense (as defined in the support agreement) to interest expense of not less than 1.15 to 1.

The Indenture provides that Cat Financial:

- will observe and perform in all material respects all of its covenants or agreements contained in the support agreement;
- to the extent possible, will cause Caterpillar to observe and perform in all material respects all covenants or agreements of Caterpillar contained in the support agreement; and

- will not waive compliance under, amend in any material respect or terminate the support agreement; provided, however, that the support agreement may be amended if that amendment would not have a material adverse effect on the holders of any outstanding debt securities of any series or if the holders of at least 66 2/3% in principal amount of the outstanding debt securities of each series so affected (excluding from the amount so outstanding and from such holders, the holders of such series who are not so affected) shall waive compliance with the provisions of this section insofar as it relates to that amendment.

The support agreement is not a guarantee by Caterpillar of the Notes or of any other obligations, indebtedness or liabilities of Cat Financial.

Restrictions on Liens and Encumbrances. Cat Financial will not create, assume or guarantee any secured debt without making effective provision for securing the Notes (and, if Cat Financial so determine, any other indebtedness of Cat Financial or guaranteed by Cat Financial), equally and ratably with that secured debt. The term "secured debt" means indebtedness for money borrowed which is secured by a mortgage, pledge, lien, security interest or encumbrance on any of Cat Financial's property of any character. This covenant does not apply to debt secured by:

- certain mortgages, pledges, liens, security interests or encumbrances in connection with the acquisition, construction or improvement of any fixed asset or other physical or real property by Cat Financial;

- mortgages, pledges, liens, security interests or encumbrances on property existing at the time of acquisition thereof, whether or not assumed by Cat Financial;

- mortgages, pledges, liens, security interests or encumbrances on property of a corporation existing at the time that corporation is merged into or consolidated with Cat Financial or at the time of a sale, lease or other disposition of the properties of a corporation or firm as an entirety or substantially as an entirety to Cat Financial;

- mortgages, including mortgages, pledges, liens, security interests or encumbrances, on Cat Financial's property in favor of the United States of America, any state thereof or any other country, or any agency, instrumentality or political subdivision thereof, to secure certain payments pursuant to any contract or statute or to secure indebtedness incurred for the purpose of financing all or any part of the purchase price or the cost of construction or improvement of the property subject to those mortgages;

- any extension, renewal or replacement (or successive extensions, renewals or replacements), in whole or in part, of any mortgage, pledge, lien or encumbrance referred to in the foregoing four items; or

- any mortgage, pledge, lien, security interest or encumbrance securing indebtedness owing by Cat Financial to one or more of its wholly-owned subsidiaries.

Notwithstanding the above, Cat Financial may, without securing the Notes, create, assume or guarantee secured debt which would otherwise be subject to the foregoing restrictions, provided that, after giving effect thereto, the aggregate amount of all secured debt then outstanding (not including secured debt permitted under the foregoing exceptions) at such time does not exceed 5% of its consolidated net tangible assets. The Indenture provides that Cat Financial will not consolidate or merge with, and will not convey, transfer or lease its property, substantially as an entirety, to, another corporation if as a result any of its properties or assets would become subject to a lien or mortgage not permitted by the terms of the Indenture unless effective provision is made to secure the Notes equally and ratably with (or prior to) all indebtedness thereby secured.

The term "consolidated net tangible assets" means, as of any particular time, the aggregate amount of assets after deducting therefrom (a) all current liabilities (excluding any such liability that by its terms is extendable or renewable at the option of the obligor thereon to a time more than 12 months after the time as of which the amount thereof is being computed) and (b) all goodwill, excess of cost over assets acquired, patents, copyrights, trademarks, tradenames, unamortized debt discount and expense and other like intangibles, all as shown in Cat Financial’s and its subsidiaries' most recent consolidated financial statements prepared in accordance with generally accepted accounting principles.

The term "subsidiary," as used in this section, means any corporation of which more than 50% of the outstanding stock having ordinary voting power to elect directors is owned directly or indirectly by Cat Financial or by one or more other corporations, more than 50% of the outstanding stock of which is similarly owned or controlled.

The Trustee

U.S. Bank Trust National Association serves as Trustee under the Indenture. The Indenture contains certain limitations on the right of the Trustee, as a creditor of Cat Financial, to obtain payment of claims in certain cases or to realize on certain property received in respect of any such claim as security or otherwise. In addition, the Trustee may be deemed to have a conflicting interest and may be required to resign as Trustee if at the time of a default under the Indenture the Trustee is a creditor of Cat Financial.

Events of Default and Notices

The following events are defined in the Indenture as "events of default" with respect to debt securities of any series, including the Notes:

- failure to pay principal of or premium, if any, on any debt security of that series when due;
- failure to pay any interest on any debt security of that series when due, continued for 60 days;
- failure to deposit any sinking fund payment, when due, in respect of any debt security of that series;
- default in the performance, or breach, of any term or provision of those covenants contained in the Indenture that are described under "—Certain Restrictions—Support Agreement";
- failure to perform any of Cat Financial’s other covenants in the Indenture (other than a covenant included in the Indenture solely for the benefit of a series of debt securities other than that series), continued for 60 days after written notice given to Cat Financial by the Trustee or the holders of at least 25% in principal amount of the debt securities outstanding and affected thereby;
- Caterpillar or one of its wholly-owned subsidiaries shall at any time fail to own all of the issued and outstanding shares of Cat Financial’s capital stock;
- default in payment of principal in excess of $10,000,000 or acceleration of any indebtedness for money borrowed in excess of $10,000,000 by Cat Financial (including a default with respect to debt securities of any series other than that series), if such indebtedness has not been discharged or becomes no longer due and payable or such acceleration has not been rescinded or annulled, within 10 days after written notice given to Cat Financial by the Trustee or the holders of at least 10% in principal amount of the outstanding debt securities of that series;
- certain bankruptcy, insolvency or reorganization events relating to Cat Financial;

- certain bankruptcy, insolvency or reorganization events relating to Caterpillar or one of its subsidiaries if those events affect any significant part of Cat Financial's assets or those of any of its subsidiaries; and

- any other event of default provided with respect to debt securities of that series.

If an event of default with respect to debt securities of any series at the time outstanding shall occur and be continuing, either the Trustee or the holders of at least 25% in principal amount of the outstanding debt securities of that series may declare the principal amount (or, if the debt securities of that series are original issue discount securities, that portion of the principal amount as may be specified in the terms of that series) of all debt securities of that series to be due and payable immediately; provided, however, that under certain circumstances the holders of a majority in aggregate principal amount of outstanding debt securities of that series may rescind and annul that declaration and its consequences.

The Indenture provides that the Trustee, within 90 days after the occurrence of a default with respect to any series of debt securities, will give to the holders of debt securities of that series notice of all uncured defaults known to it (the term default to mean the events specified above without grace periods), provided that, except in the case of default in the payment of principal of (or premium, if any) or interest, if any, on any debt security, the Trustee will be protected in withholding that notice if it in good faith determines that the withholding of that notice is in the interest of the holders of debt securities.

Cat Financial is required to furnish to the Trustee annually a statement by certain of its officers to the effect that to the best of their knowledge Cat Financial is not in default in the fulfillment of any of its obligations under the Indenture or, if there has been a default in the fulfillment of any such obligation, specifying each default.

The holders of a majority in principal amount of the outstanding debt securities of any series affected will have the right, subject to certain limitations, to direct the time, method and place of conducting any proceeding for any remedy available to the Trustee, exercising any trust or power conferred on the Trustee with respect to the debt securities of that series, and to waive certain defaults.

Under the Indenture, record dates may be set for certain actions to be taken by the holders with respect to events of default, declaring an acceleration, or rescission and annulment thereof, the direction of the time, method and place of conducting any proceeding for any remedy available to the Trustee, exercising any trust or power conferred on the Trustee or waiving any default.

The Indenture provides that in case an event of default shall occur and be continuing, the Trustee will exercise such of its rights and powers under the Indenture, and use the same degree of care and skill in their exercise, as a prudent man would exercise or use under the circumstances in the conduct of his own affairs. Subject to those provisions, the Trustee will be under no obligation to exercise any of its rights or powers under the Indenture at the request of any of the holders of debt securities unless they have offered to the Trustee reasonable security or indemnity against the costs, expenses and liabilities which might be incurred by it in compliance with that request.

The occurrence of an event of default under the Indenture may give rise to a cross-default under other series of debt securities issued under the Indenture and other indebtedness of Cat Financial which may be outstanding from time to time.

Modification and Waiver

Modifications and amendments of the Indenture may be made by Cat Financial and the Trustee with the consent of the holders of not less than 66 2/3% in aggregate principal amount of each series of the outstanding debt securities issued under the Indenture which are affected by the modification or amendment, provided that no such modification or amendment may, without a consent of each holder of such debt securities affected thereby:

- change the stated maturity date of the principal of or premium, if any, or any installment of interest, if any, on any such debt security;

- reduce the principal amount of or premium, if any, or the interest, if any, on any such debt security or the principal amount due upon acceleration of an original issue discount security;

- change the place or currency of payment of principal of or premium, if any, or interest, if any, on any such debt security;

- impair the right to institute suit for the enforcement of any such payment on or with respect to any such debt security;

- reduce the above-stated percentage of holders of debt securities necessary to modify or amend the Indenture; or

- modify the foregoing requirements or reduce the percentage of outstanding debt securities necessary to waive compliance with certain provisions of the Indenture or for waiver of certain defaults.

A record date may be set for certain actions of the holders with respect to consenting to any amendment.

Certain modifications and amendments of the Indenture may be made by Cat Financial and the Trustee without the holders of outstanding debt securities consenting. These changes are limited to clarifications and changes that would not adversely affect the debt securities of that series in any material respect. Nor does Cat Financial need any approval to make changes that affect only debt securities to be issued under the Indenture after the changes take effect.

The holders of not less than 66 2/3% in aggregate principal amount of each series of the outstanding debt securities issued under the Indenture may prospectively waive, insofar as that series is concerned, Cat Financial's compliance with certain restrictive provisions of the Indenture. The holders of at least a majority in aggregate principal amount of each series of the outstanding debt securities issued under the Indenture may, on behalf of the holders of all outstanding debt securities of that series, waive any past default under the Indenture with respect to that series, except a default in the payment of the principal of, or premium, if any, or interest on any outstanding debt securities of that series or in respect of an Indenture covenant which cannot be modified or amended without the consent of each holder of such debt securities.

The Indenture provides that in determining whether the holders of the requisite principal amount of the outstanding debt securities have given any request, demand, authorization, direction, notice, consent or waiver under the indenture, a debt security will not be "outstanding" if (i) it has been surrendered for cancellation; (ii) Cat Financial has deposited or set aside, in trust for its holder, money for its payment or redemption; (iii) the security has been paid by Cat Financial pursuant to the Indenture or exchanged for other debt securities; or (iv) Cat Financial or one of its affiliates own the security.

The Indenture also provides that in determining whether the holders of the requisite principal amount of the outstanding debt securities have given any request, demand, authorization, direction, notice, consent or waiver thereunder:

- the principal amount of an original issue discount security that will be deemed to be outstanding will be the amount of the principal thereof that would be due and payable as of the date of that determination upon acceleration of the maturity thereof; and

- the principal amount of a debt security denominated in a foreign currency or a composite currency will be the U.S. dollar equivalent, determined on the basis of the rate of exchange on the Business Day immediately preceding the date of the original issuance of the debt security in good faith, of the principal amount of that debt security (or, in the case of an original issue discount security, the U.S. dollar equivalent, determined based on the rate of exchange prevailing on the business day immediately preceding the date of original issuance of that debt security, of the amount determined as provided in the first item above).

Governing Law

The Indenture and the Notes are governed by and construed in accordance with the laws of the State of New York.

EXHIBIT 23

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (Nos.333-217029 and 333-234103) of Caterpillar Financial Services Corporation of our report dated February 19, 2020 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP
Nashville, Tennessee
February 19, 2020

EXHIBIT 31.1

SECTION 302 CERTIFICATIONS

I, David T. Walton, certify that:

1. I have reviewed this annual report on Form 10-K of Caterpillar Financial Services Corporation;
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 periods 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 we 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 registrant's Board of Directors (or persons performing the equivalent function):
    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.

Date: February 19, 2020

By: */s/David T. Walton*

David T. Walton, President, Director and Chief Executive Officer

EXHIBIT 31.2

SECTION 302 CERTIFICATIONS

I, Patrick T. McCartan, certify that:

1. I have reviewed this annual report on Form 10-K of Caterpillar Financial Services Corporation;
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 periods 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 we 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 registrant's Board of Directors (or persons performing the equivalent function):
    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.

Date: February 19, 2020

By: */s/Patrick T. McCartan*

Patrick T. McCartan, Executive Vice President and Chief Financial Officer

EXHIBIT 32

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 Caterpillar Financial Services Corporation (the "Company") on Form 10-K for the period ended December 31, 2019, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned hereby certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of our 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.

Date: February 19, 2020	*/s/David T. Walton*
	David T. Walton
	President, Director and Chief Executive Officer
Date: February 19, 2020	*/s/Patrick T. McCartan*
	Patrick T. McCartan
	Executive Vice President and Chief Financial Officer

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.