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 June 30, 2017

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

Indicate by check mark 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 [✓] (Do not check if a smaller reporting company)
Smaller reporting company [ ]
Emerging growth company [ ]

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

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

As of August 2, 2017, 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 2016 Annual Report on Form 10-K filed with the Securities and Exchange Commission (SEC) on February 15, 2017. 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 public may read and copy any materials the Company has filed with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. 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. (together with its subsidiaries, "Caterpillar" or "Cat") 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 June 30, 2017	Three Months Ended June 30, 2016	Six Months Ended June 30, 2017	Six Months Ended June 30, 2016
Revenues:				
Retail finance	$ 307	$ 309	$ 615	$ 607
Operating lease	245	254	490	499
Wholesale finance	78	71	143	140
Other, net	46	25	90	56
Total revenues	676	659	1,338	1,302
Expenses:				
Interest	168	152	330	307
Depreciation on equipment leased to others	202	211	407	414
General, operating and administrative	109	97	206	195
Provision for credit losses	18	38	34	67
Other	13	9	24	19
Total expenses	510	507	1,001	1,002
Other income (expense)	(2)	(4)	(6)	(7)
Profit before income taxes	164	148	331	293
Provision for income taxes	49	44	99	88
Profit of consolidated companies	115	104	232	205
Less: Profit attributable to noncontrolling interests	1	2	3	3
Profit [1]	$ 114	$ 102	$ 229	$ 202

[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 June 30,		Six Months Ended June 30,	
	2017	**2016**	**2017**	**2016**
Profit of consolidated companies	$ 115	$ 104	$ 232	$ 205
Other comprehensive income (loss), net of tax:				
Foreign currency translation, net of tax (expense)/benefit of: 2017 $54 three months, $64 six months; 2016 $(20) three months, $17 six months	161	(68)	241	105
Derivative financial instruments:				
Gains (losses) deferred, net of tax (expense)/benefit of: 2017 $8 three months, $14 six months; 2016 $3 three months, $3 six months	(15)	(4)	(27)	(5)
(Gains) losses reclassified to earnings, net of tax expense/(benefit) of: 2017 $(9) three months, $(16) six months; 2016 $(3) three months, $(3) six months	16	4	30	6
Available-for-sale securities:				
Gains (losses) deferred, net of tax (expense)/benefit of: 2017 $0 three months, $0 six months; 2016 $0 three months, $0 six months	1	(2)	1	(2)
(Gains) losses reclassified to earnings, net of tax expense/(benefit) of: 2017 $0 three months, $0 six months; 2016 $0 three months, $0 six months	—	—	—	—
Total Other comprehensive income (loss), net of tax	163	(70)	245	104
Comprehensive income (loss)	278	34	477	309
Less: Comprehensive income (loss) attributable to the noncontrolling interests	4	(1)	6	1
Comprehensive income (loss) attributable to Caterpillar Financial Services Corporation	$ 274	$ 35	$ 471	$ 308

See Notes to Consolidated Financial Statements (unaudited).

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

	June 30, 2017	December 31, 2016
Assets:		
Cash and cash equivalents	$ 1,174	$ 1,795
Finance receivables, net	26,731	26,212
Notes receivable from Caterpillar	2,063	530
Equipment on operating leases,		
less accumulated depreciation	3,599	3,708
Deferred and refundable income taxes	157	119
Other assets	1,114	1,251
Total assets	$ 34,838	$ 33,615
Liabilities and shareholder's equity:		
Payable to dealers and others	$ 135	$ 140
Payable to Caterpillar - other	49	49
Accrued expenses	227	172
Income taxes payable	109	32
Payable to Caterpillar - borrowings	1,600	1,637
Short-term borrowings	6,775	7,094
Current maturities of long-term debt	6,592	6,155
Long-term debt	15,000	14,382
Deferred income taxes and other liabilities	889	969
Total liabilities	31,376	30,630
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	3,337	3,108
Accumulated other comprehensive income/(loss)	(753)	(995)
Noncontrolling interests	131	125
Total shareholder's equity	3,462	2,985
Total liabilities and shareholder's equity	$ 34,838	$ 33,615

See Notes to Consolidated Financial Statements (unaudited).

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

Six Months Ended June 30, 2016	Common stock	Additional paid-in capital	Retained earnings	Accumulated other comprehensive income/(loss)	Noncontrolling interests	Total
Balance at December 31, 2015	$ 745	$ 2	$ 2,999	$ (897)	$ 126	$ 2,975
Profit of consolidated companies			202		3	205
Foreign currency translation, net of tax				107	(2)	105
Derivative financial instruments, net of tax				1		1
Available-for-sale securities, net of tax				(2)		(2)
Balance at June 30, 2016	$ 745	$ 2	$ 3,201	$ (791)	$ 127	$ 3,284
Six Months Ended June 30, 2017						
Balance at December 31, 2016	$ 745	$ 2	$ 3,108	$ (995)	$ 125	$ 2,985
Profit of consolidated companies			229		3	232
Foreign currency translation, net of tax				238	3	241
Derivative financial instruments, net of tax				3		3
Available-for-sale securities, net of tax				1		1
Balance at June 30, 2017	$ 745	$ 2	$ 3,337	$ (753)	$ 131	$ 3,462

See Notes to Consolidated Financial Statements (unaudited).

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

	Six Months Ended June 30, 2017	Six Months Ended June 30, 2016
Cash flows from operating activities:		
Profit of consolidated companies	$ 232	$ 205
Adjustments for non-cash items:		
Depreciation and amortization	412	419
Amortization of receivables purchase discount	(121)	(110)
Provision for credit losses	34	67
Other, net	(3)	73
Changes in assets and liabilities:		
Receivables from others	65	(1)
Other receivables/payables with Caterpillar	(7)	(17)
Payable to dealers and others	(33)	10
Accrued interest payable	15	(3)
Accrued expenses and other liabilities, net	(22)	(28)
Income taxes payable	49	169
Proceeds from interest rate contracts	(1)	1
Net cash provided by operating activities	620	785
Cash flows from investing activities:		
Capital expenditures for equipment on operating leases and other capital expenditures	(710)	(909)
Proceeds from disposals of equipment	502	333
Additions to finance receivables	(6,240)	(6,026)
Collections of finance receivables	6,601	6,006
Net changes in Caterpillar purchased receivables	(425)	396
Proceeds from sales of receivables	83	42
Net change in variable lending to Caterpillar	(1,570)	(1,000)
Additions to other notes receivable with Caterpillar	—	(69)
Collections on other notes receivable with Caterpillar	37	29
Restricted cash and cash equivalents activity, net	13	7
Settlements of derivatives	17	(29)
Net cash provided by (used for) investing activities	(1,692)	(1,220)
Cash flows from financing activities:		
Net change in variable lending from Caterpillar	5	579
Proceeds from borrowings with Caterpillar	—	253
Payments on borrowings with Caterpillar	(49)	(1)
Proceeds from debt issued (original maturities greater than three months)	4,507	2,840
Payments on debt issued (original maturities greater than three months)	(3,720)	(3,324)
Short-term borrowings, net (original maturities three months or less)	(305)	136
Net cash provided by (used for) financing activities	438	483
Effect of exchange rate changes on cash and cash equivalents	13	11
Increase/(decrease) in cash and cash equivalents	**(621)**	**59**
Cash and cash equivalents at beginning of year	1,795	1,016
Cash and cash equivalents at end of period	$ 1,174	$ 1,075

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 six months ended June 30, 2017 and 2016, (b) the consolidated comprehensive income for the three and six months ended June 30, 2017 and 2016, (c) the consolidated financial position as of June 30, 2017 and December 31, 2016, (d) the consolidated changes in shareholder's equity for the six months ended June 30, 2017 and 2016 and (e) the consolidated cash flows for the six months ended June 30, 2017 and 2016. 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, 2016 (2016 Form 10-K) filed with the SEC on February 15, 2017.

The December 31, 2016 financial position data included herein was derived from the audited consolidated financial statements included in the 2016 Form 10-K, but does not include all disclosures required by U.S. GAAP.

Certain amounts for prior periods have been reclassified to conform to the 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 and is effective January 1, 2018. Entities have the option to apply the new guidance under a retrospective approach to each prior reporting period presented, or a modified retrospective approach with the cumulative effect of initially applying the new guidance recognized at the date of initial application within the Consolidated Statement of Changes in Shareholder's Equity. We will adopt the new guidance effective January 1, 2018. We have substantially completed our evaluation of the impact of the new standard and do not expect the adoption to have a material impact on our financial statements. We plan to adopt the new guidance under the modified retrospective approach.

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 new guidance is effective January 1, 2018, with the cumulative effect adjustment from initially applying the new guidance recognized in the Consolidated Statement of Financial Position as of the beginning of the year of adoption. We do not expect the adoption to 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 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. The new guidance is effective January 1, 2019 with early adoption permitted. The new standard is required to be applied with a modified retrospective approach to each prior reporting period presented and provides for certain practical expedients. We are in the process of evaluating the effect of the new guidance on our financial statements.

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 is effective January 1, 2018 with early adoption permitted. We do not expect the adoption to 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 new standard is required to be applied with a retrospective approach. The guidance is effective January 1, 2018 with early adoption permitted. We do not expect the adoption to have a material impact 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)	June 30, 2017	December 31, 2016
Finance leases and installment sale contracts – Retail [1]	$ 13,969	$ 13,565
Retail notes receivable	9,838	10,195
Wholesale notes receivable	3,948	3,457
Finance leases and installment sale contracts – Wholesale	114	103
	27,869	27,320
Less: Unearned income	(800)	(765)
Recorded investment in finance receivables	27,069	26,555
Less: Allowance for credit losses	(338)	(343)
Total finance receivables, net	$ 26,731	$ 26,212

[1] Includes $2 million and $4 million of finance receivables classified as held for sale as of June 30, 2017 and December 31, 2016, respectively.

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

Our allowance for credit losses as of June 30, 2017 was $338 million or 1.25 percent of our recorded investment in finance receivables compared with $343 million or 1.29 percent as of December 31, 2016. An analysis of the allowance for credit losses was as follows:

(Millions of dollars)

	June 30, 2017			
Allowance for Credit Losses:	**Customer**	**Dealer**	**Caterpillar Purchased Receivables**	**Total**
Balance at beginning of year	$ 331	$ 10	$ 2	$ 343
Receivables written off	(62)	—	—	(62)
Recoveries on receivables previously written off	21	—	—	21
Provision for credit losses	31	—	1	32
Adjustment due to sale of receivables	(1)	—	—	(1)
Foreign currency translation adjustment	5	—	—	5
Balance at end of period	$ 325	$ 10	$ 3	$ 338
Individually evaluated for impairment	$ 113	$ —	$ —	$ 113
Collectively evaluated for impairment	212	10	3	225
Ending Balance	$ 325	$ 10	$ 3	$ 338
Recorded Investment in Finance Receivables:				
Individually evaluated for impairment	$ 898	$ —	$ —	$ 898
Collectively evaluated for impairment	18,721	4,448	3,002	26,171
Ending Balance	$ 19,619	$ 4,448	$ 3,002	$ 27,069

(Millions of dollars)

	December 31, 2016			
Allowance for Credit Losses:	**Customer**	**Dealer**	**Caterpillar Purchased Receivables**	**Total**
Balance at beginning of year	$ 327	$ 9	$ 2	$ 338
Receivables written off	(158)	—	—	(158)
Recoveries on receivables previously written off	35	—	—	35
Provision for credit losses	132	1	—	133
Adjustment due to sale of receivables	(8)	—	—	(8)
Foreign currency translation adjustment	3	—	—	3
Balance at end of year	$ 331	$ 10	$ 2	$ 343
Individually evaluated for impairment	$ 85	$ —	$ —	$ 85
Collectively evaluated for impairment	246	10	2	258
Ending Balance	$ 331	$ 10	$ 2	$ 343
Recorded Investment in Finance Receivables:				
Individually evaluated for impairment	$ 786	$ —	$ —	$ 786
Collectively evaluated for impairment	18,859	4,479	2,431	25,769
Ending Balance	$ 19,645	$ 4,479	$ 2,431	$ 26,555

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 receivable 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)	June 30, 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	$ 57	$ 13	$ 52	$ 122	$ 7,949	$ 8,071	$ 7
Europe	23	8	57	88	2,533	2,621	8
Asia/Pacific	24	13	12	49	2,211	2,260	4
Mining	—	—	52	52	1,726	1,778	—
Latin America	54	30	224	308	1,692	2,000	—
Caterpillar Power Finance	27	5	135	167	2,722	2,889	41
Dealer							
North America	—	—	—	—	2,756	2,756	—
Europe	—	—	—	—	318	318	—
Asia/Pacific	—	—	—	—	578	578	—
Mining	—	—	—	—	5	5	—
Latin America	—	—	—	—	789	789	—
Caterpillar Power Finance	—	—	—	—	2	2	—
Caterpillar Purchased Receivables							
North America	13	8	1	22	1,745	1,767	1
Europe	—	—	1	1	327	328	—
Asia/Pacific	1	—	—	1	515	516	—
Mining	—	—	—	—	—	—	—
Latin America	—	—	—	—	387	387	—
Caterpillar Power Finance	—	—	—	—	4	4	—
Total	$ 199	$ 77	$ 534	$ 810	$ 26,259	$ 27,069	$ 61

(Millions of dollars)

	December 31, 2016						
	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	$ 50	$ 16	$ 59	$ 125	$ 8,051	$ 8,176	$ 5
Europe	16	12	39	67	2,388	2,455	6
Asia/Pacific	18	7	15	40	1,944	1,984	4
Mining	3	2	63	68	1,756	1,824	2
Latin America	40	33	214	287	1,808	2,095	—
Caterpillar Power Finance	11	9	73	93	3,018	3,111	1
Dealer							
North America	—	—	—	—	2,705	2,705	—
Europe	—	—	—	—	336	336	—
Asia/Pacific	—	—	—	—	582	582	—
Mining	—	—	—	—	6	6	—
Latin America	—	—	—	—	848	848	—
Caterpillar Power Finance	—	—	—	—	2	2	—
Caterpillar Purchased Receivables							
North America	11	3	1	15	1,303	1,318	1
Europe	—	—	1	1	268	269	—
Asia/Pacific	—	—	—	—	475	475	—
Mining	—	—	—	—	—	—	—
Latin America	—	—	—	—	366	366	—
Caterpillar Power Finance	—	—	—	—	3	3	—
Total	$ 149	$ 82	$ 465	$ 696	$ 25,859	$ 26,555	$ 19

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 June 30, 2017 and December 31, 2016, 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 June 30, 2017			As of December 31, 2016		
Impaired Finance Receivables With No Allowance Recorded	Recorded Investment	Unpaid Principal Balance	Related Allowance	Recorded Investment	Unpaid Principal Balance	Related Allowance
North America	$ 13	$ 13	$ —	$ 10	$ 10	$ —
Europe	48	47	—	49	48	—
Asia/Pacific	29	29	—	3	2	—
Mining	130	130	—	129	129	—
Latin America	68	67	—	68	68	—
Caterpillar Power Finance	158	162	—	271	271	—
Total	$ 446	$ 448	$ —	$ 530	$ 528	$ —
Impaired Finance Receivables With An Allowance Recorded						
North America	$ 49	$ 48	$ 20	$ 61	$ 60	$ 22
Europe	4	4	2	7	7	3
Asia/Pacific	29	29	3	50	50	8
Mining	—	—	—	—	—	—
Latin America	107	119	43	93	104	34
Caterpillar Power Finance	263	261	45	45	44	18
Total	$ 452	$ 461	$ 113	$ 256	$ 265	$ 85
Total Impaired Finance Receivables						
North America	$ 62	$ 61	$ 20	$ 71	$ 70	$ 22
Europe	52	51	2	56	55	3
Asia/Pacific	58	58	3	53	52	8
Mining	130	130	—	129	129	—
Latin America	175	186	43	161	172	34
Caterpillar Power Finance	421	423	45	316	315	18
Total	$ 898	$ 909	$ 113	$ 786	$ 793	$ 85

(Millions of dollars)	Three Months Ended June 30, 2017		Three Months Ended June 30, 2016	
Impaired Finance Receivables With No Allowance Recorded	**Average Recorded Investment**	**Interest Income Recognized**	**Average Recorded Investment**	**Interest Income Recognized**
North America	$ 11	$ —	$ 24	$ 1
Europe	48	1	44	—
Asia/Pacific	30	1	3	—
Mining	130	3	80	—
Latin America	67	—	29	—
Caterpillar Power Finance	257	3	273	2
Total	$ 543	$ 8	$ 453	$ 3
Impaired Finance Receivables With An Allowance Recorded				
North America	$ 52	$ 1	$ 25	$ —
Europe	5	—	12	—
Asia/Pacific	30	—	36	1
Mining	—	—	13	—
Latin America	107	1	57	—
Caterpillar Power Finance	125	—	45	1
Total	$ 319	$ 2	$ 188	$ 2
Total Impaired Finance Receivables				
North America	$ 63	$ 1	$ 49	$ 1
Europe	53	1	56	—
Asia/Pacific	60	1	39	1
Mining	130	3	93	—
Latin America	174	1	86	—
Caterpillar Power Finance	382	3	318	3
Total	$ 862	$ 10	$ 641	$ 5

(Millions of dollars)

	Six Months Ended June 30, 2017		Six Months Ended June 30, 2016	
Impaired Finance Receivables With No Allowance Recorded	**Average Recorded Investment**	**Interest Income Recognized**	**Average Recorded Investment**	**Interest Income Recognized**
North America	$ 11	$ —	$ 19	$ 1
Europe	48	1	43	—
Asia/Pacific	18	1	2	—
Mining	129	4	80	1
Latin America	70	1	29	—
Caterpillar Power Finance	258	6	262	5
Total	$ 534	$ 13	$ 435	$ 7
Impaired Finance Receivables With An Allowance Recorded				
North America	$ 56	$ 1	$ 20	$ —
Europe	6	—	12	—
Asia/Pacific	38	1	35	2
Mining	—	—	12	—
Latin America	101	2	54	1
Caterpillar Power Finance	96	1	53	1
Total	$ 297	$ 5	$ 186	$ 4
Total Impaired Finance Receivables				
North America	$ 67	$ 1	$ 39	$ 1
Europe	54	1	55	—
Asia/Pacific	56	2	37	2
Mining	129	4	92	1
Latin America	171	3	83	1
Caterpillar Power Finance	354	7	315	6
Total	$ 831	$ 18	$ 621	$ 11

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 June 30, 2017 and December 31, 2016, there were no finance receivables on non-accrual status for the Dealer portfolio segment. As of June 30, 2017 and December 31, 2016, there was $1 million in recorded investment in finance receivables on non-accrual status for the Caterpillar Purchased Receivables portfolio segment, all of which was in the Europe finance receivable class. The recorded investment in Customer finance receivables on non-accrual status was as follows:

(Millions of dollars)

	June 30, 2017	December 31, 2016
North America	$ 57	$ 66
Europe	51	35
Asia/Pacific	11	12
Mining	56	69
Latin America	284	307
Caterpillar Power Finance	244	90
Total	$ 703	$ 579

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 June 30, 2017, there were no additional funds committed to lend to a borrower whose terms have been modified in a TDR. As of December 31, 2016, there were $11 million of 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 six months ended June 30, 2017 and 2016 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 June 30, 2017			Three Months Ended June 30, 2016		
	Number of Contracts	Pre-TDR Recorded Investment	Post-TDR Recorded Investment	Number of Contracts	Pre-TDR Recorded Investment	Post-TDR Recorded Investment
North America	17	$ 8	$ 7	2	$ 6	$ 6
Europe	—	—	—	3	11	8
Asia/Pacific	1	—	—	—	—	—
Mining	—	—	—	1	10	5
Latin America	7	3	3	88	12	13
Caterpillar Power Finance[1]	48	243	237	26	144	137
Total	73	$ 254	$ 247	120	$ 183	$ 169
	Six Months Ended June 30, 2017			**Six Months Ended June 30, 2016**		
	Number of Contracts	Pre-TDR Recorded Investment	Post-TDR Recorded Investment	Number of Contracts	Pre-TDR Recorded Investment	Post-TDR Recorded Investment
North America	26	$ 9	$ 8	13	$ 16	$ 16
Europe	1	—	—	3	11	8
Asia/Pacific	6	39	30	4	3	3
Mining	2	57	56	1	10	5
Latin America	14	5	5	90	12	13
Caterpillar Power Finance	54	268	261	30	183	164
Total	103	$ 378	$ 360	141	$ 235	$ 209

[1] In Caterpillar Power Finance, 42 contracts with a pre-TDR recorded investment of $175 million and a post-TDR recorded investment of $175 million are related to three customers.

During the three and six months ended June 30, 2017, there were 240 contracts, primarily related to two customers, with a recorded investment of $16 million with a payment default (defined as 91+ days past due) which had been modified within twelve months prior to the default date in the Customer portfolio segment, all of which were in the Latin America finance receivable class.

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, option and cross currency 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 June 30, 2017, $2 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	**June 30, 2017**	**December 31, 2016**
Designated derivatives			
Interest rate contracts	Other assets	$ 3	$ 4
Interest rate contracts	Accrued expenses	(1)	(1)
Cross currency contracts	Other assets	6	29
Cross currency contracts	Accrued expenses	(22)	(3)
		$ (14)	$ 29
Undesignated derivatives			
Foreign exchange contracts	Other assets	$ 18	$ 12
Foreign exchange contracts	Accrued expenses	(16)	(4)
Cross currency contracts	Other assets	28	27
		$ 30	$ 35

The total notional amount of our derivative instruments was $3.51 billion and $2.63 billion as of June 30, 2017 and December 31, 2016, 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 June 30, 2017**		**Three Months Ended June 30, 2016**	
	Classification	**Gains (Losses) on Derivatives**	**Gains (Losses) on Borrowings**	**Gains (Losses) on Derivatives**	**Gains (Losses) on Borrowings**
Interest rate contracts	Other income (expense)	$ —	$ —	$ (3)	$ 3

		Six Months Ended June 30, 2017		**Six Months Ended June 30, 2016**	
	Classification	**Gains (Losses) on Derivatives**	**Gains (Losses) on Borrowings**	**Gains (Losses) on Derivatives**	**Gains (Losses) on Borrowings**
Interest rate contracts	Other income (expense)	$ (1)	$ 1	$ —	$ (1)

Cash Flow Hedges

(Millions of dollars)	Three Months Ended June 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	$ —	Interest expense	$ 2	$ —
Cross currency contracts	(23)	Other income (expense)	(27)	—
	$ (23)		$ (25)	$ —

	Three Months Ended June 30, 2016			
		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	(6)	Other income (expense)	(6)	—
	$ (7)		$ (7)	$ —

	Six Months Ended June 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	$ —	Interest expense	$ 3	$ —
Cross currency contracts	(41)	Other income (expense)	(49)	—
	$ (41)		$ (46)	$ —

	Six Months Ended June 30, 2016			
		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	$ (2)	Interest expense	$ (3)	$ —
Cross currency contracts	(6)	Other income (expense)	(6)	—
	$ (8)		$ (9)	$ —

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

(Millions of dollars)		Three Months Ended June 30,	
	Classification	2017	2016
Foreign exchange contracts	Other income (expense)	$ 15	$ (17)
Cross currency contracts	Other income (expense)	2	(7)
		$ 17	$ (24)
		Six Months Ended June 30,	
	Classification	2017	2016
Foreign exchange contracts	Other income (expense)	$ 11	$ (16)
Cross currency contracts	Other income (expense)	(1)	(12)
		$ 10	$ (28)

Balance sheet offsetting

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 June 30, 2017 and December 31, 2016, 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)

	June 30, 2017	December 31, 2016
Derivative Assets		
Gross Amount of Recognized Assets	$ 55	$ 72
Gross Amounts Offset	—	—
Net Amount of Assets[1]	55	72
Gross Amounts Not Offset	(14)	(7)
Net Amount	$ 41	$ 65
Derivative Liabilities		
Gross Amount of Recognized Liabilities	$ (39)	$ (8)
Gross Amounts Offset	—	—
Net Amount of Liabilities[1]	(39)	(8)
Gross Amounts Not Offset	14	7
Net Amount	$ (25)	$ (1)

[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 June 30, 2016				
Balance at March 31, 2016	$ (725)	$ 1	$ —	$ (724)
Other comprehensive income/(loss) before reclassifications	(65)	(4)	(2)	(71)
Amounts reclassified from accumulated other comprehensive (income)/loss	—	4	—	4
Other comprehensive income/(loss)	(65)	—	(2)	(67)
Balance at June 30, 2016	$ (790)	$ 1	$ (2)	$ (791)
Three Months Ended June 30, 2017				
Balance at March 31, 2017	$ (914)	$ 1	$ —	$ (913)
Other comprehensive income/(loss) before reclassifications	158	(15)	1	144
Amounts reclassified from accumulated other comprehensive (income)/loss	—	16	—	16
Other comprehensive income/(loss)	158	1	1	160
Balance at June 30, 2017	$ (756)	$ 2	$ 1	$ (753)
Six Months Ended June 30, 2016				
Balance at December 31, 2015	$ (897)	$ —	$ —	$ (897)
Other comprehensive income/(loss) before reclassifications	107	(5)	(2)	100
Amounts reclassified from accumulated other comprehensive (income)/loss	—	6	—	6
Other comprehensive income/(loss)	107	1	(2)	106
Balance at June 30, 2016	$ (790)	$ 1	$ (2)	$ (791)
Six Months Ended June 30, 2017				
Balance at December 31, 2016	$ (994)	$ (1)	$ —	$ (995)
Other comprehensive income/(loss) before reclassifications	238	(27)	1	212
Amounts reclassified from accumulated other comprehensive (income)/loss	—	30	—	30
Other comprehensive income/(loss)	238	3	1	242
Balance at June 30, 2017	$ (756)	$ 2	$ 1	$ (753)

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

(Millions of dollars)	Classification of income (expense)	Three Months Ended June 30, 2017	Three Months Ended June 30, 2016	Six Months Ended June 30, 2017	Six Months Ended June 30, 2016
Cross currency contracts	Other income (expense)	$ (27)	$ (6)	$ (49)	$ (6)
Interest rate contracts	Interest expense	2	(1)	3	(3)
Reclassifications before tax		(25)	(7)	(46)	(9)
Tax (provision) benefit		9	3	16	3
Total reclassifications from Accumulated other comprehensive income/(loss)		$ (16)	$ (4)	$ (30)	$ (6)

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 five 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, Middle East and the Commonwealth of Independent States.
- **Asia/Pacific** - Includes our operations in Australia, New Zealand, China, Japan and Southeast Asia.
- **Latin America and Caterpillar Power Finance** - Includes our operations in Central and South American countries. This segment also includes Caterpillar Power Finance (CPF), which finances marine vessels with Caterpillar engines worldwide and also provides financing for Caterpillar electrical power generation, gas compression and co-generation systems and non-Caterpillar equipment that is powered by these systems worldwide.
- **Mining** - Serves large mining customers worldwide and provides project financing in various countries.

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 June 30 was as follows:

(Millions of dollars)

2017	**External Revenues**	**Profit before income taxes**	**Interest Expense**	**Depreciation on equipment leased to others**	**Provision for credit losses**	**Assets at June 30, 2017**	**Capital expenditures**
North America	$ 331	$ 90	$ 74	$ 129	$ 7	$ 14,933	$ 353
Europe	67	22	9	21	(3)	3,996	28
Asia/Pacific	66	22	22	7	(2)	3,941	1
Latin America and CPF	113	11	41	11	27	6,677	9
Mining	72	30	13	34	(9)	2,494	45
Total Segments	649	175	159	202	20	32,041	436
Unallocated	34	(44)	47	—	—	3,252	3
Timing	(7)	(1)	—	—	(2)	26	—
Methodology	—	34	(38)	—	—	(253)	—
Inter-segment Eliminations [1]	—	—	—	—	—	(228)	—
Total	$ 676	$ 164	$ 168	$ 202	$ 18	$ 34,838	$ 439

2016	**External Revenues**	**Profit before income taxes**	**Interest Expense**	**Depreciation on equipment leased to others**	**Provision for credit losses**	**Assets at December 31, 2016**	**Capital expenditures**
North America	$ 317	$ 94	$ 73	$ 118	$ 4	$ 14,925	$ 480
Europe	68	22	9	21	—	3,834	38
Asia/Pacific	64	15	21	7	6	3,620	59
Latin America and CPF	120	18	40	15	25	7,270	7
Mining	78	11	11	49	2	2,734	28
Total Segments	647	160	154	210	37	32,383	612
Unallocated	21	(32)	25	—	1	1,688	2
Timing	(9)	(2)	—	1	—	27	(2)
Methodology	—	22	(27)	—	—	(220)	—
Inter-segment Eliminations [1]	—	—	—	—	—	(263)	—
Total	$ 659	$ 148	$ 152	$ 211	$ 38	$ 33,615	$ 612

[1] Elimination is primarily related to intercompany loans.

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

(Millions of dollars) 2017	External Revenues	Profit before income taxes	Interest Expense	Depreciation on equipment leased to others	Provision for credit losses	Assets at June 30, 2017	Capital expenditures
North America	$ 651	$ 172	$ 147	$ 258	$ 14	$ 14,933	$ 535
Europe	132	42	18	41	(2)	3,996	46
Asia/Pacific	129	48	42	14	(6)	3,941	3
Latin America and CPF	234	46	83	23	36	6,677	42
Mining	142	45	25	71	(9)	2,494	80
Total Segments	1,288	353	315	407	33	32,041	706
Unallocated	65	(81)	89	—	—	3,252	4
Timing	(15)	(7)	—	—	1	26	—
Methodology	—	66	(74)	—	—	(253)	—
Inter-segment Eliminations [1]	—	—	—	—	—	(228)	—
Total	$ 1,338	$ 331	$ 330	$ 407	$ 34	$ 34,838	$ 710

2016	External Revenues	Profit before income taxes	Interest Expense	Depreciation on equipment leased to others	Provision for credit losses	Assets at December 31, 2016	Capital expenditures
North America	$ 617	$ 176	$ 146	$ 227	$ 13	$ 14,925	$ 652
Europe	134	42	17	41	2	3,834	76
Asia/Pacific	125	36	41	13	5	3,620	69
Latin America and CPF	245	45	82	32	42	7,270	24
Mining	159	21	24	100	6	2,734	86
Total Segments	1,280	320	310	413	68	32,383	907
Unallocated	39	(64)	49	—	1	1,688	3
Timing	(17)	(6)	—	1	(2)	27	(1)
Methodology	—	43	(52)	—	—	(220)	—
Inter-segment Eliminations [1]	—	—	—	—	—	(263)	—
Total	$ 1,302	$ 293	$ 307	$ 414	$ 67	$ 33,615	$ 909

[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 June 30, 2017 and December 31, 2016, the related recorded liability was $1 million. The maximum potential amount of future payments (undiscounted and without reduction for any amounts that may possibly be recovered under recourse or collateralized provisions) we could be required to make under the guarantees was $65 million and $43 million at June 30, 2017 and December 31, 2016, 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 June 30, 2017 and December 31, 2016, the SPC's assets of $1.14 billion and $1.09 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 $1.14 billion and $1.09 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 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 $16 million and $64 million as of June 30, 2017 and December 31, 2016, respectively.

Investment in equity securities

Investment in certain equity securities have been classified as available-for-sale and recorded at fair value. Fair values for our investment in equity securities are based upon valuations for identical instruments in active markets.

Equity securities are measured on a recurring basis at fair value and are classified as Level 1 measurements. We had equity securities included in our Consolidated Statements of Financial Position of $3 million as of June 30, 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 $286 million and $137 million as of June 30, 2017 and December 31, 2016, 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)	June 30, 2017		December 31, 2016			
	Carrying Amount	Fair Value	Carrying Amount	Fair Value	Fair Value Levels	Reference
Cash and cash equivalents	$ 1,174	$ 1,174	$ 1,795	$ 1,795	1	
Finance receivables, net (excluding finance leases[1])	$ 20,137	$ 20,042	$ 20,101	$ 19,949	3	Note 3
Interest rate contracts:						
In a net receivable position	$ 3	$ 3	$ 4	$ 4	2	Note 4
In a net payable position	$ (1)	$ (1)	$ (1)	$ (1)	2	Note 4
Cross currency contracts:						
In a receivable position	$ 34	$ 34	$ 56	$ 56	2	Note 4
In a payable position	$ (22)	$ (22)	$ (3)	$ (3)	2	Note 4
Foreign currency contracts:						
In a receivable position	$ 18	$ 18	$ 12	$ 12	2	Note 4
In a payable position	$ (16)	$ (16)	$ (4)	$ (4)	2	Note 4
Restricted cash and cash equivalents[2]	$ 16	$ 16	$ 29	$ 29	1	
Investment in equity securities	$ 3	$ 3	$ —	$ —	1	
Short-term borrowings	$ (6,775)	$ (6,775)	$ (7,094)	$ (7,094)	1	
Long-term debt	$ (21,592)	$ (21,821)	$ (20,537)	$ (20,724)	2	
Guarantees	$ (1)	$ (1)	$ (1)	$ (1)	3	Note 7

[1] As of June 30, 2017 and December 31, 2016, represents finance leases with a net carrying value of $6.59 billion and $6.11 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 30 percent in the second quarter of both 2017 and 2016.

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

OVERVIEW

We reported second-quarter 2017 revenues of $676 million, an increase of $17 million, or 3 percent, compared with the second quarter of 2016. The increase in revenues was due to a $14 million favorable impact from lending activity with Caterpillar, a $13 million favorable impact from higher average financing rates and an $8 million favorable impact from returned or repossessed equipment. These favorable impacts were partially offset by an $18 million unfavorable impact from lower average earning assets.

Profit before income taxes was $164 million for the second quarter of 2017, compared with $148 million for the second quarter of 2016. The increase was primarily due to a $20 million decrease in provision for credit losses, a $10 million favorable impact from miscellaneous revenue items primarily due to lending activity with Caterpillar and an $8 million favorable impact from returned or repossessed equipment. These favorable impacts were partially offset by a $12 million increase in general, operating and administrative expenses primarily due to higher incentive compensation and a $9 million unfavorable impact from lower average earning assets.

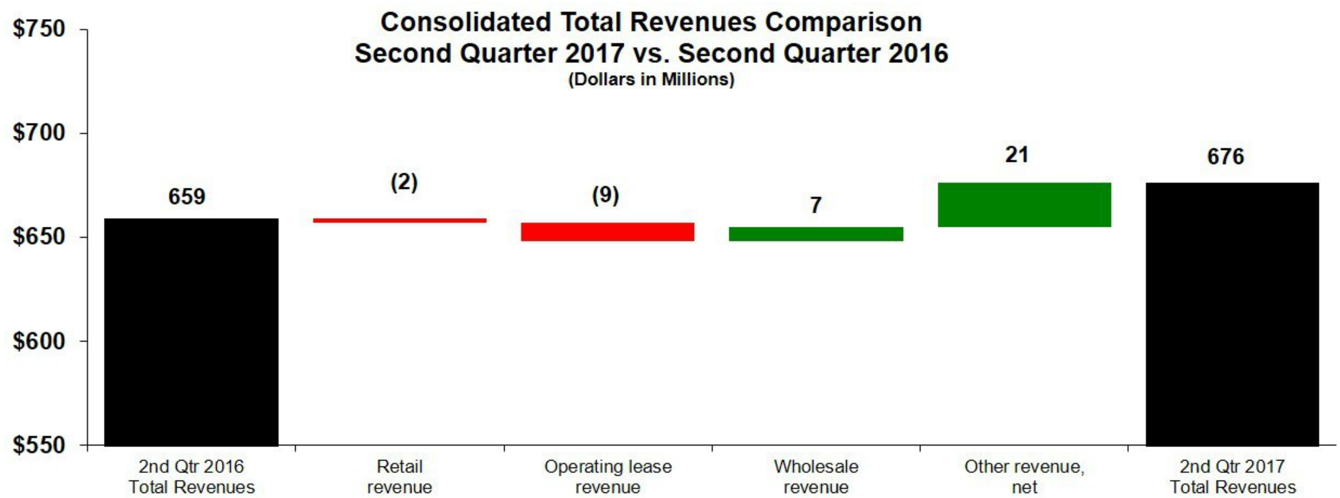
The provision for income taxes reflects an estimated annual tax rate of 30 percent in the second quarter of both 2017 and 2016.

During the second quarter of 2017, retail new business volume was $2.69 billion, a decrease of $367 million, or 12 percent, from the second quarter of 2016. The decrease was primarily related to lower volume in North America, Mining and Latin America, partially offset by an increase in Asia/Pacific.

At the end of the second quarter of 2017, past dues were 2.71 percent, compared with 2.93 percent at the end of the second quarter of 2016. Write-offs, net of recoveries, were $26 million for the second quarter of 2017, compared with $33 million for the second quarter of 2016. As of June 30, 2017, the allowance for credit losses totaled $338 million, or 1.25 percent of finance receivables, compared with $346 million, or 1.25 percent of finance receivables at June 30, 2016. The allowance for credit losses at year-end 2016 was $343 million, or 1.29 percent of finance receivables.

SECOND QUARTER 2017 COMPARED WITH SECOND QUARTER 2016

Consolidated Total Revenues



The chart above graphically illustrates reasons for the change in Consolidated Total Revenues between second quarter 2016 (at left) and second quarter 2017 (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 second quarter of 2017 was $307 million, a decrease of $2 million from the same period in 2016. The decrease was due to a $9 million unfavorable impact from lower average earning assets, partially offset by a $7 million favorable impact from higher interest rates on retail finance receivables. For the quarter ended June 30, 2017, retail average earning assets were $23.05 billion, a decrease of $683 million from the same period in 2016. The annualized average yield was 5.33 percent for the second quarter of 2017, compared with 5.20 percent for the second quarter of 2016.

Operating lease revenue for the second quarter of 2017 was $245 million, a decrease of $9 million from the same period in 2016. The decrease was due to a $7 million unfavorable impact from lower average earning assets and a $2 million unfavorable impact from lower average rental rates on operating leases.

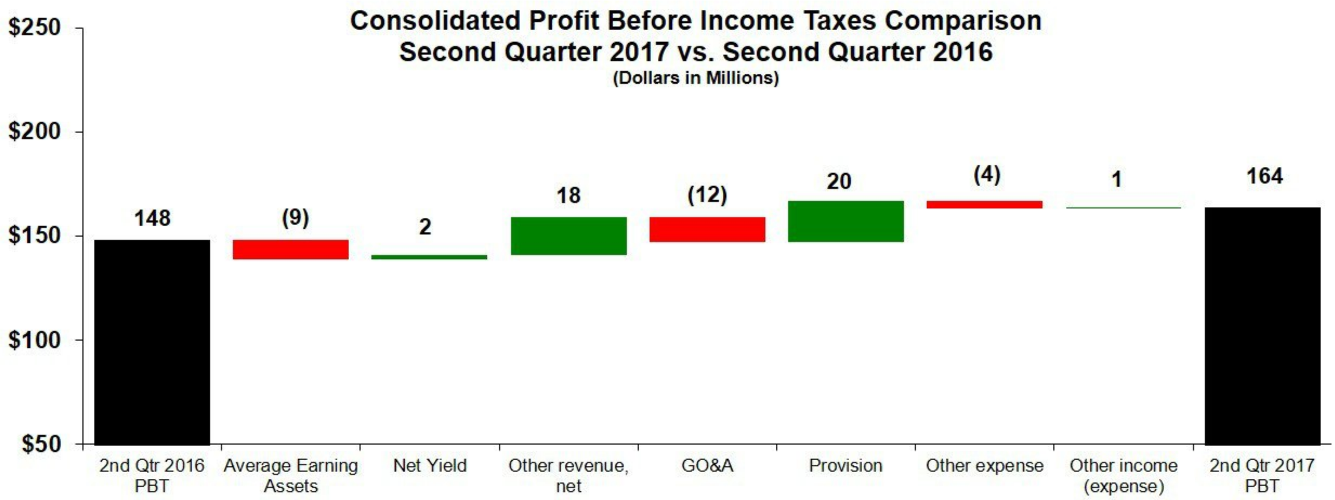
Wholesale revenue for the second quarter of 2017 was $78 million, an increase of $7 million from the same period in 2016. The increase was due to a $10 million favorable impact from higher interest rates on wholesale finance receivables, partially offset by a $3 million unfavorable impact from lower average earning assets. For the quarter ended June 30, 2017, wholesale average earning assets were $3.89 billion, a decrease of $191 million from the same period in 2016. The annualized average yield was 8.00 percent for the second quarter of 2017, compared with 6.95 percent for the second quarter of 2016.

Other revenue, net, items were as follows:

(Millions of dollars)	**Three Months Ended June 30,**		
	2017	**2016**	**$ Change**
Interest income on Notes Receivable from Caterpillar[(1)]	$ 20	$ 8	$ 12
Finance receivable and operating lease fees (including late charges)[(2)]	19	19	—
Fees on committed credit facility extended to Caterpillar	10	10	—
Net loss on returned or repossessed equipment	(6)	(14)	8
Miscellaneous other revenue, net	3	2	1
Total Other revenue, net	$ 46	$ 25	$ 21

(1) For the three months ended June 30, 2017 and 2016, includes $6 million and $8 million, respectively, of portfolio-related revenues.
(2) Portfolio-related revenues.

Consolidated Profit Before Income Taxes



The chart above graphically illustrates reasons for the change in Consolidated Profit Before Income Taxes between second quarter 2016 (at left) and second quarter 2017 (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.

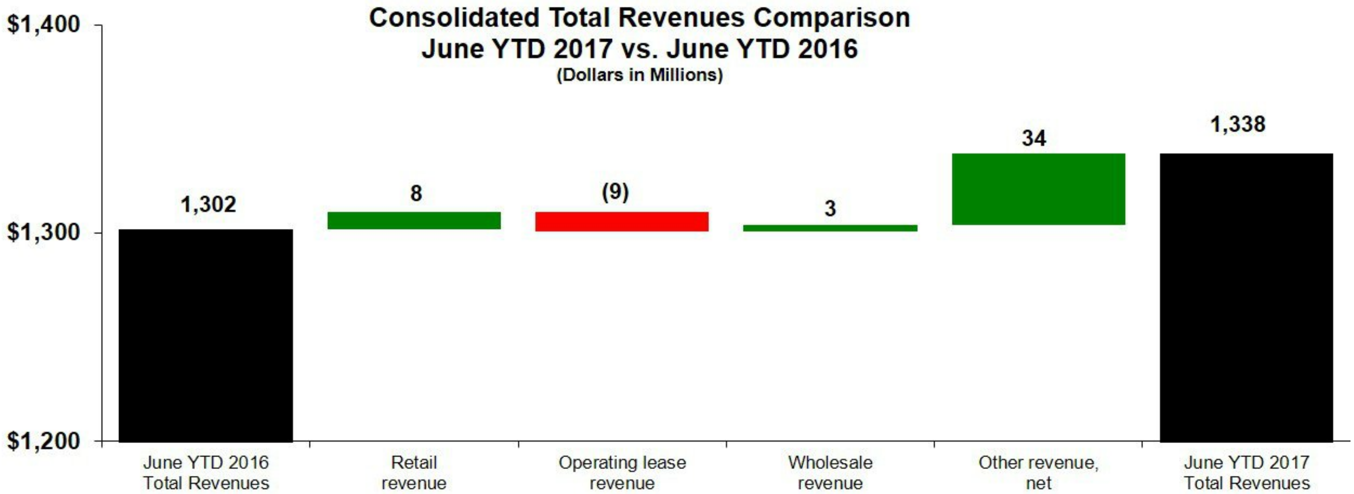
Profit before income taxes was $164 million for the second quarter of 2017, compared with $148 million for the second quarter of 2016. The increase was primarily due to a $20 million decrease in provision for credit losses, a $10 million favorable impact from miscellaneous revenue items primarily due to lending activity with Caterpillar and an $8 million favorable impact from returned or repossessed equipment. These favorable impacts were partially offset by a $12 million increase in general, operating and administrative expenses primarily due to higher incentive compensation and a $9 million unfavorable impact from lower average earning assets.

Provision for income taxes

The Provision for income taxes reflects an estimated annual tax rate of 30 percent in the second quarter of both 2017 and 2016.

SIX MONTHS ENDED JUNE 30, 2017 VS. SIX MONTHS ENDED JUNE 30, 2016

Consolidated Total Revenues



The chart above graphically illustrates reasons for the change in Consolidated Total Revenues between June YTD 2016 (at left) and June YTD 2017 (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 six months of 2017 was $615 million, an increase of $8 million from the same period in 2016. The increase was due to a $21 million favorable impact from higher interest rates on retail finance receivables, partially offset by a $13 million unfavorable impact from lower average earning assets. For the six months ended June 30, 2017, retail average earning assets were $23.11 billion, a decrease of $505 million from the same period in 2016. The annualized average yield was 5.32 percent for the first six months of 2017, compared with 5.14 percent for the same period in 2016.

Operating lease revenue for the first six months of 2017 was $490 million, a decrease of $9 million from the same period in 2016. The decrease was due to a $5 million unfavorable impact from lower average rental rates on operating leases and a $4 million unfavorable impact from lower average earning assets.

Wholesale revenue for the first six months of 2017 was $143 million, an increase of $3 million from the same period in 2016. The increase was due to a $16 million favorable impact from higher interest rates on wholesale finance receivables, partially offset by a $13 million unfavorable impact from lower average earning assets. For the six months ended June 30, 2017, wholesale average earning assets were $3.61 billion, a decrease of $376 million from the same period in 2016. The annualized average yield was 7.91 percent for the first six months of 2017, compared with 7.01 percent for the same period in 2016.

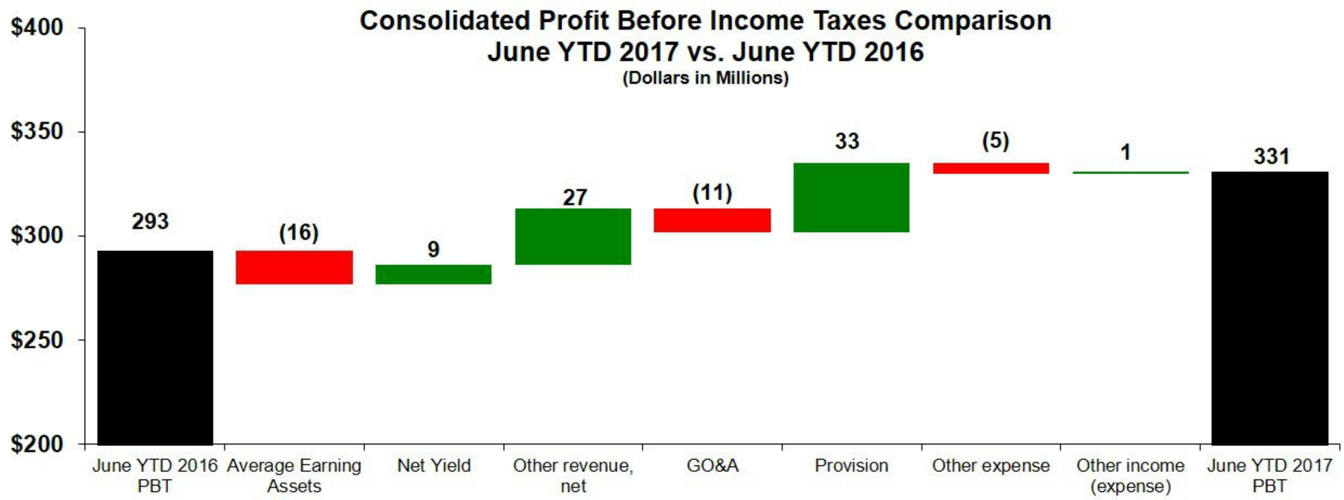
Other revenue, net, items were as follows:

(Millions of dollars)	Six Months Ended June 30, 2017	Six Months Ended June 30, 2016	$ Change
Interest income on Notes Receivable from Caterpillar[(1)]	$ 38	$ 14	$ 24
Finance receivable and operating lease fees (including late charges)[(2)]	36	36	—
Fees on committed credit facility extended to Caterpillar	20	20	—
Net loss on returned or repossessed equipment	(10)	(20)	10
Miscellaneous other revenue, net	6	6	—
Total Other revenue, net	$ 90	$ 56	$ 34

(1) For the six months ended June 30, 2017 and 2016, includes $13 million and $14 million, respectively, of portfolio-related revenues.

(2) Portfolio-related revenues.

Consolidated Profit Before Income Taxes



The chart above graphically illustrates reasons for the change in Consolidated Profit Before Income Taxes between June YTD 2016 (at left) and June YTD 2017 (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 $331 million for the first six months of 2017, compared with $293 million for the same period in 2016. The increase was primarily due to a $33 million decrease in provision for credit losses, a $17 million favorable impact from miscellaneous revenue items primarily due to lending activity with Caterpillar and a $10 million favorable impact from returned or repossessed equipment. These favorable impacts were partially offset by a $16 million unfavorable impact from lower average earning assets and an $11 million increase in general, operating and administrative expenses primarily due to higher incentive compensation.

Provision for income taxes

The Provision for income taxes reflects an estimated annual tax rate of 30 percent for both the six months ended June 30, 2017 and 2016.

Finance Receivables and Equipment on Operating Leases

New Business Volume

(Millions of dollars)	Six Months Ended June 30,		
	2017	2016	$ Change
New retail financing	$ 4,319	$ 4,440	$ (121)
New operating lease activity	715	932	(217)
New wholesale financing	17,415	16,057	1,358
Total	$ 22,449	$ 21,429	$ 1,020

New retail financing decreased primarily due to lower volume in North America, Latin America and Mining, partially offset by higher volume in Asia/Pacific. New operating lease activity (which is substantially related to retail) decreased primarily due to lower rentals of Cat equipment in North America and Asia/Pacific. 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)	June 30, 2017	December 31, 2016	$ Change
Finance receivables, net	$ 26,731	$ 26,212	$ 519
Equipment on operating leases, less accumulated depreciation	3,599	3,708	(109)
Total portfolio	$ 30,330	$ 29,920	$ 410
Retail finance leases	$ 97	$ 41	$ 56
Retail notes receivable	80	87	(7)
Retail installment sale contracts	72	79	(7)
Operating leases	48	79	(31)
Total off-balance sheet managed assets	$ 297	$ 286	$ 11
Total managed portfolio	$ 30,627	$ 30,206	$ 421

At the end of the second quarter of 2017, past dues were 2.71 percent, compared with 2.93 percent at the end of the second quarter of 2016. Total non-performing finance receivables, which represent finance receivables currently on non-accrual status, were $704 million and $580 million at June 30, 2017 and December 31, 2016, respectively. Total non-performing finance receivables as a percentage of our recorded investment in finance receivables were 2.60 percent and 2.18 percent at June 30, 2017 and December 31, 2016, respectively.

Our allowance for credit losses as of June 30, 2017 was $338 million or 1.25 percent of finance receivables compared with $343 million or 1.29 percent as of December 31, 2016. 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 June 30, 2017.

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 second quarter of 2017, we experienced favorable liquidity conditions. We ended the second quarter of 2017 with $1.17 billion of cash, a decrease of $621 million from year-end 2016. Our cash balances are held in numerous locations throughout the world with approximately $240 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. 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 June 30, 2017 were $29.97 billion, an increase of $699 million over December 31, 2016, primarily due to the impact of lending activity with Caterpillar. Outstanding borrowings were as follows:

(Millions of dollars)	June 30, 2017	December 31, 2016
Medium-term notes, net of unamortized discount and debt issuance costs	$ 20,802	$ 19,667
Commercial paper, net of unamortized discount	5,537	5,985
Bank borrowings – long-term	790	870
Bank borrowings – short-term	742	553
Variable denomination floating rate demand notes	496	556
Notes payable to Caterpillar	1,600	1,637
Total outstanding borrowings	$ 29,967	$ 29,268

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, Argentina and Mexico 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 $4.11 billion and redeemed totaled $3.12 billion for the six months ended June 30, 2017. Medium-term notes outstanding as of June 30, 2017, mature as follows:

(Millions of dollars)	
2017	$ 2,739
2018	5,557
2019	4,468
2020	2,863
2021	1,633
Thereafter	3,542
Total	$ 20,802

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 June 30, 2017 was $7.75 billion.

- The 364-day facility of $3.15 billion (of which $2.33 billion is available to us) expires in September 2017.
- The three-year facility, as amended in September 2016, of $2.73 billion (of which $2.01 billion is available to us) expires in September 2019.
- The five-year facility, as amended in September 2016, of $4.62 billion (of which $3.41 billion is available to us) expires in September 2021.

At June 30, 2017, Caterpillar’s consolidated net worth was $14.07 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 June 30, 2017, our covenant interest coverage ratio was 1.94 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 June 30, 2017, our covenant leverage ratio was 7.46 to 1. This is below the maximum ratio of debt to net worth of 10 to 1, calculated (1) on a monthly basis as the average of the leverage ratios determined on the last day of each of the six preceding calendar months and (2) at each December 31, required by the Credit Facility.

In the event that either Caterpillar or we do not meet one or more of our respective financial covenants under the Credit Facility in the future (and are unable to obtain a consent or waiver), the syndicate of banks may terminate the commitments allocated to the party that does not meet its covenants. Additionally, in such event, certain of our other lenders under other loan agreements where similar financial covenants or cross default provisions are applicable, may, at their election, choose to pursue remedies under those loan agreements, including accelerating the repayment of outstanding borrowings. At June 30, 2017, there were no borrowings under the Credit Facility.

Bank borrowings

Available credit lines with banks as of June 30, 2017 totaled $4.30 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 June 30, 2017, we had $1.53 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 June 30, 2017, there was $496 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 $2.78 billion from Caterpillar and Caterpillar may borrow up to $2.64 billion from us. The variable amount lending agreements are in effect for indefinite periods of time and may be changed or terminated by either party with 30 days notice. The term lending agreements have remaining maturities ranging up to nine years. We had notes payable of $1.60 billion and notes receivable of $2.06 billion outstanding under these agreements as of June 30, 2017.

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 June 30, 2017, there were no borrowings under this credit facility.

OFF-BALANCE SHEET ARRANGEMENTS

We lease all of our facilities. In addition, we have potential payment exposure for guarantees issued to third parties totaling $65 million as of June 30, 2017.

CASH FLOWS

Operating cash flow was $620 million in the first six months of 2017, compared with $785 million for the same period a year ago. Net cash used for investing activities was $1.69 billion for the first six months of 2017, compared with $1.22 billion for the same period in 2016. The change was primarily due to the impact of lending activity with Caterpillar. Net cash provided by financing activities was $438 million for the first six months of 2017, compared with $483 million for the same period in 2016.

CRITICAL ACCOUNTING POLICIES

For a discussion of the Company's critical accounting policies, see Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations in our 2016 Annual Report on Form 10-K.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

Certain statements contained in this Quarterly Report on Form 10-Q may be considered "forward-looking statements" as that term is defined in the Private Securities Litigation Reform Act of 1995. These statements may relate to future events or our future financial performance, which may involve known and unknown risks and uncertainties and other factors that may cause our actual results, levels of activity, performance or achievement to be materially different from those expressed or implied by any forward-looking statements. From time to time, we may also provide forward-looking statements in oral presentations to the public or in other materials we issue to the public. Forward-looking statements give current expectations or forecasts of future events about the company. You may identify these statements by the fact that they do not relate to historical or current facts and may use words such as "believes," "expects," "estimates," "anticipates," "will," "should," "plan," "project," "intend," "could" and similar words or phrases. These statements are only predictions. Actual events or results may differ materially due to factors that affect international businesses, including changes in economic conditions, disruptions in the global financial and credit markets and changes in laws, regulations and political stability, as well as factors specific to Cat Financial and the markets we serve, including the market's acceptance of our products and services, the creditworthiness of our customers, interest rate and currency rate fluctuations and estimated residual values of leased equipment. These risk factors may not be exhaustive. We operate in a continually changing business environment and new risk factors emerge from time to time. We cannot predict these new risk factors, nor can we assess the impact, if any, of these new risk factors on our businesses or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those projected in any forward-looking statements. Accordingly, forward-looking statements should not be relied upon as a prediction of actual results. Moreover, we do not assume responsibility for the accuracy and completeness of those statements. 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, 2017 for the fiscal year ended December 31, 2016, as supplemented in our Form 10-Q filed with the SEC on May 3, 2017 and in this Form 10-Q filing. We undertake no obligation to publicly update forward-looking statements, whether as a result of new information, future events or otherwise.

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 under 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 second quarter of 2017 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, 2017 for the year ended December 31, 2016. 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
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 James A. Duensing, 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 James A. Duensing, 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: August 2, 2017	*/s/David T. Walton*
	David T. Walton, President, Director and Chief Executive Officer
Date: August 2, 2017	*/s/James A. Duensing*
	James A. Duensing, Executive Vice President and Chief Financial Officer
Date: August 2, 2017	*/s/Leslie S. Zmugg*
	Leslie S. Zmugg, Secretary
Date: August 2, 2017	*/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 June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Profit of consolidated companies	$ 115	$ 104	$ 232	$ 205
Add:				
Provision for income taxes	49	44	99	88
Profit before income taxes	$ 164	$ 148	$ 331	$ 293
Fixed charges:				
Interest expense	$ 168	$ 152	$ 330	$ 307
Rentals at computed interest*	2	2	3	3
Total fixed charges	$ 170	$ 154	$ 333	$ 310
Profit before income taxes plus fixed charges	$ 334	$ 302	$ 664	$ 603
Ratio of profit before income taxes plus fixed charges to fixed charges	1.96	1.96	1.99	1.95

*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: August 2, 2017

/s/David T. Walton

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

EXHIBIT 31.2

SECTION 302 CERTIFICATIONS

I, James A. Duensing, 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: August 2, 2017

/s/James A. Duensing

James A. Duensing, 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 June 30, 2017, 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: August 2, 2017	*/s/David T. Walton*
	David T. Walton
	President, Director and Chief Executive Officer
Date: August 2, 2017	*/s/James A. Duensing*
	James A. Duensing
	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.