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

FORM 10-Q

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

For the quarterly period ended September 30, 2018

Commission File No. 001-11241

CATERPILLAR FINANCIAL SERVICES CORPORATION

(Exact name of Registrant as specified in its charter)

Delaware	**37-1105865**
(State of incorporation)	**(IRS Employer I.D. No.)**
2120 West End Ave. Nashville, Tennessee	**37203-0001**
(Address of principal executive offices)	**(Zip Code)**

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

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, 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 Exchange Act). Yes [ ] No [✓]

As of October 31, 2018, one share of common stock of the registrant was outstanding, which is owned by Caterpillar Inc.

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

PART I. FINANCIAL INFORMATION

ITEM 1. CONSOLIDATED FINANCIAL STATEMENTS (Unaudited)

In addition to the accompanying unaudited consolidated financial statements for Caterpillar Financial Services Corporation (together with its subsidiaries, "Cat Financial," "the Company," "we," "us" or "our"), we suggest that you read our 2017 Annual Report on Form 10-K filed with the Securities and Exchange Commission (SEC) on February 15, 2018. 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.

Caterpillar Financial Services Corporation
CONSOLIDATED STATEMENTS OF PROFIT
(Unaudited)
(Dollars in Millions)

	Three Months Ended September 30, 2018	Three Months Ended September 30, 2017	Nine Months Ended September 30, 2018	Nine Months Ended September 30, 2017
Revenues:				
Retail finance	$ 330	$ 309	$ 975	$ 924
Operating lease	259	247	760	737
Wholesale finance	108	79	304	222
Other, net	38	38	109	128
Total revenues	735	673	2,148	2,011
Expenses:				
Interest	194	169	558	499
Depreciation on equipment leased to others	208	201	616	608
General, operating and administrative	109	113	326	319
Provision for credit losses	47	48	218	82
Other	11	12	28	36
Total expenses	569	543	1,746	1,544
Other income (expense)	(3)	(4)	(15)	(10)
Profit before income taxes	163	126	387	457
Provision for income taxes	32	38	85	137
Profit of consolidated companies	131	88	302	320
Less: Profit attributable to noncontrolling interests	6	2	15	5
Profit [1]	$ 125	$ 86	$ 287	$ 315

[1] **Profit attributable to Caterpillar Financial Services Corporation.**

See Notes to Consolidated Financial Statements (unaudited).

Caterpillar Financial Services Corporation
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(Unaudited)
(Dollars in Millions)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	**2017**	**2018**	**2017**
Profit of consolidated companies	$ 131	$ 88	$ 302	$ 320
Other comprehensive income (loss), net of tax:				
Foreign currency translation, net of tax (expense)/benefit of: 2018 $(3) three months, $(18) nine months; 2017 $30 three months, $94 nine months	(50)	154	(241)	395
Derivative financial instruments:				
Gains (losses) deferred, net of tax (expense)/benefit of: 2018 $(14) three months, $(36) nine months; 2017 $8 three months, $22 nine months	42	(14)	115	(41)
(Gains) losses reclassified to earnings, net of tax expense/(benefit) of: 2018 $14 three months, $37 nine months; 2017 $(7) three months, $(23) nine months	(42)	11	(118)	41
Available-for-sale securities:				
Gains (losses) deferred, net of tax (expense)/benefit of: 2018 $0 three months, $0 nine months; 2017 $0 three months, $0 nine months	—	(1)	—	—
(Gains) losses reclassified to earnings, net of tax expense/(benefit) of: 2018 $0 three months, $0 nine months; 2017 $0 three months, $0 nine months	—	—	—	—
Total Other comprehensive income (loss), net of tax	(50)	150	(244)	395
Comprehensive income (loss)	81	238	58	715
Less: Comprehensive income (loss) attributable to the noncontrolling interests	—	5	7	11
Comprehensive income (loss) attributable to Caterpillar Financial Services Corporation	$ 81	$ 233	$ 51	$ 704

See Notes to Consolidated Financial Statements (unaudited).

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

	September 30, 2018	December 31, 2017
Assets:		
Cash and cash equivalents	$ 676	$ 708
Finance receivables, net	27,512	27,126
Notes receivable from Caterpillar	667	559
Equipment on operating leases,		
less accumulated depreciation	3,594	3,568
Deferred and refundable income taxes	205	174
Other assets	1,183	1,025
Total assets	$ 33,837	$ 33,160
Liabilities and shareholder's equity:		
Payable to dealers and others	$ 145	$ 190
Payable to Caterpillar - other	68	85
Accrued expenses	248	274
Income taxes payable	145	158
Payable to Caterpillar - borrowings	1,565	1,638
Short-term borrowings	4,462	4,836
Current maturities of long-term debt	5,801	6,188
Long-term debt	17,450	15,918
Deferred income taxes and other liabilities	631	609
Total liabilities	30,515	29,896
Commitments and contingent liabilities (Notes 7 and 9)		
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	3,256	2,969
Accumulated other comprehensive income/(loss)	(828)	(592)
Noncontrolling interests	147	140
Total shareholder's equity	3,322	3,264
Total liabilities and shareholder's equity	$ 33,837	$ 33,160

See Notes to Consolidated Financial Statements (unaudited).

Caterpillar Financial Services Corporation
CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDER'S EQUITY
(Unaudited)
(Dollars in Millions)

Nine Months Ended September 30, 2017	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			315		5	320
Foreign currency translation, net of tax				389	6	395
Derivative financial instruments, net of tax				—		—
Balance at September 30, 2017	$ 745	$ 2	$ 3,423	$ (606)	$ 136	$ 3,700
Nine Months Ended September 30, 2018						
Balance at December 31, 2017	$ 745	$ 2	$ 2,969	$ (592)	$ 140	$ 3,264
Profit of consolidated companies			287		15	302
Foreign currency translation, net of tax				(233)	(8)	(241)
Derivative financial instruments, net of tax				(3)		(3)
Balance at September 30, 2018	$ 745	$ 2	$ 3,256	$ (828)	$ 147	$ 3,322

See Notes to Consolidated Financial Statements (unaudited).

Caterpillar Financial Services Corporation
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)
(Dollars in Millions)

	Nine Months Ended September 30,	
	2018	**2017**
Cash flows from operating activities:		
Profit of consolidated companies	$ 302	$ 320
Adjustments for non-cash items:		
Depreciation and amortization	626	616
Amortization of receivables purchase discount	(274)	(180)
Provision for credit losses	218	82
Other, net	93	16
Changes in assets and liabilities:		
Receivables from others	(11)	69
Other receivables/payables with Caterpillar	(19)	1
Payable to dealers and others	(32)	(31)
Accrued interest payable	22	3
Accrued expenses and other liabilities, net	11	(4)
Income taxes payable	(67)	38
Settlements of designated derivatives	13	(7)
Net cash provided by operating activities	882	923
Cash flows from investing activities:		
Expenditures for equipment on operating leases	(1,093)	(1,012)
Capital expenditures - excluding equipment on operating leases	(99)	(6)
Proceeds from disposals of equipment	619	753
Additions to finance receivables	(10,151)	(9,765)
Collections of finance receivables	9,132	10,192
Net changes in Caterpillar purchased receivables	(484)	(161)
Proceeds from sales of receivables	416	98
Net change in variable lending to Caterpillar	(18)	(1,051)
Additions to other notes receivable with Caterpillar	(390)	(53)
Collections on other notes receivable with Caterpillar	300	56
Proceeds from sale of securities	—	4
Settlements of undesignated derivatives	(2)	23
Net cash provided by (used for) investing activities	(1,770)	(922)
Cash flows from financing activities:		
Net change in variable lending from Caterpillar	(63)	(105)
Payments on borrowings with Caterpillar	—	(49)
Proceeds from debt issued (original maturities greater than three months)	7,026	6,972
Payments on debt issued (original maturities greater than three months)	(5,636)	(5,718)
Short-term borrowings, net (original maturities three months or less)	(479)	(2,207)
Net cash provided by (used for) financing activities	848	(1,107)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(13)	23
Increase/(decrease) in cash, cash equivalents and restricted cash	**(53)**	**(1,083)**
Cash, cash equivalents and restricted cash at beginning of year[1]	732	1,824
Cash, cash equivalents and restricted cash at end of period[1]	$ 679	$ 741

[1] As of September 30, 2018 and December 31, 2017, restricted cash, which is included in Other assets in the Consolidated Statements of Financial Position, was $3 million and $24 million, respectively. Restricted cash 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 (unaudited).

Notes to Consolidated Financial Statements

(Unaudited)

1. Basis of Presentation

In the opinion of management, the accompanying unaudited consolidated financial statements include all adjustments, consisting only of normal recurring adjustments, necessary for a fair statement of (a) the consolidated profit for the three and nine months ended September 30, 2018 and 2017, (b) the consolidated comprehensive income for the three and nine months ended September 30, 2018 and 2017, (c) the consolidated financial position as of September 30, 2018 and December 31, 2017, (d) the consolidated changes in shareholder's equity for the nine months ended September 30, 2018 and 2017 and (e) the consolidated cash flows for the nine months ended September 30, 2018 and 2017. The preparation of financial statements, in conformity with generally accepted accounting principles in the United States of America (U.S. GAAP) and pursuant to the rules and regulations of the Securities and Exchange Commission (SEC), requires management to make estimates and assumptions that affect reported amounts. Significant estimates include residual values for leased assets, allowance for credit losses and income taxes. Actual results may differ from these estimates.

Interim results are not necessarily indicative of results for a full year. The information included in this Form 10-Q should be read in conjunction with the audited consolidated financial statements and notes thereto included in our annual report on Form 10-K for the year ended December 31, 2017 (2017 Form 10-K) filed with the SEC on February 15, 2018. The December 31, 2017 financial position data included herein was derived from the audited consolidated financial statements included in the 2017 Form 10-K, but does not include all disclosures required by U.S. GAAP. Certain amounts for prior periods have been reclassified to conform with current period financial statement presentation.

We consolidate all variable interest entities (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 7 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.

2. New Accounting Pronouncements

Revenue recognition – In May 2014, the Financial Accounting Standards Board (FASB) issued new revenue recognition guidance to provide a single, comprehensive revenue recognition model for all contracts with customers. Under the new guidance, an entity will recognize revenue to depict the transfer of promised goods or services to customers at an amount that the entity expects to be entitled to in exchange for those goods or services. A five step model has been introduced for an entity to apply when recognizing revenue. The new guidance also includes enhanced disclosure requirements. The guidance was effective January 1, 2018, and was applied on a modified retrospective basis. The adoption did not have a material impact on our financial statements.

Recognition and measurement of financial assets and financial liabilities – In January 2016, the FASB issued accounting guidance that affects the accounting for equity investments, financial liabilities accounted for under the fair value option and the presentation and disclosure requirements for financial instruments. Under the new guidance, all equity investments in unconsolidated entities (other than those accounted for using the equity method of accounting) will generally be measured at fair value through earnings. There will no longer be an available-for-sale classification for equity securities with readily determinable fair values. For financial liabilities when the fair value option has been elected, changes in fair value due to instrument-specific credit risk will be recognized separately in other comprehensive income. In addition, the FASB clarified guidance related to the valuation allowance assessment when recognizing deferred tax assets resulting from unrealized losses on available-for-sale debt securities. The guidance was effective January 1, 2018, and was applied on a modified retrospective basis. The adoption did not have a material impact on our financial statements.

Lease accounting – In February 2016, the 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 will continue 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 will be substantially equivalent to current lease accounting guidance except for certain targeted improvements that are intended to align, where necessary, lessor accounting with the lessee accounting model. Entities have the option to adopt the new guidance using a modified retrospective approach through a cumulative effect adjustment to retained earnings applied either to the beginning of the earliest period presented or the beginning of the period of adoption. We will adopt the new guidance effective January 1, 2019 using a modified retrospective approach through a cumulative effect adjustment to retained earnings as of the beginning of the period of adoption.

The new guidance provides a number of optional practical expedients in transition. We plan to elect 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 do not expect to elect the use-of-hindsight practical expedient. In addition, the new guidance provides practical expedients for an entity's ongoing accounting that we are still evaluating such as whether or not to separate lease and non-lease components. We plan to elect the short-term lease recognition exemption for all leases that qualify which means we will not recognize right-of-use assets or lease liabilities for these leases.

We are currently designing new processes and controls, cataloging and entering our leases into a recently implemented software solution and evaluating our population of leased assets to assess the effect of the new guidance on our financial statements. While we continue to assess the effects of adoption, we believe the most significant effects relate to the recognition of right-of-use assets and lease liabilities on our balance sheet and providing new disclosures about our leasing activities. We also have a team evaluating the impact of the changes to lessor accounting.

Measurement of credit losses on financial instruments – 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 is effective January 1, 2020, with early adoption permitted beginning January 1, 2019. We are in the process of evaluating the effect of the new guidance on our financial statements.

Classification for certain cash receipts and cash payments – In August 2016, the FASB issued accounting guidance related to the presentation and classification of certain transactions in the statement of cash flows where diversity in practice exists. The guidance was effective January 1, 2018, and was applied on a retrospective basis. The adoption did not have a material impact on our financial statements.

Classification of restricted cash – In November 2016, the FASB issued accounting guidance related to the presentation and classification of changes in restricted cash on the statement of cash flows where diversity in practice exists. The guidance was effective January 1, 2018, and was applied on a retrospective basis. The adoption did not have a material impact on our financial statements.

Derivatives and hedging – In August 2017, the FASB issued accounting guidance to better align hedge accounting with a company's risk management activities, simplify the application of hedge accounting and improve the disclosures of hedging arrangements. The new guidance is required to be applied on a modified retrospective basis, resulting in a cumulative-effect adjustment to opening retained earnings in the period of adoption. We will adopt the new guidance effective January 1, 2019. We have completed the evaluation of the impact of the new standard and do not expect the adoption to have a material impact on our financial statements.

Reclassification of certain tax effects from accumulated other comprehensive income – In February 2018, the FASB issued accounting guidance to allow a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from U.S. tax reform legislation. The new guidance is required to be applied either in the period of adoption or retrospectively to each period affected by U.S. tax reform legislation. The guidance is effective January 1, 2019, with early adoption permitted. We are in the process of evaluating the effect of the new guidance on our financial statements.

3. Finance Receivables

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

(Millions of dollars)	September 30, 2018	December 31, 2017
Finance leases and installment sale contracts – Retail	$ 15,544	$ 14,647
Retail notes receivable	8,382	9,417
Wholesale notes receivable	4,781	4,161
Finance leases and installment sale contracts – Wholesale	147	119
	28,854	28,344
Less: Unearned income	(926)	(853)
Recorded investment in finance receivables	27,928	27,491
Less: Allowance for credit losses	(416)	(365)
Total finance receivables, net	$ 27,512	$ 27,126

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 retail 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.
- **Europe** - 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 and Southeast Asia.
- **Mining** - Finance receivables related to large mining customers worldwide and project financing in various countries.
- **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 September 30, 2018 was $416 million or 1.49 percent of our recorded investment in finance receivables compared with $365 million or 1.33 percent as of December 31, 2017. An analysis of the allowance for credit losses was as follows:

(Millions of dollars)				
	September 30, 2018			
Allowance for Credit Losses:	**Customer**	**Dealer**	**Caterpillar Purchased Receivables**	**Total**
Balance at beginning of year	$ 353	$ 9	$ 3	$ 365
Receivables written off	(181)	—	—	(181)
Recoveries on receivables previously written off	31	—	—	31
Provision for credit losses	216	(2)	1	215
Adjustment due to sale of receivables	(6)	—	—	(6)
Foreign currency translation adjustment	(8)	—	—	(8)
Balance at end of period	$ 405	$ 7	$ 4	$ 416
Individually evaluated for impairment	$ 229	$ —	$ —	$ 229
Collectively evaluated for impairment	176	7	4	187
Ending Balance	$ 405	$ 7	$ 4	$ 416
Recorded Investment in Finance Receivables:				
Individually evaluated for impairment	$ 803	$ —	$ —	$ 803
Collectively evaluated for impairment	18,771	4,338	4,016	27,125
Ending Balance	$ 19,574	$ 4,338	$ 4,016	$ 27,928

(Millions of dollars)				
	December 31, 2017			
Allowance for Credit Losses:	Customer	Dealer	Caterpillar Purchased Receivables	Total
Balance at beginning of year	$ 331	$ 10	$ 2	$ 343
Receivables written off	(157)	—	—	(157)
Recoveries on receivables previously written off	43	—	—	43
Provision for credit losses	129	(1)	1	129
Adjustment due to sale of receivables	(1)	—	—	(1)
Foreign currency translation adjustment	8	—	—	8
Balance at end of year	$ 353	$ 9	$ 3	$ 365
Individually evaluated for impairment	$ 149	$ —	$ —	$ 149
Collectively evaluated for impairment	204	9	3	216
Ending Balance	$ 353	$ 9	$ 3	$ 365
Recorded Investment in Finance Receivables:				
Individually evaluated for impairment	$ 942	$ —	$ —	$ 942
Collectively evaluated for impairment	18,847	4,241	3,461	26,549
Ending Balance	$ 19,789	$ 4,241	$ 3,461	$ 27,491

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)	September 30, 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	$ 74	$ 17	$ 46	$ 137	$ 7,921	$ 8,058	$ 7
Europe	19	9	122	150	2,848	2,998	6
Asia/Pacific	31	14	8	53	2,885	2,938	5
Mining	5	—	9	14	1,623	1,637	—
Latin America	35	15	84	134	1,385	1,519	—
Caterpillar Power Finance	116	45	298	459	1,965	2,424	8
Dealer							
North America	—	—	—	—	2,435	2,435	—
Europe	—	—	—	—	580	580	—
Asia/Pacific	—	—	—	—	502	502	—
Mining	—	—	—	—	4	4	—
Latin America	—	—	79	79	734	813	—
Caterpillar Power Finance	—	—	—	—	4	4	—
Caterpillar Purchased Receivables[1]							
North America	17	10	11	38	2,618	2,656	
Europe	1	—	2	3	448	451	
Asia/Pacific	2	—	1	3	588	591	
Mining	—	—	—	—	—	—	
Latin America	—	—	—	—	314	314	
Caterpillar Power Finance	1	—	—	1	3	4	
Total	$ 301	$ 110	$ 660	$ 1,071	$ 26,857	$ 27,928	$ 26

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

(Millions of dollars)	December 31, 2017						
	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	$ 71	$ 15	$ 42	$ 128	$ 8,040	$ 8,168	$ 8
Europe	21	10	46	77	2,718	2,795	13
Asia/Pacific	18	7	14	39	2,520	2,559	5
Mining	3	1	60	64	1,751	1,815	9
Latin America	37	55	142	234	1,546	1,780	—
Caterpillar Power Finance	20	32	144	196	2,476	2,672	1
Dealer							
North America	—	—	—	—	2,394	2,394	—
Europe	—	—	—	—	417	417	—
Asia/Pacific	—	—	—	—	578	578	—
Mining	—	—	—	—	5	5	—
Latin America	—	72	—	72	773	845	—
Caterpillar Power Finance	—	—	—	—	2	2	—
Caterpillar Purchased Receivables[1]							
North America	24	5	2	31	2,010	2,041	
Europe	1	2	1	4	344	348	
Asia/Pacific	—	—	—	—	630	630	
Mining	—	—	—	—	—	—	
Latin America	—	—	—	—	437	437	
Caterpillar Power Finance	—	—	—	—	5	5	
Total	$ 195	$ 199	$ 451	$ 845	$ 26,646	$ 27,491	$ 36

[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 no impaired finance receivables as of September 30, 2018 and December 31, 2017, for the Dealer and Caterpillar Purchased Receivables portfolio segments. 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 September 30, 2018			As of December 31, 2017		
Impaired Finance Receivables With No Allowance Recorded	**Recorded Investment**	**Unpaid Principal Balance**	**Related Allowance**	**Recorded Investment**	**Unpaid Principal Balance**	**Related Allowance**
North America	$ 17	$ 17	$ —	$ 19	$ 19	$ —
Europe	2	1	—	45	45	—
Asia/Pacific	29	29	—	34	33	—
Mining	34	34	—	121	121	—
Latin America	31	31	—	45	45	—
Caterpillar Power Finance	61	74	—	160	172	—
Total	$ 174	$ 186	$ —	$ 424	$ 435	$ —
Impaired Finance Receivables With An Allowance Recorded						
North America	$ 41	$ 39	$ 18	$ 44	$ 43	$ 17
Europe	66	66	36	9	8	5
Asia/Pacific	2	2	1	8	8	2
Mining	58	58	22	—	—	—
Latin America	61	61	34	95	106	42
Caterpillar Power Finance	401	408	118	362	365	83
Total	$ 629	$ 634	$ 229	$ 518	$ 530	$ 149
Total Impaired Finance Receivables						
North America	$ 58	$ 56	$ 18	$ 63	$ 62	$ 17
Europe	68	67	36	54	53	5
Asia/Pacific	31	31	1	42	41	2
Mining	92	92	22	121	121	—
Latin America	92	92	34	140	151	42
Caterpillar Power Finance	462	482	118	522	537	83
Total	$ 803	$ 820	$ 229	$ 942	$ 965	$ 149

(Millions of dollars)	Three Months Ended September 30, 2018		Three Months Ended September 30, 2017	
Impaired Finance Receivables With No Allowance Recorded	**Average Recorded Investment**	**Interest Income Recognized**	**Average Recorded Investment**	**Interest Income Recognized**
North America	$ 19	$ —	$ 14	$ 1
Europe	4	—	47	—
Asia/Pacific	30	1	30	1
Mining	35	—	128	1
Latin America	37	1	68	1
Caterpillar Power Finance	94	2	171	1
Total	$ 219	$ 4	$ 458	$ 5
Impaired Finance Receivables With An Allowance Recorded				
North America	$ 47	$ —	$ 44	$ —
Europe	59	—	6	—
Asia/Pacific	2	—	28	1
Mining	60	1	—	—
Latin America	51	1	102	1
Caterpillar Power Finance	374	4	251	3
Total	$ 593	$ 6	$ 431	$ 5
Total Impaired Finance Receivables				
North America	$ 66	$ —	$ 58	$ 1
Europe	63	—	53	—
Asia/Pacific	32	1	58	2
Mining	95	1	128	1
Latin America	88	2	170	2
Caterpillar Power Finance	468	6	422	4
Total	$ 812	$ 10	$ 889	$ 10

(Millions of dollars)	Nine Months Ended September 30, 2018		Nine Months Ended September 30, 2017	
Impaired Finance Receivables With No Allowance Recorded	**Average Recorded Investment**	**Interest Income Recognized**	**Average Recorded Investment**	**Interest Income Recognized**
North America	$ 17	$ 1	$ 12	$ 1
Europe	17	—	48	1
Asia/Pacific	31	2	22	2
Mining	65	2	128	5
Latin America	41	2	69	2
Caterpillar Power Finance	149	5	233	7
Total	$ 320	$ 12	$ 512	$ 18
Impaired Finance Receivables With An Allowance Recorded				
North America	$ 51	$ 1	$ 52	$ 1
Europe	41	1	6	—
Asia/Pacific	5	—	35	2
Mining	43	2	—	—
Latin America	69	3	101	3
Caterpillar Power Finance	364	8	141	4
Total	$ 573	$ 15	$ 335	$ 10
Total Impaired Finance Receivables				
North America	$ 68	$ 2	$ 64	$ 2
Europe	58	1	54	1
Asia/Pacific	36	2	57	4
Mining	108	4	128	5
Latin America	110	5	170	5
Caterpillar Power Finance	513	13	374	11
Total	$ 893	$ 27	$ 847	$ 28

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.

As of September 30, 2018, there were $79 million in finance receivables on non-accrual status for the Dealer portfolio segment, all of which was in Latin America. As of December 31, 2017, there were no finance receivables on non-accrual status for the Dealer portfolio segment. The recorded investment in Customer finance receivables on non-accrual status was as follows:

(Millions of dollars)	September 30, 2018	December 31, 2017
North America	$ 44	$ 38
Europe	124	37
Asia/Pacific	4	10
Mining	10	63
Latin America	118	192
Caterpillar Power Finance	451	343
Total	$ 751	$ 683

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.

As of September 30, 2018 and December 31, 2017, there were no additional funds committed to lend to a borrower whose terms have been modified in a TDR.

There were no finance receivables modified as TDRs during the three and nine months ended September 30, 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 were as follows:

(Dollars in millions)	Three Months Ended September 30, 2018			Three Months Ended September 30, 2017		
	Number of Contracts	Pre-TDR Recorded Investment	Post-TDR Recorded Investment	Number of Contracts	Pre-TDR Recorded Investment	Post-TDR Recorded Investment
North America	4	$ —	$ —	11	$ 4	$ 5
Europe	—	—	—	1	—	—
Latin America	—	—	—	3	21	22
Caterpillar Power Finance	2	40	40	5	51	44
Total	6	$ 40	$ 40	20	$ 76	$ 71
	Nine Months Ended September 30, 2018			**Nine Months Ended September 30, 2017**		
	Number of Contracts	Pre-TDR Recorded Investment	Post-TDR Recorded Investment	Number of Contracts	Pre-TDR Recorded Investment	Post-TDR Recorded Investment
North America	34	$ 13	$ 13	37	$ 13	$ 13
Europe	—	—	—	2	—	—
Asia/Pacific	—	—	—	6	39	30
Mining	1	29	29	2	57	56
Latin America	1	3	3	17	26	27
Caterpillar Power Finance[1]	7	93	60	59	319	305
Total	43	$ 138	$ 105	123	$ 454	$ 431

[1] In Caterpillar Power Finance, during the nine months ended September 30, 2017, 44 contracts with a pre-TDR recorded investment of $200 million and a post-TDR recorded investment of $200 million were related to four customers.

TDRs in the Customer portfolio segment with a payment default (defined as 91+ days past due) which had been modified within twelve months prior to the default date, were as follows:

(Dollars in millions)	Three Months Ended September 30, 2018		Three Months Ended September 30, 2017	
	Number of Contracts	Post-TDR Recorded Investment	Number of Contracts	Post-TDR Recorded Investment
North America	7	$ 9	—	$ —
Latin America	1	—	1	—
Caterpillar Power Finance	3	33	—	—
Total	11	$ 42	1	$ —
	Nine Months Ended September 30, 2018		Nine Months Ended September 30, 2017	
	Number of Contracts	Post-TDR Recorded Investment	Number of Contracts	Post-TDR Recorded Investment
North America	10	$ 10	—	$ —
Latin America	3	1	241	16
Caterpillar Power Finance	3	33	—	—
Total	16	$ 44	241	$ 16

4. 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 and the ineffective portion of designated 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 September 30, 2018, $3 million of deferred net gains, 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 were as follows:

(Millions of dollars)		**Asset (Liability) Fair Value**	
	Consolidated Statements of Financial Position Location	**September 30, 2018**	**December 31, 2017**
Designated derivatives			
Interest rate contracts	Other assets	$ 10	$ 3
Interest rate contracts	Accrued expenses	(3)	(2)
Cross currency contracts	Other assets	81	7
Cross currency contracts	Accrued expenses	(17)	(57)
		$ 71	$ (49)
Undesignated derivatives			
Foreign exchange contracts	Other assets	$ 42	$ 12
Foreign exchange contracts	Accrued expenses	(19)	(9)
Cross currency contracts	Other assets	7	—
		$ 30	$ 3

The total notional amount of our derivative instruments was $7.52 billion and $3.69 billion as of September 30, 2018 and December 31, 2017, 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:

Fair Value Hedges (Millions of dollars)		**Three Months Ended September 30, 2018**		**Three Months Ended September 30, 2017**	
	Classification	**Gains (Losses) on Derivatives**	**Gains (Losses) on Borrowings**	**Gains (Losses) on Derivatives**	**Gains (Losses) on Borrowings**
Interest rate contracts	Other income (expense)	$ —	$ —	$ —	$ —

		Nine Months Ended September 30, 2018		**Nine Months Ended September 30, 2017**	
	Classification	**Gains (Losses) on Derivatives**	**Gains (Losses) on Borrowings**	**Gains (Losses) on Derivatives**	**Gains (Losses) on Borrowings**
Interest rate contracts	Other income (expense)	$ (2)	$ 2	$ (1)	$ 1

Cash Flow Hedges

(Millions of dollars)

	Three Months Ended September 30, 2018			
		Recognized in Earnings		
	Amounts of Gains (Losses) Recognized in AOCI (Effective Portion)	Classification	Reclassified from AOCI to Earnings (Effective Portion)	Recognized in Earnings (Ineffective Portion)
Interest rate contracts	$ 3	Interest expense	$ —	$ —
Cross currency contracts	53	Other income (expense)	51	—
		Interest expense	5	—
	$ 56		$ 56	$ —

	Three Months Ended September 30, 2017			
		Recognized in Earnings		
	Amounts of Gains (Losses) Recognized in AOCI (Effective Portion)	Classification	Reclassified from AOCI to Earnings (Effective Portion)	Recognized in Earnings (Ineffective Portion)
Interest rate contracts	$ (1)	Interest expense	$ 1	$ —
Cross currency contracts	(21)	Other income (expense)	(20)	—
		Interest expense	1	—
	$ (22)		$ (18)	$ —

	Nine Months Ended September 30, 2018			
		Recognized in Earnings		
	Amounts of Gains (Losses) Recognized in AOCI (Effective Portion)	Classification	Reclassified from AOCI to Earnings (Effective Portion)	Recognized in Earnings (Ineffective Portion)
Interest rate contracts	$ 8	Interest expense	$ 1	$ —
Cross currency contracts	143	Other income (expense)	141	—
		Interest expense	13	—
	$ 151		$ 155	$ —

	Nine Months Ended September 30, 2017			
		Recognized in Earnings		
	Amounts of Gains (Losses) Recognized in AOCI (Effective Portion)	Classification	Reclassified from AOCI to Earnings (Effective Portion)	Recognized in Earnings (Ineffective Portion)
Interest rate contracts	$ (1)	Interest expense	$ 2	$ —
Cross currency contracts	(62)	Other income (expense)	(69)	—
		Interest expense	3	—
	$ (63)		$ (64)	$ —

The effect of derivatives not designated as hedging instruments on the Consolidated Statements of Profit was as follows:

(Millions of dollars)		Three Months Ended September 30,	
	Classification	2018	2017
Foreign exchange contracts	Other income (expense)	$ 12	$ 14
Cross currency contracts	Other income (expense)	1	(3)
		$ 13	$ 11
		Nine Months Ended September 30,	
	Classification	2018	2017
Foreign exchange contracts	Other income (expense)	$ 23	$ 25
Cross currency contracts	Other income (expense)	6	(4)
		$ 29	$ 21

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 September 30, 2018 and December 31, 2017, 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 was as follows:

Offsetting of Derivative Assets and Liabilities (Millions of dollars)	September 30, 2018	December 31, 2017
Derivative Assets		
Gross Amount of Recognized Assets	$ 140	$ 22
Gross Amounts Offset	—	—
Net Amount of Assets[1]	140	22
Gross Amounts Not Offset	(31)	(10)
Net Amount	$ 109	$ 12
Derivative Liabilities		
Gross Amount of Recognized Liabilities	$ (39)	$ (68)
Gross Amounts Offset	—	—
Net Amount of Liabilities[1]	(39)	(68)
Gross Amounts Not Offset	31	10
Net Amount	$ (8)	$ (58)

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

5. 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	Available-for-sale securities	Total
Three Months Ended September 30, 2017				
Balance at June 30, 2017	$ (756)	$ 2	$ 1	$ (753)
Other comprehensive income/(loss) before reclassifications	151	(14)	(1)	136
Amounts reclassified from accumulated other comprehensive (income)/loss	—	11	—	11
Other comprehensive income/(loss)	151	(3)	(1)	147
Balance at September 30, 2017	$ (605)	$ (1)	$ —	$ (606)
Three Months Ended September 30, 2018				
Balance at June 30, 2018	$ (776)	$ (8)	$ —	$ (784)
Other comprehensive income/(loss) before reclassifications	(44)	42	—	(2)
Amounts reclassified from accumulated other comprehensive (income)/loss	—	(42)	—	(42)
Other comprehensive income/(loss)	(44)	—	—	(44)
Balance at September 30, 2018	$ (820)	$ (8)	$ —	$ (828)
Nine Months Ended September 30, 2017				
Balance at December 31, 2016	$ (994)	$ (1)	$ —	$ (995)
Other comprehensive income/(loss) before reclassifications	389	(41)	—	348
Amounts reclassified from accumulated other comprehensive (income)/loss	—	41	—	41
Other comprehensive income/(loss)	389	—	—	389
Balance at September 30, 2017	$ (605)	$ (1)	$ —	$ (606)
Nine Months Ended September 30, 2018				
Balance at December 31, 2017	$ (587)	$ (5)	$ —	$ (592)
Other comprehensive income/(loss) before reclassifications	(233)	115	—	(118)
Amounts reclassified from accumulated other comprehensive (income)/loss	—	(118)	—	(118)
Other comprehensive income/(loss)	(233)	(3)	—	(236)
Balance at September 30, 2018	$ (820)	$ (8)	$ —	$ (828)

The effect of the reclassifications out of Accumulated other comprehensive income/(loss) on the Consolidated Statements of Profit was as follows:

(Millions of dollars)		Three Months Ended September 30,		Nine Months Ended September 30,	
Derivative financial instruments	**Classification of income (expense)**	**2018**	**2017**	**2018**	**2017**
Cross currency contracts	Other income (expense)	$ 51	$ (20)	$ 141	$ (69)
Cross currency contracts	Interest expense	5	1	13	3
Interest rate contracts	Interest expense	—	1	1	2
Reclassifications before tax		56	(18)	155	(64)
Tax (provision) benefit		(14)	7	(37)	23
Total reclassifications from Accumulated other comprehensive income/(loss)		$ 42	$ (11)	$ 118	$ (41)

6. Segment Information

A. Basis for Segment Information

We report information internally for operating segments based on management responsibility. Our operating segments offer financing to customers and dealers for the purchase and lease of Caterpillar and other equipment, as well as financing for Caterpillar sales to dealers. Financing plans include operating and finance leases, installment sale contracts, working capital loans and wholesale financing plans within each of the respective 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.
- **Europe** - 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 and Southeast Asia.
- **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** - Serves large mining customers worldwide and provides project financing in various countries.

To align with the review of operating results by the Chief Executive Officer, our segment reporting was updated effective February 1, 2018. Prior year data has been revised to conform to the current period segment presentation.

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 7 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.
    - The profit attributable to noncontrolling interests is considered a component of segment profit.

Supplemental segment data and reconciliations to consolidated external reporting for the three months ended September 30 was as follows:

(Millions of dollars)

2018	**External Revenues**	**Profit before income taxes**	**Interest Expense**	**Depreciation on equipment leased to others**	**Provision for credit losses**	**Assets at September 30, 2018**	**Capital expenditures**
North America	$ 402	$ 121	$ 94	$ 148	$ 7	$ 15,559	$ 204
Europe	69	12	12	17	8	4,663	20
Asia/Pacific	92	44	29	4	—	4,477	3
Latin America	61	15	23	6	6	2,936	1
Caterpillar Power Finance	33	(21)	13	1	34	2,502	—
Mining	64	19	15	32	(7)	2,186	67
Total Segments	721	190	186	208	48	32,323	295
Unallocated	23	(72)	62	—	(1)	1,923	3
Timing	(9)	6	—	—	—	70	—
Methodology	—	39	(54)	—	—	(152)	—
Inter-segment Eliminations [1]	—	—	—	—	—	(327)	—
Total	$ 735	$ 163	$ 194	$ 208	$ 47	$ 33,837	$ 298

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	$ 338	$ 90	$ 77	$ 130	$ 11	$ 14,790	$ 187
Europe	68	20	9	19	2	4,332	25
Asia/Pacific	68	25	22	5	1	4,214	2
Latin America	61	(16)	30	10	17	3,407	6
Caterpillar Power Finance	40	18	11	—	3	2,746	—
Mining	71	12	12	36	4	2,399	88
Total Segments	646	149	161	200	38	31,888	308
Unallocated	35	(47)	50	—	—	1,719	—
Timing	(8)	(13)	—	1	10	53	—
Methodology	—	37	(42)	—	—	(256)	—
Inter-segment Eliminations [1]	—	—	—	—	—	(244)	—
Total	$ 673	$ 126	$ 169	$ 201	$ 48	$ 33,160	$ 308

[1] Elimination is primarily related to intercompany loans.

Supplemental segment data and reconciliations to consolidated external reporting for the nine months ended September 30 was as follows:

(Millions of dollars) 2018	External Revenues	Profit before income taxes	Interest Expense	Depreciation on equipment leased to others	Provision for credit losses	Assets at September 30, 2018	Capital expenditures
North America	$ 1,141	$ 321	$ 267	$ 427	$ 32	$ 15,559	$ 870
Europe	208	24	35	56	32	4,663	56
Asia/Pacific	269	128	84	14	(5)	4,477	10
Latin America	193	(1)	77	21	54	2,936	28
Caterpillar Power Finance	98	(60)	40	2	98	2,502	—
Mining	196	35	45	95	1	2,186	131
Total Segments	2,105	447	548	615	212	32,323	1,095
Unallocated	68	(204)	182	1	(1)	1,923	97
Timing	(25)	12	—	—	7	70	—
Methodology	—	132	(172)	—	—	(152)	—
Inter-segment Eliminations [1]	—	—	—	—	—	(327)	—
Total	$ 2,148	$ 387	$ 558	$ 616	$ 218	$ 33,837	$ 1,192

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	$ 989	$ 262	$ 224	$ 388	$ 25	$ 14,790	$ 722
Europe	200	62	27	60	—	4,332	71
Asia/Pacific	197	73	64	19	(5)	4,214	5
Latin America	216	(6)	92	31	46	3,407	48
Caterpillar Power Finance	119	54	32	2	10	2,746	—
Mining	213	57	37	107	(5)	2,399	168
Total Segments	1,934	502	476	607	71	31,888	1,014
Unallocated	100	(128)	139	—	—	1,719	4
Timing	(23)	(20)	—	1	11	53	—
Methodology	—	103	(116)	—	—	(256)	—
Inter-segment Eliminations [1]	—	—	—	—	—	(244)	—
Total	$ 2,011	$ 457	$ 499	$ 608	$ 82	$ 33,160	$ 1,018

[1] Elimination is primarily related to intercompany loans.

7. 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 September 30, 2018 and December 31, 2017, 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 $87 million and $91 million at September 30, 2018 and December 31, 2017, 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 September 30, 2018 and December 31, 2017, the SPC’s assets of $1.13 billion and $1.11 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 $1.13 billion and $1.11 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.

8. 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 a standard industry accepted valuation model that discounts 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 $101 million as of September 30, 2018, and in a net liability position of $46 million as of December 31, 2017.

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 $366 million and $341 million as of September 30, 2018 and December 31, 2017, 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.

Please refer to the table below for the fair values of our financial instruments.

(Millions of dollars)	September 30, 2018		December 31, 2017			
	Carrying Amount	Fair Value	Carrying Amount	Fair Value	Fair Value Levels	Reference
Cash and cash equivalents	$ 676	$ 676	$ 708	$ 708	1	
Restricted cash and cash equivalents[2]	$ 3	$ 3	$ 24	$ 24	1	
Finance receivables, net (excluding finance leases[1])	$ 20,021	$ 19,944	$ 20,063	$ 20,019	3	Note 3
Interest rate contracts:						
In a receivable position	$ 10	$ 10	$ 3	$ 3	2	Note 4
In a payable position	$ (3)	$ (3)	$ (2)	$ (2)	2	Note 4
Cross currency contracts:						
In a receivable position	$ 88	$ 88	$ 7	$ 7	2	Note 4
In a payable position	$ (17)	$ (17)	$ (57)	$ (57)	2	Note 4
Foreign exchange contracts:						
In a receivable position	$ 42	$ 42	$ 12	$ 12	2	Note 4
In a payable position	$ (19)	$ (19)	$ (9)	$ (9)	2	Note 4
Short-term borrowings	$ (4,462)	$ (4,462)	$ (4,836)	$ (4,836)	1	
Long-term debt	$ (23,251)	$ (23,110)	$ (22,106)	$ (22,230)	2	
Guarantees	$ —	$ —	$ —	$ —	3	Note 7

[1] As of September 30, 2018 and December 31, 2017, represents finance leases with a net carrying value of $7.49 billion and $7.06 billion, respectively.
[2] Included in Other assets in the Consolidated Statements of Financial Position.

9. Contingencies

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.

10. Income Taxes

The provision for income taxes reflects an estimated annual tax rate of 24 percent in the third quarter of 2018, compared with 30 percent in the third quarter of 2017. The decrease in the estimated annual tax rate is primarily due to the reduction in the U.S. corporate tax rate beginning January 1, 2018, along with changes in the geographic mix of profits. In addition, a one-time only tax benefit of $7 million was recorded in the third quarter of 2018 for the write-down of net deferred tax liabilities resulting from the 2017 tax year return to provision adjustments. The write-down reflects the reduction in the U.S. corporate tax rate from 35 percent to 21 percent beginning January 1, 2018.

Our analysis of U.S. tax reform legislation, updated through September 30, 2018, resulted in no other changes to the 2017 year-end provisional charge. We will continue to update our calculations as additional required information is prepared and analyzed, interpretations and assumptions are refined, and additional guidance is issued. These updates could significantly impact the provision for income taxes, the amount of taxes payable and the deferred tax asset and liability balances. We account for the new U.S. tax on global intangible low-taxed income as a period cost.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

OVERVIEW

We reported third-quarter 2018 revenues of $735 million, an increase of $62 million, or 9 percent, compared with the third quarter of 2017. Third-quarter 2018 profit was $125 million, a $39 million, or 45 percent, increase from the third quarter of 2017.

The increase in revenues was due to a $33 million favorable impact from higher average financing rates, a $27 million favorable impact from higher average earning assets and a $13 million favorable impact from returned or repossessed equipment. These favorable impacts were partially offset by a $14 million unfavorable impact from lower lending activity with Caterpillar.

Profit before income taxes was $163 million for the third quarter of 2018, compared with $126 million for the third quarter of 2017. The increase was primarily due to a $13 million favorable impact from returned or repossessed equipment, a $12 million favorable impact from higher average earning assets and an $11 million increase in net yield on average earning assets primarily due to changes in portfolio mix.

The provision for income taxes reflects an estimated annual tax rate of 24 percent in the third quarter of 2018, compared with 30 percent in the third quarter of 2017. The decrease in the estimated annual tax rate is primarily due to the reduction in the U.S. corporate tax rate beginning January 1, 2018, along with changes in the geographic mix of profits. In addition, a one-time only tax benefit of $7 million was recorded in the third quarter of 2018 for the write-down of net deferred tax liabilities resulting from the 2017 tax year return to provision adjustments. The write-down reflects the reduction in the U.S. corporate tax rate from 35 percent to 21 percent beginning January 1, 2018.

Our analysis of U.S. tax reform legislation, updated through September 30, 2018, resulted in no other changes to the 2017 year-end provisional charge. We will continue to update our calculations as additional required information is prepared and analyzed, interpretations and assumptions are refined, and additional guidance is issued. These updates could significantly impact the provision for income taxes, the amount of taxes payable and the deferred tax asset and liability balances. We account for the new U.S. tax on global intangible low-taxed income as a period cost.

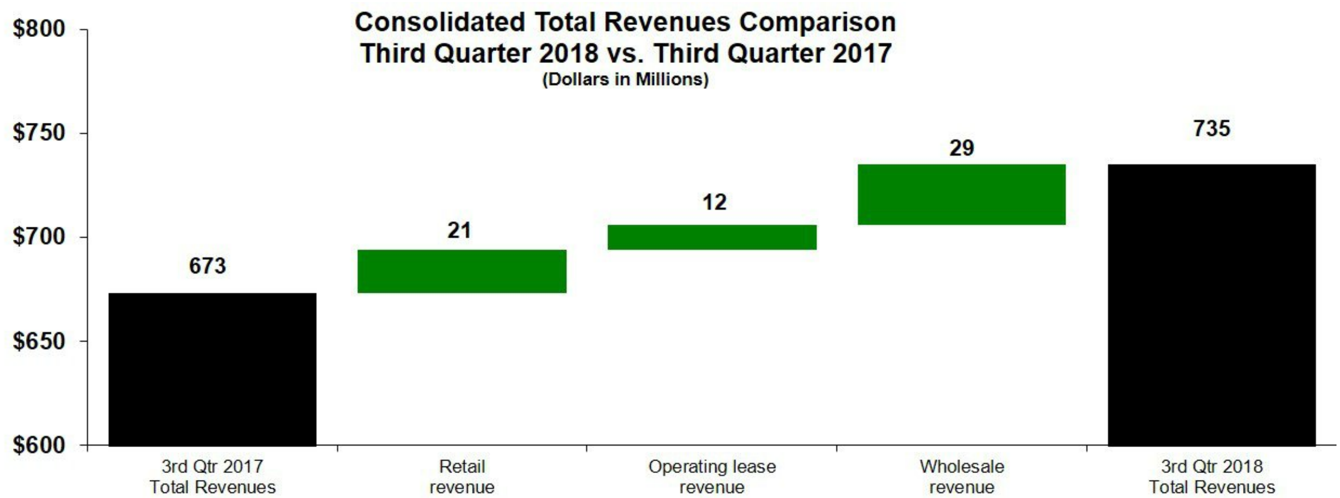
During the third quarter of 2018, retail new business volume was $2.88 billion, an increase of $101 million, or 4 percent, from the third quarter of 2017. The increase was primarily driven by higher volume in Europe, partially offset by a decrease in Mining.

At the end of the third quarter of 2018, past dues were 3.47 percent, compared with 2.73 percent at the end of the third quarter of 2017. The increase in past dues was primarily driven by the Caterpillar Power Finance portfolio. Write-offs, net of recoveries, were $40 million for the third quarter of 2018, compared with $47 million for the third quarter of 2017.

As of September 30, 2018, the allowance for credit losses totaled $416 million, or 1.49 percent of finance receivables, compared with $416 million, or 1.48 percent of finance receivables at June 30, 2018. The allowance for credit losses at year-end 2017 was $365 million, or 1.33 percent of finance receivables.

THIRD QUARTER 2018 COMPARED WITH THIRD QUARTER 2017

Consolidated Total Revenues



The chart above graphically illustrates reasons for the change in Consolidated Total Revenues between third quarter 2017 (at left) and third quarter 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 the third quarter of 2018 was $330 million, an increase of $21 million from the same period in 2017. The increase was due to a $21 million favorable impact from higher interest rates on retail finance receivables. For the quarter ended September 30, 2018, retail average earning assets were $23.12 billion, an increase of $70 million from the same period in 2017. The annualized average yield was 5.71 percent for the third quarter of 2018, compared with 5.37 percent for the third quarter of 2017.

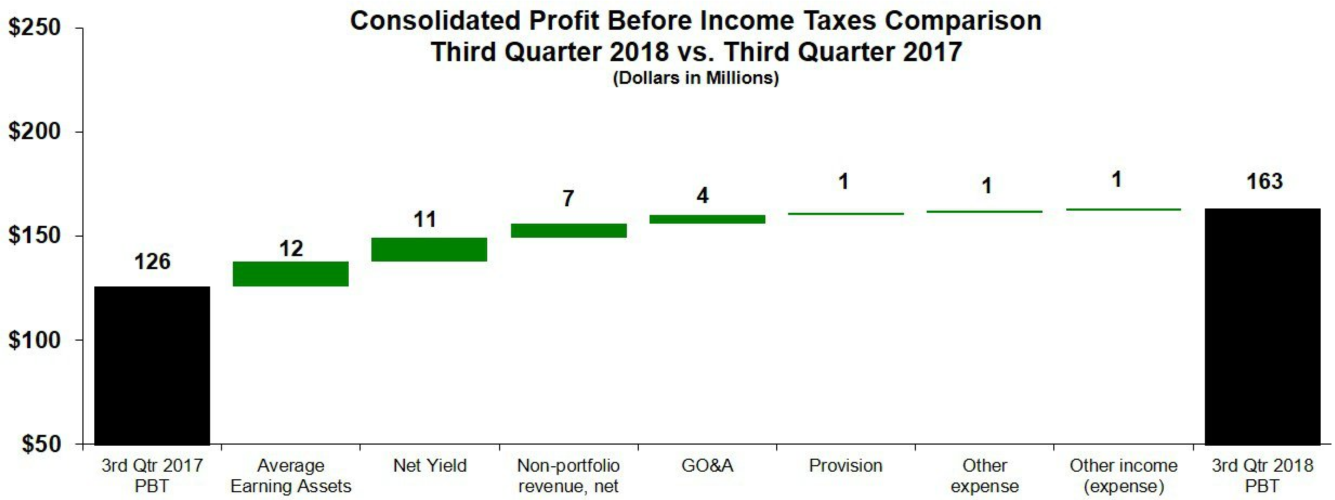
Operating lease revenue for the third quarter of 2018 was $259 million, an increase of $12 million from the same period in 2017. The increase was due to a $10 million favorable impact from higher average rental rates on operating leases and a $2 million favorable impact from higher average earning assets.

Wholesale revenue for the third quarter of 2018 was $108 million, an increase of $29 million from the same period in 2017. The increase was due to a $22 million favorable impact from higher average earning assets and a $7 million favorable impact from higher interest rates on wholesale finance receivables. For the quarter ended September 30, 2018, wholesale average earning assets were $5.00 billion, an increase of $1.06 billion from the same period in 2017. The annualized average yield was 8.63 percent for the third quarter of 2018, compared with 8.07 percent for the third quarter of 2017.

Other revenue, net, items were as follows:

(Millions of dollars)	**Three Months Ended September 30,**		
	2018	**2017**	**$ Change**
Finance receivable and operating lease fees (including late charges)	$ 19	$ 21	$ (2)
Fees on committed credit facility extended to Caterpillar	10	10	—
Interest income on Notes Receivable from Caterpillar	8	21	(13)
Net loss on returned or repossessed equipment	(7)	(20)	13
Miscellaneous other revenue, net	8	6	2
Total Other revenue, net	$ 38	$ 38	$ —

Consolidated Profit Before Income Taxes



The chart above graphically illustrates reasons for the change in Consolidated Profit Before Income Taxes between third quarter 2017 (at left) and third quarter 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 $163 million for the third quarter of 2018, compared with $126 million for the third quarter of 2017. The increase was primarily due to a $13 million favorable impact from returned or repossessed equipment, a $12 million favorable impact from higher average earning assets and an $11 million increase in net yield on average earning assets primarily due to changes in portfolio mix.

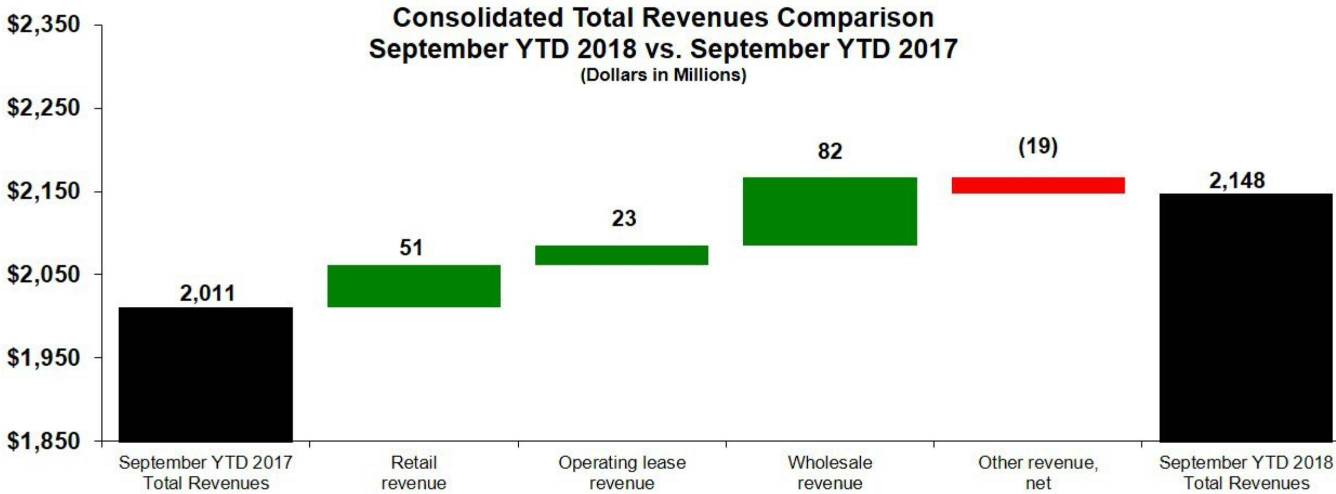
Provision for Income Taxes

The provision for income taxes reflects an estimated annual tax rate of 24 percent in the third quarter of 2018, compared with 30 percent in the third quarter of 2017. The decrease in the estimated annual tax rate is primarily due to the reduction in the U.S. corporate tax rate beginning January 1, 2018, along with changes in the geographic mix of profits. In addition, a one-time only tax benefit of $7 million was recorded in the third quarter of 2018 for the write-down of net deferred tax liabilities resulting from the 2017 tax year return to provision adjustments. The write-down reflects the reduction in the U.S. corporate tax rate from 35 percent to 21 percent beginning January 1, 2018.

Our analysis of U.S. tax reform legislation, updated through September 30, 2018, resulted in no other changes to the 2017 year-end provisional charge. We will continue to update our calculations as additional required information is prepared and analyzed, interpretations and assumptions are refined, and additional guidance is issued. These updates could significantly impact the provision for income taxes, the amount of taxes payable and the deferred tax asset and liability balances. We account for the new U.S. tax on global intangible low-taxed income as a period cost.

NINE MONTHS ENDED SEPTEMBER 30, 2018 VS. NINE MONTHS ENDED SEPTEMBER 30, 2017

Consolidated Total Revenues



The chart above graphically illustrates reasons for the change in Consolidated Total Revenues between September YTD 2017 (at left) and September YTD 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 the first nine months of 2018 was $975 million, an increase of $51 million from the same period in 2017. The increase was due to a $49 million favorable impact from higher interest rates on retail finance receivables and a $2 million favorable impact from higher average earning assets. For the nine months ended September 30, 2018, retail average earning assets were $23.14 billion, an increase of $47 million from the same period in 2017. The annualized average yield was 5.62 percent for the first nine months of 2018, compared with 5.34 percent for the same period in 2017.

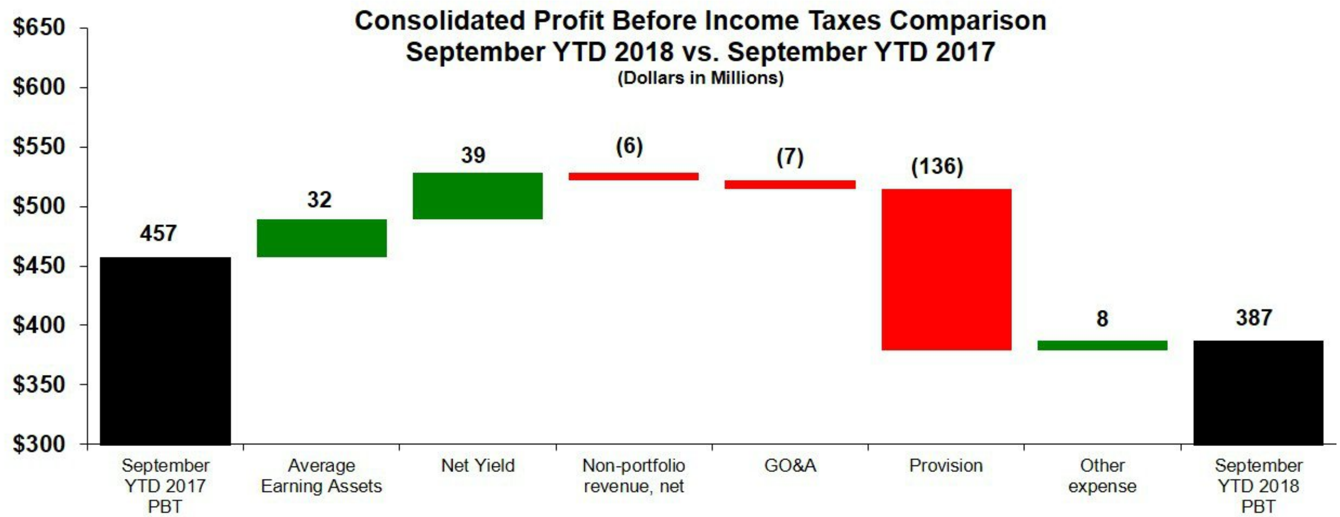
Operating lease revenue for the first nine months of 2018 was $760 million, an increase of $23 million from the same period in 2017. The increase was due to a $24 million favorable impact from higher average rental rates on operating leases, partially offset by a $1 million unfavorable impact from lower average earning assets.

Wholesale revenue for the first nine months of 2018 was $304 million, an increase of $82 million from the same period in 2017. The increase was due to a $62 million favorable impact from higher average earning assets and a $20 million favorable impact from higher interest rates on wholesale finance receivables. For the nine months ended September 30, 2018, wholesale average earning assets were $4.74 billion, an increase of $1.03 billion from the same period in 2017. The annualized average yield was 8.55 percent for the first nine months of 2018, compared with 8.01 percent for the same period in 2017.

Other revenue, net, items were as follows:

(Millions of dollars)	**Nine Months Ended September 30,**		
	2018	**2017**	**$ Change**
Finance receivable and operating lease fees (including late charges)	$ 56	$ 57	$ (1)
Fees on committed credit facility extended to Caterpillar	30	30	—
Interest income on Notes Receivable from Caterpillar	22	59	(37)
Net loss on returned or repossessed equipment	(14)	(30)	16
Miscellaneous other revenue, net	15	12	3
Total Other revenue, net	$ 109	$ 128	$ (19)

Consolidated Profit Before Income Taxes



The chart above graphically illustrates reasons for the change in Consolidated Profit Before Income Taxes between September YTD 2017 (at left) and September YTD 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 $387 million for the first nine months of 2018, compared with $457 million for the same period in 2017. The decrease was primarily due to a $136 million increase in provision for credit losses and a $26 million unfavorable impact from lower lending activity with Caterpillar. These unfavorable impacts were partially offset by a $39 million increase in net yield on average earning assets primarily due to changes in portfolio mix, a $32 million favorable impact from higher average earning assets and a $16 million favorable impact from returned or repossessed equipment.

Provision for Income Taxes

The provision for income taxes reflects an estimated annual tax rate of 24 percent for the nine months ended September 30, 2018, compared with 30 percent for the nine months ended September 30, 2017. The decrease in the estimated annual tax rate is primarily due to the reduction in the U.S. corporate tax rate beginning January 1, 2018, along with changes in the geographic mix of profits. In addition, a one-time only tax benefit of $7 million was recorded in the nine months ended September 30, 2018 for the write-down of net deferred tax liabilities resulting from the 2017 tax year return to provision adjustments. The write-down reflects the reduction in the U.S. corporate tax rate from 35 percent to 21 percent beginning January 1, 2018.

Our analysis of U.S. tax reform legislation, updated through September 30, 2018, resulted in no other changes to the 2017 year-end provisional charge. We will continue to update our calculations as additional required information is prepared and analyzed, interpretations and assumptions are refined, and additional guidance is issued. These updates could significantly impact the provision for income taxes, the amount of taxes payable and the deferred tax asset and liability balances. We account for the new U.S. tax on global intangible low-taxed income as a period cost.

Finance Receivables and Equipment on Operating Leases

New Business Volume

(Millions of dollars)	Nine Months Ended September 30,		
	2018	2017	$ Change
New retail financing	$ 7,843	$ 6,785	$ 1,058
New operating lease activity	1,132	1,029	103
New wholesale financing	32,817	26,349	6,468
Total	$ 41,792	$ 34,163	$ 7,629

New retail financing increased primarily due to higher volume in Asia/Pacific, Europe 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 Mining, Latin America and Europe. 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, less accumulated depreciation. 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 was as follows:

(Millions of dollars)	September 30, 2018	December 31, 2017	$ Change
Finance receivables, net	$ 27,512	$ 27,126	$ 386
Equipment on operating leases, less accumulated depreciation	3,594	3,568	26
Total portfolio	$ 31,106	$ 30,694	$ 412
Retail installment sale contracts	$ 104	$ 74	$ 30
Retail finance leases	95	103	(8)
Operating leases	33	39	(6)
Retail notes receivable	24	55	(31)
Total off-balance sheet managed assets	$ 256	$ 271	$ (15)
Total managed portfolio	$ 31,362	$ 30,965	$ 397

Total Portfolio Metrics

At the end of the third quarter of 2018, past dues were 3.47 percent, compared with 2.73 percent at the end of the third quarter of 2017. The increase in past dues was primarily driven by the Caterpillar Power Finance portfolio. Total non-performing finance receivables, which represent finance receivables currently on non-accrual status, were $830 million and $683 million at September 30, 2018 and December 31, 2017, respectively. Total non-performing finance receivables as a percentage of our recorded investment in finance receivables were 2.97 percent and 2.48 percent at September 30, 2018 and December 31, 2017, respectively.

Our allowance for credit losses as of September 30, 2018 was $416 million or 1.49 percent of our recorded investment in finance receivables compared with $365 million or 1.33 percent as of December 31, 2017. The increase in our allowance for credit losses was primarily driven by specific reserves for individually evaluated finance receivables. 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 September 30, 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 the third quarter of 2018, we experienced favorable liquidity conditions. We ended the third quarter of 2018 with $676 million of cash, a decrease of $32 million from year-end 2017. Our cash balances are held in numerous locations throughout the world with approximately $181 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.

We receive debt ratings from the major rating agencies. In December 2016, Moody's Investors Service downgraded our long-term ratings to A3 from A2, and short-term ratings to Prime-2 from Prime-1. The Moody's downgrade did not have a material impact on our borrowing costs or our overall financial health. A further downgrade of our credit ratings by Moody's or one of the other major credit rating agencies would result in increased borrowing costs and could make access to certain credit markets more difficult. However, our long-term ratings with Fitch and S&P continue to be "mid-A". 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 our other credit facilities and potential borrowings from Caterpillar. In addition, Caterpillar maintains a support agreement with us, which requires Caterpillar to remain as 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 September 30, 2018 were $29.28 billion, an increase of $698 million over December 31, 2017. Outstanding borrowings were as follows:

(Millions of dollars)	**September 30, 2018**	**December 31, 2017**
Medium-term notes, net of unamortized discount and debt issuance costs	$ 22,608	$ 21,303
Commercial paper, net of unamortized discount	3,636	3,680
Bank borrowings – long-term	643	803
Bank borrowings – short-term	399	675
Variable denomination floating rate demand notes	427	481
Notes payable to Caterpillar	1,565	1,638
Total outstanding borrowings	$ 29,278	$ 28,580

Medium-term notes

We issue medium-term unsecured notes through securities dealers or underwriters in the U.S., Canada, Europe, Australia, Japan, Hong Kong, China and Argentina 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 $5.58 billion and redeemed totaled $4.23 billion for the nine months ended September 30, 2018. Medium-term notes outstanding as of September 30, 2018, mature as follows:

(Millions of dollars)	
2018	$ 1,666
2019	5,590
2020	5,474
2021	4,745
2022	1,989
Thereafter	3,144
Total	$ 22,608

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.

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 September 30, 2018 was $7.75 billion. Information on our Credit Facility is as follows:

- In September 2018, we entered into a new 364-day facility. The 364-day facility of $3.15 billion (of which $2.33 billion is available to us) expires in September 2019.
- In September 2018, we amended and extended the three-year facility. The three-year facility of $2.73 billion (of which $2.01 billion is available to us) expires in September 2021.
- In September 2018, we amended and extended the five-year facility. The five-year facility of $4.62 billion (of which $3.41 billion is available to us) expires in September 2023.

At September 30, 2018, Caterpillar's consolidated net worth was $15.87 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 September 30, 2018, our covenant interest coverage ratio was 1.70 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 September 30, 2018, our covenant leverage ratio was 7.56 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 September 30, 2018, there were no borrowings under the Credit Facility.

Bank borrowings

Available credit lines with banks as of September 30, 2018 totaled $4.46 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 September 30, 2018, we had $1.04 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 September 30, 2018, there was $427 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 $2.79 billion from Caterpillar and Caterpillar may borrow up to $2.14 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 ten years. We had notes payable of $1.57 billion and notes receivable of $667 million outstanding under these agreements as of September 30, 2018.

Committed credit facility

We extended a $2 billion committed credit facility to Caterpillar, which expires in February 2019. We receive a fee from Caterpillar based on amounts drawn under the credit facility and a commitment fee for the undrawn amounts under the credit facility. At September 30, 2018, there were no borrowings under this credit facility.

OFF-BALANCE SHEET ARRANGEMENTS

We lease all of our facilities except for our corporate headquarters building. In addition, we have potential payment exposure for guarantees issued to third parties totaling $87 million as of September 30, 2018.

CASH FLOWS

Operating cash flow was $882 million in the first nine months of 2018, compared with $923 million for the same period a year ago. Net cash used for investing activities was $1.77 billion for the first nine months of 2018, compared with $922 million for the same period in 2017. The change was primarily due to the impact of portfolio related activity, partially offset by lower lending with Caterpillar. Net cash provided by financing activities was $848 million for the first nine months of 2018, compared with cash used for financing activities of $1.11 billion for the same period in 2017. The change was primarily due to the impact of net borrowings.

CRITICAL ACCOUNTING POLICIES

For a discussion of the Company's critical accounting policies, see Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations in our 2017 Annual Report on Form 10-K. There have been no significant changes to our critical accounting policies since our 2017 Annual Report on Form 10-K.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

Certain statements in this Form 10-Q may relate to future events and expectations and are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as “believe,” “estimate,” “will be,” “will,” “would,” “expect,” “anticipate,” “plan,” “project,” “intend,” “could,” “should” or other similar words or expressions often identify forward-looking statements. All statements other than statements of historical fact are forward-looking statements, including, without limitation, statements regarding our outlook, projections, forecasts or trend descriptions. These statements do not guarantee future performance and speak only as of the date they are made, and we do not undertake to update our forward-looking statements.

Our actual results may differ materially from those described or implied in our forward-looking statements 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. 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 our annual report on Form 10-K filed with the Securities and Exchange Commission (SEC) on February 15, 2018 for the fiscal year ended December 31, 2017, as supplemented by (i) our Forms 10-Q filed with the SEC on May 2, 2018, August 7, 2018 and this Form 10-Q filing, and (ii) our Form 8-K reports filed with the SEC.

ITEM 4. 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 in Rule 13a-15(e) of the Securities Exchange Act of 1934, as amended, as of the end of the period covered by this quarterly report. Based on that evaluation, our CEO and CFO concluded that our disclosure controls and procedures were effective as of the end of the period covered by this quarterly report.

Changes in Internal Control over Financial Reporting

There have been no changes in the Company's internal control over financial reporting during the third quarter of 2018 that materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. 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 1A. RISK FACTORS

For a discussion of risks and uncertainties that may affect our business, please see Part I. Item 1A. Risk Factors in our annual report on Form 10-K filed with the SEC on February 15, 2018 for the year ended December 31, 2017. There has been no material change in this information for the current quarter.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

Exhibit No.	Description of Exhibit
10.1	Credit Agreement (364-Day Facility), dated as of September 6, 2018, among the Company, Caterpillar Inc., 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 99.1 to the Company's Current Report on Form 8-K filed September 12, 2018)
10.2	Local Currency Addendum, dated as of September 6, 2018, to the 364-Day Facility (incorporated by reference from Exhibit 99.2 to the Company's Current Report on Form 8-K filed on September 12, 2018)
10.3	Japan Local Currency Addendum, dated as of September 6, 2018, to the 364-Day Facility (incorporated by reference from Exhibit 99.3 to the Company's Current Report on Form 8-K filed on September 12, 2018)
10.4	Omnibus Amendment No. 3 to Amended and Restated Credit Agreement (3-Year Facility), Amendment No. 2 to Local Currency Addendum to the 3-year facility and Amendment No. 3 to Japan Local Currency Addendum to the 3-year facility, dated as of September 10, 2018, among the Company, Caterpillar Inc., 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 99.4 to the Company's Current Report on Form 8-K filed September 12, 2018)
10.5	Omnibus Amendment No. 3 to Amended and Restated Credit Agreement (5-Year Facility), Amendment No. 2 to Local Currency Addendum to the 5-year facility and Amendment No. 3 to Japan Local Currency Addendum to the 5-year facility, dated as of September 10, 2018, among the Company, Caterpillar Inc., 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 99.5 to the Company's Current Report on Form 8-K filed September 12, 2018)
12	Computation of Ratio of Earnings to Fixed Charges
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

Signatures

Pursuant to the requirements 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

(Registrant)

Date: October 31, 2018 */s/David T. Walton*

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

Date: October 31, 2018 */s/Patrick T. McCartan*

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

Date: October 31, 2018 */s/Leslie S. Zmugg*

Leslie S. Zmugg, Secretary

Date: October 31, 2018 */s/Jeffry D. Everett*

Jeffry D. Everett, Controller

EXHIBIT 12

Caterpillar Financial Services Corporation
COMPUTATION OF RATIO OF EARNINGS TO FIXED CHARGES
(Unaudited)
(Dollars in Millions)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	**2017**	**2018**	**2017**
Profit of consolidated companies	$ 131	$ 88	$ 302	$ 320
Add:				
Provision for income taxes	32	38	85	137
Profit before income taxes	$ 163	$ 126	$ 387	$ 457
Fixed charges:				
Interest expense	$ 194	$ 169	$ 558	$ 499
Rentals at computed interest*	1	1	3	4
Total fixed charges	$ 195	$ 170	$ 561	$ 503
Profit before income taxes plus fixed charges	$ 358	$ 296	$ 948	$ 960
Ratio of profit before income taxes plus fixed charges to fixed charges	1.84	1.74	1.69	1.91

*Those portions of rent expense that are representative of interest cost.

EXHIBIT 31.1

SECTION 302 CERTIFICATIONS

I, David T. Walton, certify that:

1. I have reviewed this quarterly report on Form 10-Q 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: October 31, 2018

/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 quarterly report on Form 10-Q 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: October 31, 2018

/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 quarterly report of Caterpillar Financial Services Corporation (the "Company") on Form 10-Q for the period ended September 30, 2018, 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: October 31, 2018	*/s/David T. Walton*
	David T. Walton
	President, Director and Chief Executive Officer
Date: October 31, 2018	*/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.