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, 2020

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**

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

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

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

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

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

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

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

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

As of August 5, 2020, 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 2019 Annual Report on Form 10-K filed with the Securities and Exchange Commission (SEC) on February 19, 2020. The Company files electronically with the SEC required reports on Form 8-K, Form 10-Q, Form 10-K; registration statements on Form S-3; and other forms or reports as required. The SEC maintains a website (www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. Copies of our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to these reports filed or furnished with the SEC are available free of charge through Caterpillar's website (www.caterpillar.com/secfilings) as soon as reasonably practicable after filing with the SEC. In addition, the public may obtain more detailed information about our parent company, Caterpillar, by visiting its website (www.caterpillar.com). None of the information contained at any time on our website or Caterpillar'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, 2020	Three Months Ended June 30, 2019	Six Months Ended June 30, 2020	Six Months Ended June 30, 2019
Revenues:				
Retail finance	$ 307	$ 350	$ 636	$ 685
Operating lease	247	257	504	515
Wholesale finance	84	131	183	250
Other, net	3	19	13	43
Total revenues	641	757	1,336	1,493
Expenses:				
Interest	150	200	325	401
Depreciation on equipment leased to others	194	204	395	406
General, operating and administrative	104	126	212	250
Provision for credit losses	86	71	147	124
Other	12	9	25	19
Total expenses	546	610	1,104	1,200
Other income (expense)	(6)	(6)	(16)	(10)
Profit before income taxes	89	141	216	283
Provision for income taxes	25	57	58	95
Profit of consolidated companies	64	84	158	188
Less: Profit attributable to noncontrolling interests	5	5	9	11
Profit[1]	$ 59	$ 79	$ 149	$ 177

[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,	
	2020	**2019**	**2020**	**2019**
Profit of consolidated companies	$ 64	$ 84	$ 158	$ 188
Other comprehensive income (loss), net of tax:				
Foreign currency translation, net of tax (expense)/benefit of: 2020 $11 three months, $(1) six months; 2019 $7 three months, $3 six months	125	18	(182)	33
Derivative financial instruments:				
Gains (losses) deferred, net of tax (expense)/benefit of: 2020 $9 three months, $(10) six months; 2019 $5 three months, $6 six months	(35)	(19)	32	(22)
(Gains) losses reclassified to earnings, net of tax expense/(benefit) of: 2020 $(11) three months, $5 six months; 2019 $- three months, $3 six months	42	(3)	(19)	(14)
Total Other comprehensive income (loss), net of tax	132	(4)	(169)	(3)
Comprehensive income (loss)	196	80	(11)	185
Less: Comprehensive income (loss) attributable to the noncontrolling interests	4	3	7	11
Comprehensive income (loss) attributable to Caterpillar Financial Services Corporation	$ 192	$ 77	$ (18)	$ 174

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, 2020	December 31, 2019
Assets:		
Cash and cash equivalents	$ 630	$ 690
Finance receivables, net of Allowance for credit losses of $515 and $424	26,341	27,832
Notes receivable from Caterpillar	339	296
Equipment on operating leases, net	3,355	3,583
Other assets	1,408	1,292
Total assets	$ 32,073	$ 33,693
Liabilities and shareholder's equity:		
Payable to dealers and others	$ 116	$ 135
Payable to Caterpillar - borrowings and other	179	693
Accrued expenses	180	241
Short-term borrowings	4,301	5,161
Current maturities of long-term debt	6,006	6,194
Long-term debt	17,178	17,140
Other liabilities	901	893
Total liabilities	28,861	30,457
Commitments and contingent liabilities (Note 7)		
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	3,298	3,162
Accumulated other comprehensive income (loss)	(1,012)	(845)
Noncontrolling interests	179	172
Total shareholder's equity	3,212	3,236
Total liabilities and shareholder's equity	$ 32,073	$ 33,693

See Notes to Consolidated Financial Statements (Unaudited).

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

	Common stock	Additional paid-in capital	Retained earnings	Accumulated other comprehensive income (loss)	Noncontrolling interests	Total
Three Months Ended June 30, 2019						
Balance at March 31, 2019	$ 745	$ 2	$ 2,875	$ (829)	$ 161	$ 2,954
Profit of consolidated companies			79		5	84
Foreign currency translation, net of tax				20	(2)	18
Derivative financial instruments, net of tax				(22)		(22)
Balance at June 30, 2019	$ 745	$ 2	$ 2,954	$ (831)	$ 164	$ 3,034
Three Months Ended June 30, 2020						
Balance at March 31, 2020	$ 745	$ 2	$ 3,239	$ (1,145)	$ 175	$ 3,016
Profit of consolidated companies			59		5	64
Foreign currency translation, net of tax				126	(1)	125
Derivative financial instruments, net of tax				7		7
Balance at June 30, 2020	$ 745	$ 2	$ 3,298	$ (1,012)	$ 179	$ 3,212
Six Months Ended June 30, 2019						
Balance at December 31, 2018	$ 745	$ 2	$ 2,874	$ (925)	$ 153	$ 2,849
Profit of consolidated companies			177		11	188
Foreign currency translation, net of tax				33	—	33
Derivative financial instruments, net of tax				(36)		(36)
Adjustment to adopt new accounting guidance[1]			(97)	97		—
Balance at June 30, 2019	$ 745	$ 2	$ 2,954	$ (831)	$ 164	$ 3,034
Six Months Ended June 30, 2020						
Balance at December 31, 2019	$ 745	$ 2	$ 3,162	$ (845)	$ 172	$ 3,236
Profit of consolidated companies			149		9	158
Foreign currency translation, net of tax				(180)	(2)	(182)
Derivative financial instruments, net of tax				13		13
Adjustment to adopt new accounting guidance[2]			(13)			(13)
Balance at June 30, 2020	$ 745	$ 2	$ 3,298	$ (1,012)	$ 179	$ 3,212

(1) Adjustment to adopt new accounting guidance related to reclassification of certain tax effects from accumulated other comprehensive income (loss).
(2) Adjustment to adopt new accounting guidance related to credit losses (See Note 2).

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, 2020	Six Months Ended June 30, 2019
Cash flows from operating activities:		
Profit of consolidated companies	$ 158	$ 188
Adjustments for non-cash items:		
Depreciation and amortization	402	413
Amortization of receivables purchase discount	(166)	(231)
Provision for credit losses	147	124
Other, net	139	74
Changes in assets and liabilities:		
Other assets	(20)	56
Payable to dealers and others	11	294
Accrued expenses	(53)	(38)
Other payables with Caterpillar	(20)	(4)
Other liabilities	(15)	31
Net cash provided by operating activities	583	907
Cash flows from investing activities:		
Expenditures for equipment on operating leases	(496)	(694)
Capital expenditures - excluding equipment on operating leases	(7)	(11)
Proceeds from disposals of equipment	282	354
Additions to finance receivables	(7,352)	(7,027)
Collections of finance receivables	7,444	6,543
Net changes in Caterpillar purchased receivables	920	15
Proceeds from sales of receivables	31	119
Net change in variable lending to Caterpillar	(30)	69
Additions to other notes receivable with Caterpillar	(25)	(80)
Collections on other notes receivable with Caterpillar	12	33
Settlements of undesignated derivatives	22	(31)
Net cash provided by (used for) investing activities	801	(710)
Cash flows from financing activities:		
Net change in variable lending from Caterpillar	(497)	(118)
Payments on borrowings with Caterpillar	—	(93)
Proceeds from debt issued (original maturities greater than three months)	4,168	5,340
Payments on debt issued (original maturities greater than three months)	(4,617)	(4,897)
Short-term borrowings, net (original maturities three months or less)	(485)	(436)
Net cash provided by (used for) financing activities	(1,431)	(204)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(14)	(2)
Increase (decrease) in cash, cash equivalents and restricted cash	**(61)**	**(9)**
Cash, cash equivalents and restricted cash at beginning of year[1]	695	773
Cash, cash equivalents and restricted cash at end of period[1]	$ 634	$ 764

[1] As of June 30, 2020 and December 31, 2019, restricted cash, which is included in Other assets in the Consolidated Statements of Financial Position, was $4 million and $5 million, respectively. Restricted cash primarily includes cash related to syndication activities.

See Notes to Consolidated Financial Statements (Unaudited).

Notes to Consolidated Financial Statements
(Unaudited)

1. Summary of Significant Accounting Policies

A. 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, 2020 and 2019, (b) the consolidated comprehensive income for the three and six months ended June 30, 2020 and 2019, (c) the consolidated financial position at June 30, 2020 and December 31, 2019, (d) the consolidated changes in shareholder's equity for the three and six months ended June 30, 2020 and 2019 and (e) the consolidated cash flows for the six months ended June 30, 2020 and 2019. The preparation of financial statements, in conformity with generally accepted accounting principles and pursuant to the rules and regulations of the Securities and Exchange Commission (SEC), requires management to make estimates and assumptions that affect the reported amounts. Significant estimates include residual values for leased assets, allowance for credit losses and income taxes. The continued impact of the COVID-19 pandemic could cause our actual results to differ materially from the estimates and assumptions used in preparation of the financial statements. Changes in estimates are recorded in the period that the events or circumstances giving rise to such changes occur.

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, 2019 (2019 Form 10-K). The December 31, 2019 financial position data included herein was derived from the audited consolidated financial statements included in the 2019 Form 10-K but does not include all disclosures required by generally accepted accounting principles. 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. Credit risk was evaluated and reflected in our financial statements as part of our overall portfolio of finance receivables and related allowance for credit losses.

B. Accounting Policy Updates

For a discussion of our significant accounting policies, see Note 1 in our 2019 Form 10-K. Significant accounting policies that have been revised since our 2019 Form 10-K are shown below. These accounting policy changes were effective January 1, 2020 with the adoption of the new credit loss accounting guidance discussed in Note 2. Prior period comparative information has not been recast and continues to be reported under the accounting guidance in effect for those periods.

Finance Receivables

Finance receivables are generally classified as held for investment and recorded at amortized cost given that we have the intent and ability to hold them for the foreseeable future. Amortized cost is the principal balance outstanding plus accrued interest less write-downs, net of unamortized purchase discounts and deferred fees and costs.

Allowance for Credit Losses

The allowance for credit losses is management's estimate of expected losses over the life of our finance receivable portfolio calculated using loss forecast models that take into consideration historical credit loss experience, current economic conditions and forecasts and scenarios that capture country and industry-specific economic factors. In addition, qualitative factors not able to be fully captured in our loss forecast models, including borrower-specific and company-specific macro-economic factors, are considered in the evaluation of the adequacy of our allowance for credit losses. These qualitative factors are subjective and require a degree of management judgment.

The allowance for credit losses is measured on a collective (pool) basis when similar risk characteristics exist and on an individual basis when it is determined that similar risk characteristics do not exist. Finance receivables are identified for individual evaluation 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 is based on the present value of expected future cash flows discounted at the receivables' effective interest rate, the fair value of the collateral for collateral-dependent receivables or the observable market price of the receivable. In determining collateral value, we estimate the current fair market value of the collateral less selling costs. We also consider credit enhancements such as additional collateral and contractual third-party guarantees. See Note 3 for a description of our portfolio segments and allowance methodologies.

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

2. New Accounting Pronouncements

A. Adoption of New Accounting Standards

Credit losses (Accounting Standards Update (ASU) 2016-13) – In June 2016, the Financial Accounting Standards Board (FASB) issued new 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 applies 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 also applies to debt securities and other financial assets measured at fair value through other comprehensive income. The new guidance was effective January 1, 2020. We applied the new guidance using a modified retrospective approach through a cumulative effect adjustment to retained earnings as of January 1, 2020. We have not recast prior period comparative information, which we continue to report under the accounting guidance in effect for those periods.

The most significant effects of adoption relate to the change in methodology for estimating our Allowance for credit losses from an incurred loss model to a current expected credit loss model. We elected to present accrued interest receivable related to our finance receivables in Finance receivables, net. In prior period comparative information, accrued interest receivable continues to be reported in Other assets. Our adoption of the new guidance did not have a material impact on our financial statements.

The cumulative effect of initially applying the new credit loss guidance to our consolidated financial statements on January 1, 2020 was as follows:

Consolidated Statement of Financial Position (Millions of dollars)	**Balance as of December 31, 2019**	**Cumulative Impact from Adopting New Credit Loss Standard**	**Balance as of January 1, 2020**
Assets:			
Finance receivables, net	$ 27,832	$ 42	$ 27,874
Other assets	$ 1,292	$ (53)	$ 1,239
Liabilities:			
Other liabilities	$ 893	$ 2	$ 895
Shareholder's equity			
Retained earnings	$ 3,162	$ (13)	$ 3,149

See Note 3 for additional information.

We adopted the following ASUs effective January 1, 2020, none of which had a material impact on our financial statements:

ASU	Description
2018-13	Fair value measurement
2018-15	Internal-use software
2018-19	Codification improvements - Credit losses
2019-04	Codification improvements - Credit losses, Derivatives & hedging, and Financial instruments
2019-05	Financial instruments - Credit losses
2019-11	Codification improvements - Credit losses
2019-12	Simplifying accounting for income taxes
2020-02	Financial instruments - Credit losses
2020-03	Codification improvements - Financial instruments

B. Accounting Standards Issued But Not Yet Adopted

Reference rate reform (ASU 2020-04) – In March 2020, the FASB issued accounting guidance to ease the potential burden in accounting for reference rate reform related activities that impact debt, leases, derivatives and other contracts. The guidance is optional and may be elected over time as reference rate reform activities occur between March 12, 2020 through December 31, 2022. We are evaluating the impact of reference rate reform on our contracts and assessing the impacts of adopting this guidance on our financial statements.

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

3. Finance Receivables

Effective January 1, 2020, we implemented the new credit loss guidance using a modified retrospective approach. Prior period comparative information has not been recast and continues to be reported under the accounting guidance in effect for those periods. See Note 2 for additional information.

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

(Millions of dollars)	June 30, 2020	December 31, 2019
Retail loans, net[1]	$ 15,063	$ 15,424
Retail leases, net	7,466	7,660
Caterpillar purchased receivables, net	3,514	4,448
Wholesale loans, net[1]	773	664
Wholesale leases, net	40	60
Total finance receivables	26,856	28,256
Less: Allowance for credit losses	(515)	(424)
Total finance receivables, net	$ 26,341	$ 27,832

[1] Includes failed sale leasebacks.

Finance leases

Revenues from finance leases were $119 million and $135 million for the three months ended June 30, 2020 and 2019, respectively, and $244 million and $253 million for the six months ended June 30, 2020 and 2019, respectively, and are included in retail and wholesale finance revenue in the Consolidated Statements of Profit. The residual values for leases classified as finance leases are included in Finance receivables, net in the Consolidated Statements of Financial Position. For finance leases, residual value adjustments are recognized through a reduction of finance revenue over the remaining lease term.

Allowance for credit losses

Portfolio segments

A portfolio segment is the level at which we develop a systematic methodology for determining our allowance for credit losses. Our portfolio segments and related methods for estimating expected credit losses are as follows:

Customer

We provide loans and finance leases to end-user customers primarily for the purpose of financing new and used Caterpillar machinery, engines and equipment for commercial use, the majority of which operate in construction-related industries. We also provide financing for vehicles, power generation facilities and marine vessels that, in most cases, incorporate Caterpillar products. The average original term of our customer finance receivable portfolio was approximately 48 months with an average remaining term of approximately 23 months as of June 30, 2020.

We typically maintain a security interest in financed equipment and we require physical damage insurance coverage on the financed equipment, both of which provide us with certain rights and protections. If our collection efforts fail to bring a defaulted account current, we generally can repossess the financed equipment, after satisfying local legal requirements, and sell it within the Caterpillar dealer network or through third-party auctions.

We estimate the allowance for credit losses related to our customer finance receivables based on loss forecast models utilizing probabilities of default and our estimated loss given default based on past loss experience adjusted for current conditions and reasonable and supportable forecasts capturing country and industry-specific macro-economic factors.

As of June 30, 2020, our forecasts for the markets in which we operate continued to reflect a decline in economic conditions resulting from a contracting economy, elevated unemployment rates and an increase in the level and trend of delinquencies due to the COVID-19 pandemic. We believe the economic forecasts employed represent reasonable and supportable forecasts, followed by a reversion to long-term trends.

Dealer

We provide financing to Caterpillar dealers in the form of wholesale financing plans. Our wholesale financing plans provide assistance to dealers by financing their new Caterpillar equipment inventory and rental fleets and are generally secured by the financed equipment. In addition, we provide unsecured loans to Caterpillar dealers for working capital.

We estimate the allowance for credit losses for dealer finance receivables based on historical loss rates with consideration of current economic conditions and reasonable and supportable forecasts.

Although forecasts continued to indicate a decline in economic conditions, our Dealer portfolio segment has not historically experienced increased credit losses during prior economic downturns due to our close working relationships with the dealers and their financial strength. Therefore, no adjustments to historical loss rates were made during the three and six months ended June 30, 2020.

Caterpillar Purchased Receivables

We purchase receivables from Caterpillar, primarily related to the sale of equipment and parts to dealers. Caterpillar purchased receivables are non-interest-bearing short-term trade receivables that are purchased at a discount.

We estimate the allowance for credit losses for Caterpillar purchased receivables based on historical loss rates with consideration of current economic conditions and reasonable and supportable forecasts.

Although forecasts continued to indicate a decline in economic conditions, our Caterpillar Purchased Receivables portfolio segment has not historically experienced increased credit losses during prior economic downturns due to the short-term maturities of the receivables, our close working relationships with the dealers and their financial strength. Therefore, no adjustments to historical loss rates were made during the three and six months ended June 30, 2020.

Classes of finance receivables

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

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

An analysis of the allowance for credit losses was as follows:

(Millions of dollars)	June 30, 2020			
Allowance for Credit Losses:	**Customer**	**Dealer**	**Caterpillar Purchased Receivables**	**Total**
Balance at beginning of year	$ 375	$ 45	$ 4	$ 424
Adjustment to adopt new accounting guidance[1]	12	—	—	12
Receivables written off	(73)	—	—	(73)
Recoveries on receivables previously written off	13	—	—	13
Provision for credit losses	146	—	(1)	145
Foreign currency translation adjustment	(6)	—	—	(6)
Balance at end of period	$ 467	$ 45	$ 3	$ 515
Individually evaluated	$ 184	$ 39	$ —	$ 223
Collectively evaluated	283	6	3	292
Ending Balance	$ 467	$ 45	$ 3	$ 515
Finance Receivables:				
Individually evaluated	$ 601	$ 78	$ —	$ 679
Collectively evaluated	18,538	4,125	3,514	26,177
Ending Balance	$ 19,139	$ 4,203	$ 3,514	$ 26,856

[1] See Note 2 regarding new accounting guidance related to credit losses.

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

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, probabilities of default, industry trends, macroeconomic factors and other internal metrics. On an ongoing basis, we monitor credit quality based on past-due status 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 finance receivable past due when any installment is over 30 days past due.

Customer

The table below summarizes the aging category of our amortized cost of finance receivables in the Customer portfolio segment by origination year.

(Millions of dollars)	June 30, 2020							
	2020	2019	2018	2017	2016	Prior	Revolving Finance Receivables	Total Finance Receivables
North America								
Current	$ 1,863	$ 3,035	$ 1,836	$ 814	$ 374	$ 97	$ 102	$ 8,121
31-60 days past due	13	28	20	15	5	2	—	83
61-90 days past due	4	15	14	8	3	1	—	45
91+ days past due	3	24	31	19	15	6	—	98
EAME								
Current	545	1,104	727	336	113	33	—	2,858
31-60 days past due	5	13	12	5	2	—	—	37
61-90 days past due	6	7	2	2	—	—	—	17
91+ days past due	—	11	14	15	51	62	—	153
Asia/Pacific								
Current	790	1,153	609	195	50	20	29	2,846
31-60 days past due	4	22	18	5	—	—	—	49
61-90 days past due	2	11	8	3	—	—	—	24
91+ days past due	1	19	18	5	1	—	—	44
Mining								
Current	213	655	375	236	124	190	270	2,063
31-60 days past due	—	—	13	5	—	—	—	18
61-90 days past due	—	1	3	—	—	—	—	4
91+ days past due	—	12	3	25	—	—	1	41
Latin America								
Current	286	440	214	74	22	27	—	1,063
31-60 days past due	2	6	8	1	1	1	—	19
61-90 days past due	—	3	9	5	1	—	—	18
91+ days past due	—	19	40	29	8	6	—	102
Caterpillar Power Finance								
Current	106	279	172	278	119	143	134	1,231
31-60 days past due	—	—	2	—	—	—	—	2
61-90 days past due	—	—	—	—	—	2	—	2
91+ days past due	—	—	20	13	33	135	—	201
Total	$ 3,843	$ 6,857	$ 4,168	$ 2,088	$ 922	$ 725	$ 536	$ 19,139

Finance receivables in the Customer portfolio segment are substantially secured by collateral, primarily in the form of Caterpillar and other machinery. For those contracts where the borrower is experiencing financial difficulty, repayment of the outstanding amounts is generally expected to be provided through the operation or repossession and sale of the machinery.

Dealer

As of June 30, 2020, our total amortized cost of finance receivables within the Dealer portfolio segment was current, with the exception of $78 million that was 91+ days past due in Latin America. These past due receivables were originated in 2017.

Caterpillar Purchased Receivables

The table below summarizes the aging category of our amortized cost of finance receivables in the Caterpillar Purchased Receivables portfolio segment.

(Millions of dollars)	June 30, 2020					
	31-60 Days Past Due	61-90 Days Past Due	91+ Days Past Due	Total Past Due	Current	Total Finance Receivables
North America	$ 15	$ 8	$ 16	$ 39	$ 1,789	$ 1,828
EAME	1	—	1	2	633	635
Asia/Pacific	2	—	1	3	579	582
Mining	—	—	—	—	—	—
Latin America	1	—	—	1	459	460
Caterpillar Power Finance	2	—	1	3	6	9
Total	$ 21	$ 8	$ 19	$ 48	$ 3,466	$ 3,514

The table below summarizes our recorded investment in finance receivables by aging category.

(Millions of dollars)	December 31, 2019					
	31-60 Days Past Due	61-90 Days Past Due	91+ Days Past Due	Total Past Due	Current	Total Finance Receivables
Customer						
North America	$ 72	$ 23	$ 55	$ 150	$ 8,085	$ 8,235
EAME	30	31	141	202	2,882	3,084
Asia/Pacific	40	14	29	83	2,733	2,816
Mining	5	—	19	24	2,266	2,290
Latin America	41	23	80	144	1,131	1,275
Caterpillar Power Finance	10	10	225	245	1,419	1,664
Dealer						
North America	—	—	—	—	2,514	2,514
EAME	—	—	—	—	600	600
Asia/Pacific	—	—	—	—	487	487
Mining	—	—	—	—	4	4
Latin America	—	—	78	78	758	836
Caterpillar Power Finance	—	—	—	—	3	3
Caterpillar Purchased Receivables						
North America	15	6	18	39	2,450	2,489
EAME	1	—	2	3	574	577
Asia/Pacific	1	—	—	1	891	892
Mining	—	—	—	—	—	—
Latin America	—	—	—	—	475	475
Caterpillar Power Finance	—	—	—	—	15	15
Total	$ 215	$ 107	$ 647	$ 969	$ 27,287	$ 28,256

Impaired finance receivables

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.

In our Customer portfolio segment, impaired finance receivables and the related unpaid principal balances and allowance were as follows:

(Millions of dollars)	As of December 31, 2019		
Impaired Finance Receivables With No Allowance Recorded	**Recorded Investment**	**Unpaid Principal Balance**	**Related Allowance**
North America	$ 6	$ 6	$ —
EAME	—	—	—
Asia/Pacific	—	—	—
Mining	22	22	—
Latin America	8	8	—
Caterpillar Power Finance	58	58	—
Total	$ 94	$ 94	$ —
Impaired Finance Receivables With An Allowance Recorded			
North America	$ 30	$ 30	$ 11
EAME	61	61	29
Asia/Pacific	8	8	2
Mining	37	36	9
Latin America	58	58	20
Caterpillar Power Finance	306	319	107
Total	$ 500	$ 512	$ 178
Total Impaired Finance Receivables			
North America	$ 36	$ 36	$ 11
EAME	61	61	29
Asia/Pacific	8	8	2
Mining	59	58	9
Latin America	66	66	20
Caterpillar Power Finance	364	377	107
Total	$ 594	$ 606	$ 178

(Millions of dollars)

	Three Months Ended June 30, 2019		Six Months Ended June 30, 2019	
Impaired Finance Receivables With No Allowance Recorded	Average Recorded Investment	Interest Income Recognized	Average Recorded Investment	Interest Income Recognized
North America	$ 10	$ —	$ 10	$ —
EAME	1	—	1	—
Asia/Pacific	—	—	—	—
Mining	29	1	30	1
Latin America	20	1	23	1
Caterpillar Power Finance	41	—	51	1
Total	$ 101	$ 2	$ 115	$ 3
Impaired Finance Receivables With An Allowance Recorded				
North America	$ 35	$ —	$ 37	$ 1
EAME	94	—	94	1
Asia/Pacific	9	—	8	—
Mining	39	—	42	1
Latin America	74	2	75	3
Caterpillar Power Finance	443	4	446	7
Total	$ 694	$ 6	$ 702	$ 13
Total Impaired Finance Receivables				
North America	$ 45	$ —	$ 47	$ 1
EAME	95	—	95	1
Asia/Pacific	9	—	8	—
Mining	68	1	72	2
Latin America	94	3	98	4
Caterpillar Power Finance	484	4	497	8
Total	$ 795	$ 8	$ 817	$ 16

There were $78 million in impaired finance receivables with a related allowance of $39 million as of December 31, 2019 for the Dealer portfolio segment, all of which was in Latin America. There were no impaired finance receivables as of December 31, 2019 for the Caterpillar Purchased Receivables portfolio segment.

Non-accrual finance receivables

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. Contracts on non-accrual status are generally more than 120 days past due or have been restructured in a troubled debt restructuring (TDR). Recognition is resumed and previously suspended income is recognized when the finance receivable becomes current and collection of remaining amounts is considered probable. Payments received while the finance receivable is on non-accrual status are applied to interest and principal in accordance with the contractual terms. Interest earned but uncollected prior to the receivable being placed on non-accrual status is written off through Provision for credit losses when, in the judgment of management, it is considered uncollectible.

In our Customer portfolio segment, finance receivables which were on non-accrual status and finance receivables over 90 days past due and still accruing income were as follows:

(Millions of dollars)	June 30, 2020		
	Amortized Cost		
	Non-accrual With an Allowance	Non-accrual Without an Allowance	91+ Still Accruing
North America	$ 78	$ 1	$ 30
EAME	168	—	5
Asia/Pacific	32	—	12
Mining	43	—	—
Latin America	106	3	2
Caterpillar Power Finance	302	21	—
Total	$ 729	$ 25	$ 49

There was $1 million and $5 million of interest income recognized during the three and six months ended June 30, 2020, respectively, for customer finance receivables on non-accrual status.

(Millions of dollars)	December 31, 2019	
	Recorded Investment	
	Non-accrual Finance Receivables	91+ Still Accruing
North America	$ 44	$ 15
EAME	165	4
Asia/Pacific	21	8
Mining	47	—
Latin America	89	2
Caterpillar Power Finance	361	—
Total	$ 727	$ 29

As of June 30, 2020 and December 31, 2019, there were $78 million in finance receivables on non-accrual status in our Dealer portfolio segment, all of which was in Latin America. There were no finance receivables in our Dealer portfolio segment more than 90 days past due and still accruing income as of June 30, 2020 and no interest income was recognized on dealer finance receivables on non-accrual status during the three and six months ended June 30, 2020.

Troubled debt restructurings

A restructuring of a finance receivable constitutes a 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, payment deferrals and reduction of principal and/or accrued interest.

There were no finance receivables modified as TDRs during the three and six months ended June 30, 2020 and 2019 for the Dealer or Caterpillar Purchased Receivables portfolio segments. Finance receivables in the Customer portfolio segment modified as TDRs were as follows:

(Dollars in millions)	Three Months Ended June 30, 2020			Three Months Ended June 30, 2019		
	Number of Contracts	Pre-TDR Amortized Cost	Post-TDR Amortized Cost	Number of Contracts	Pre-TDR Recorded Investment	Post-TDR Recorded Investment
North America	10	$ 9	$ 9	8	$ 5	$ 4
EAME	—	—	—	2	10	10
Asia/Pacific[1]	104	8	8	—	—	—
Mining[2]	40	17	17	1	6	6
Latin America	1	—	—	4	2	2
Caterpillar Power Finance	6	37	37	7	47	47
Total	161	$ 71	$ 71	22	$ 70	$ 69
	Six Months Ended June 30, 2020			**Six Months Ended June 30, 2019**		
	Number of Contracts	Pre-TDR Amortized Cost	Post-TDR Amortized Cost	Number of Contracts	Pre-TDR Recorded Investment	Post-TDR Recorded Investment
North America	10	$ 9	$ 9	8	$ 5	$ 4
EAME	—	—	—	19	17	17
Asia/Pacific	104	8	8	—	—	—
Mining	40	17	17	1	6	6
Latin America	6	2	2	4	2	2
Caterpillar Power Finance	6	37	37	15	98	97
Total	166	$ 73	$ 73	47	$ 128	$ 126

[1] In Asia/Pacific, during the three months ended June 30, 2020, 104 contracts with a pre-TDR amortized cost of $8 million and a post-TDR amortized cost of $8 million were related to four customers.
[2] In Mining, during the three months ended June 30, 2020, 40 contracts with a pre-TDR amortized cost of $17 million and a post-TDR amortized cost of $17 million were related to two customers.

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

(Dollars in millions)	Three Months Ended June 30, 2020		Three Months Ended June 30, 2019	
	Number of Contracts	Post-TDR Amortized Cost	Number of Contracts	Post-TDR Recorded Investment
North America	1	$ —	—	$ —
Total	1	$ —	—	$ —
	Six Months Ended June 30, 2020		**Six Months Ended June 30, 2019**	
	Number of Contracts	Post-TDR Amortized Cost	Number of Contracts	Post-TDR Recorded Investment
North America	1	$ —	—	$ —
EAME	2	10	—	—
Latin America	3	1	—	—
Total	6	$ 11	—	$ —

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. We present at least annually to our Board of Directors and the Audit Committee of the Caterpillar Inc. Board of Directors on our risk management practices, including our use of financial derivative instruments.

We recognize all derivatives at their fair value on the Consolidated Statements of Financial Position. 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. We record in current earnings 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. We record in Accumulated other comprehensive income (loss) (AOCI) changes in the fair value of a derivative that is qualified, designated and highly effective as a cash flow hedge, to the extent effective, on the Consolidated Statements of Financial Position until we reclassify them to earnings in the same period or periods during which the hedged transaction affects earnings. We report changes in the fair value of undesignated derivative instruments in current earnings. We classify cash flows from designated derivative financial instruments within the same category as the item being hedged on the Consolidated Statements of Cash Flows. We include cash flows from undesignated derivative financial instruments in the investing category on the Consolidated Statements of Cash Flows.

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

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

Foreign currency exchange rate risk

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

Interest rate risk

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

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

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

As of June 30, 2020, $16 million of deferred net losses, net of tax, included in equity (AOCI in the Consolidated Statements of Financial Position), related to our floating-to-fixed interest rate contracts, are expected to be reclassified to Interest expense over the next twelve months. The actual amount recorded in Interest expense will vary based on interest rates at the time the hedged transactions impact earnings.

As of June 30, 2020, the cumulative amount of fair value hedging adjustments related to our fixed-to-floating interest rate contracts included in the carrying amount of Long-term debt was $70 million. Fair value gains and losses on these interest rate contracts and the related hedged items generally offset within interest expense. 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, 2020**	**December 31, 2019**
Designated derivatives			
Interest rate contracts	Other assets	$ 69	$ 5
Interest rate contracts	Accrued expenses	(26)	(25)
Cross currency contracts	Other assets	57	67
Cross currency contracts	Accrued expenses	(3)	(3)
		$ 97	$ 44
Undesignated derivatives			
Foreign exchange contracts	Other assets	$ 49	$ 7
Foreign exchange contracts	Accrued expenses	(12)	(21)
Cross currency contracts	Other assets	12	5
Cross currency contracts	Accrued expenses	—	(1)
		$ 49	$ (10)

The total notional amount of our derivative instruments was $11.45 billion and $8.93 billion as of June 30, 2020 and December 31, 2019, respectively. The notional amounts of derivative financial instruments do not represent amounts exchanged by the parties. We calculate the amounts exchanged by the parties by referencing the notional amounts and by other terms of the derivatives, such as foreign currency exchange rates and interest rates.

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

Cash Flow Hedges
(Millions of dollars)

	Three Months Ended June 30, 2020			
		Recognized in Earnings		
	Amount of Gains (Losses) Recognized in AOCI	Classification	Amount of Gains (Losses) Reclassified from AOCI	Amount of the line items in the Consolidated Statements of Profit
Interest rate contracts	$ (9)	Interest expense	$ (19)	$ 150
Cross currency contracts	(35)	Other income (expense)	(43)	(6)
		Interest expense	9	150
	$ (44)		$ (53)	

	Three Months Ended June 30, 2019			
		Recognized in Earnings		
	Amount of Gains (Losses) Recognized in AOCI	Classification	Amount of Gains (Losses) Reclassified from AOCI	Amount of the line items in the Consolidated Statements of Profit
Interest rate contracts	$ (34)	Interest expense	$ —	$ 200
Cross currency contracts	10	Other income (expense)	(4)	(6)
		Interest expense	7	200
	$ (24)		$ 3	

	Six Months Ended June 30, 2020			
		Recognized in Earnings		
	Amount of Gains (Losses) Recognized in AOCI	Classification	Amount of Gains (Losses) Reclassified from AOCI	Amount of the line items in the Consolidated Statements of Profit
Interest rate contracts	$ (24)	Interest expense	$ (24)	$ 325
Cross currency contracts	66	Other income (expense)	28	(16)
		Interest expense	20	325
	$ 42		$ 24	

	Six Months Ended June 30, 2019			
		Recognized in Earnings		
	Amount of Gains (Losses) Recognized in AOCI	Classification	Amount of Gains (Losses) Reclassified from AOCI	Amount of the line items in the Consolidated Statements of Profit
Interest rate contracts	$ (60)	Interest expense	$ 1	$ 401
Cross currency contracts	32	Other income (expense)	2	(10)
		Interest expense	14	401
	$ (28)		$ 17	

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	2020	2019
Foreign exchange contracts	Other income (expense)	$ (24)	$ (9)
Cross currency contracts	Other income (expense)	1	(1)
		$ (23)	$ (10)
		Six Months Ended June 30,	
	Classification	2020	2019
Foreign exchange contracts	Other income (expense)	$ 75	$ (38)
Cross currency contracts	Other income (expense)	10	(1)
		$ 85	$ (39)

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, 2020 and December 31, 2019, 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:

(Millions of dollars)	June 30, 2020	December 31, 2019
Derivative Assets		
Gross Amount of Recognized Assets	$ 187	$ 84
Gross Amounts Offset	—	—
Net Amount of Assets[1]	187	84
Gross Amounts Not Offset	(33)	(21)
Net Amount	$ 154	$ 63
Derivative Liabilities		
Gross Amount of Recognized Liabilities	$ (41)	$ (50)
Gross Amounts Offset	—	—
Net Amount of Liabilities[1]	(41)	(50)
Gross Amounts Not Offset	33	21
Net Amount	$ (8)	$ (29)

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

5. Accumulated Other Comprehensive Income (Loss)

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

(Millions of dollars)	Foreign currency translation	Derivative financial instruments	Total
Three Months Ended June 30, 2019			
Balance at March 31, 2019	$ (778)	$ (51)	$ (829)
Other comprehensive income (loss) before reclassifications	20	(19)	1
Amounts reclassified from accumulated other comprehensive (income) loss	—	(3)	(3)
Other comprehensive income (loss)	20	(22)	(2)
Balance at June 30, 2019	$ (758)	$ (73)	$ (831)
Three Months Ended June 30, 2020			
Balance at March 31, 2020	$ (1,083)	$ (62)	$ (1,145)
Other comprehensive income (loss) before reclassifications	126	(35)	91
Amounts reclassified from accumulated other comprehensive (income) loss	—	42	42
Other comprehensive income (loss)	126	7	133
Balance at June 30, 2020	$ (957)	$ (55)	$ (1,012)
Six Months Ended June 30, 2019			
Balance at December 31, 2018	$ (889)	$ (36)	$ (925)
Other comprehensive income (loss) before reclassifications	33	(22)	11
Amounts reclassified from accumulated other comprehensive (income) loss	—	(14)	(14)
Adjustment to adopt new accounting guidance[1]	98	(1)	97
Other comprehensive income (loss)	131	(37)	94
Balance at June 30, 2019	$ (758)	$ (73)	$ (831)
Six Months Ended June 30, 2020			
Balance at December 31, 2019	$ (777)	$ (68)	$ (845)
Other comprehensive income (loss) before reclassifications	(180)	32	(148)
Amounts reclassified from accumulated other comprehensive (income) loss	—	(19)	(19)
Other comprehensive income (loss)	(180)	13	(167)
Balance at June 30, 2020	$ (957)	$ (55)	$ (1,012)

[1] Adjustment to adopt new accounting guidance related to reclassification of certain tax effects from Accumulated other comprehensive income (loss).

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

(Millions of dollars)		Three Months Ended June 30,		Six Months Ended June 30,	
Derivative financial instruments	Classification of income (expense)	2020	2019	2020	2019
Cross currency contracts	Other income (expense)	$ (43)	$ (4)	$ 28	$ 2
Cross currency contracts	Interest expense	9	7	20	14
Interest rate contracts	Interest expense	(19)	—	(24)	1
Reclassifications before tax		(53)	3	24	17
Tax (provision) benefit		11	—	(5)	(3)
Total reclassifications from Accumulated other comprehensive income (loss)		$ (42)	$ 3	$ 19	$ 14

6. Segment Information

A. Basis for Segment Information

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

B. Description of Segments

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

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

To align with changes in executive management responsibilities and measurement of segment performance, our management reporting was updated effective January 1, 2020. Prior year data has been revised to conform to the 2020 presentation.

C. Segment Measurement and Reconciliations

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

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

- **Unallocated** - This item is related to corporate requirements and strategies that are considered to be for the benefit of the entire organization. Also included are the consolidated results of the special purpose corporation (see Note 7 for additional information) and other miscellaneous items.
- **Timing** - Timing differences in the recognition of costs between segment reporting and consolidated external reporting.

- **Methodology** - Methodology differences between segment reporting and consolidated external reporting are as follows:
    - Segment assets include off-balance sheet managed assets for which we maintain servicing responsibilities.
    - The impact of differences between the actual leverage and the segment leverage ratios.
    - Interest expense includes realized forward points on foreign currency forward contracts.
    - The net gain or loss from interest rate derivatives is excluded from segment reporting.

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

(Millions of dollars) 2020	External Revenues	Profit before income taxes	Interest Expense	Depreciation on equipment leased to others	Provision for credit losses	Assets at June 30, 2020	Capital expenditures
North America	$ 356	$ 62	$ 87	$ 139	$ 25	$ 14,684	$ 221
EAME	63	14	10	15	6	4,786	9
Asia/Pacific	82	39	23	3	7	4,400	2
Latin America	48	2	21	3	12	2,764	1
Caterpillar Power Finance	17	(10)	6	—	18	1,409	—
Mining	75	(1)	14	34	18	2,707	18
Total Segments	641	106	161	194	86	30,750	251
Unallocated	6	(64)	46	—	—	1,799	5
Timing	(6)	(1)	—	—	—	11	—
Methodology	—	48	(57)	—	—	(136)	—
Inter-segment Eliminations [1]	—	—	—	—	—	(351)	—
Total	$ 641	$ 89	$ 150	$ 194	$ 86	$ 32,073	$ 256

2019	External Revenues	Profit before income taxes	Interest Expense	Depreciation on equipment leased to others	Provision for credit losses	Assets at December 31, 2019	Capital expenditures
North America	$ 412	$ 131	$ 98	$ 145	$ 2	$ 15,496	$ 388
EAME	71	22	13	17	(2)	4,918	18
Asia/Pacific	99	47	27	3	5	4,540	4
Latin America	59	3	24	4	13	2,809	5
Caterpillar Power Finance	26	(33)	11	1	42	1,673	—
Mining	83	11	18	34	11	2,966	38
Total Segments	750	181	191	204	71	32,402	453
Unallocated	15	(83)	65	—	—	1,896	6
Timing	(8)	(4)	—	—	—	16	—
Methodology	—	47	(56)	—	—	(216)	—
Inter-segment Eliminations [1]	—	—	—	—	—	(405)	—
Total	$ 757	$ 141	$ 200	$ 204	$ 71	$ 33,693	$ 459

[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) 2020	External Revenues	Profit before income taxes	Interest Expense	Depreciation on equipment leased to others	Provision for credit losses	Assets at June 30, 2020	Capital expenditures
North America	$ 738	$ 137	$ 181	$ 283	$ 47	$ 14,684	$ 441
EAME	133	30	23	31	13	4,786	13
Asia/Pacific	168	75	50	5	14	4,400	5
Latin America	101	8	44	6	19	2,764	4
Caterpillar Power Finance	37	(9)	14	—	23	1,409	—
Mining	156	7	31	70	31	2,707	34
Total Segments	1,333	248	343	395	147	30,750	497
Unallocated	15	(134)	102	—	—	1,799	6
Timing	(12)	(2)	—	—	—	11	—
Methodology	—	104	(120)	—	—	(136)	—
Inter-segment Eliminations [1]	—	—	—	—	—	(351)	—
Total	$ 1,336	$ 216	$ 325	$ 395	$ 147	$ 32,073	$ 503

2019	External Revenues	Profit before income taxes	Interest Expense	Depreciation on equipment leased to others	Provision for credit losses	Assets at December 31, 2019	Capital expenditures
North America	$ 812	$ 247	$ 195	$ 288	$ 9	$ 15,496	$ 566
EAME	141	45	26	34	(3)	4,918	41
Asia/Pacific	187	86	56	6	8	4,540	10
Latin America	117	6	46	9	28	2,809	7
Caterpillar Power Finance	55	(49)	24	1	68	1,673	—
Mining	163	27	36	68	14	2,966	72
Total Segments	1,475	362	383	406	124	32,402	696
Unallocated	34	(166)	129	—	—	1,896	9
Timing	(16)	(9)	—	—	—	16	—
Methodology	—	96	(111)	—	—	(216)	—
Inter-segment Eliminations [1]	—	—	—	—	—	(405)	—
Total	$ 1,493	$ 283	$ 401	$ 406	$ 124	$ 33,693	$ 705

[1] Elimination is primarily related to intercompany loans.

7. Commitments and Contingent Liabilities

Guarantees

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

No significant loss has been experienced or is anticipated under any of these guarantees. At June 30, 2020 and December 31, 2019, the related recorded liability was less than $1 million. The maximum potential amount of future payments (undiscounted and without reduction for any amounts that may possibly be recovered under recourse or collateralized provisions) we could be required to make under the guarantees was $37 million and $65 million at June 30, 2020 and December 31, 2019, 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, 2020 and December 31, 2019, the SPC’s assets of $1.30 billion and $1.45 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 $1.30 billion and $1.45 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.

Litigation and claims

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

8. Fair Value Measurements

A. Fair Value Measurements

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

- **Level 1** – Quoted prices for identical instruments in active markets.
- **Level 2** – Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs or significant value-drivers are observable in active markets.
- **Level 3** – Model-derived valuations in which one or more significant inputs or significant value-drivers are unobservable.

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

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

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

Derivative financial instruments

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

Derivative financial instruments are measured on a recurring basis at fair value and are classified as Level 2 measurements. We had derivative financial instruments in a net asset position included in our Consolidated Statements of Financial Position of $146 million and $34 million as of June 30, 2020 and December 31, 2019, respectively.

Impaired loans

Our impaired loans are subject to measurement at fair value on a nonrecurring basis and are classified as Level 3 measurements. A loan is considered impaired when management determines that collection of contractual amounts due is not probable. In these cases, an allowance for credit losses may be established based either on the present value of expected future cash flows discounted at the receivables' effective interest rate, the fair value of the collateral for collateral-dependent receivables or the observable market price of the receivable. In determining collateral value, we estimate the current fair market value of the collateral less selling costs. We had impaired loans carried at the fair value of $304 million and $343 million as of June 30, 2020 and December 31, 2019, 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 use the following methods and assumptions to estimate the fair value of our financial instruments:

Cash and cash equivalents – carrying amount approximates fair value.

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

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

Short-term borrowings – carrying amount approximates fair value.

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

Fair values of our financial instruments were as follows:

(Millions of dollars)	June 30, 2020		December 31, 2019			
	Carrying Amount	Fair Value	Carrying Amount	Fair Value	Fair Value Levels	Reference
Cash and cash equivalents	$ 630	$ 630	$ 690	$ 690	1	
Restricted cash and cash equivalents[1]	$ 4	$ 4	$ 5	$ 5	1	
Finance receivables, net (excluding finance leases[2])	$ 18,736	$ 19,075	$ 20,022	$ 20,133	3	Note 3
Interest rate contracts:						
In a receivable position	$ 69	$ 69	$ 5	$ 5	2	Note 4
In a payable position	$ (26)	$ (26)	$ (25)	$ (25)	2	Note 4
Cross currency contracts:						
In a receivable position	$ 69	$ 69	$ 72	$ 72	2	Note 4
In a payable position	$ (3)	$ (3)	$ (4)	$ (4)	2	Note 4
Foreign exchange contracts:						
In a receivable position	$ 49	$ 49	$ 7	$ 7	2	Note 4
In a payable position	$ (12)	$ (12)	$ (21)	$ (21)	2	Note 4
Short-term borrowings	$ (4,301)	$ (4,301)	$ (5,161)	$ (5,161)	1	
Long-term debt	$ (23,184)	$ (23,856)	$ (23,334)	$ (23,655)	2	

[1] Included in Other assets in the Consolidated Statements of Financial Position.

[2] Represents finance leases and failed sale leasebacks of $7.61 billion and $7.81 billion as of June 30, 2020 and December 31, 2019, respectively.

9. Income Taxes

The provision for income taxes reflected an estimated annual tax rate of 27 percent in the second quarter of 2020, compared with 29 percent in the second quarter of 2019, excluding a discrete item in the second quarter of 2019 of $13 million for a valuation allowance against the deferred tax assets of a non-U.S. subsidiary. The decrease in the estimated annual tax rate was primarily due to changes in the geographic mix of profits.

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

This Management's Discussion and Analysis of Financial Condition and Results of Operations should be read in conjunction with our unaudited financial statements and related notes included elsewhere in this report and our discussion of significant risks to the company's business under Part I, Item 1A. Risk Factors of the 2019 Form 10-K as supplemented by Part II, Item 1A. Risk Factors of this report.

OVERVIEW

We reported second-quarter 2020 revenues of $641 million, a decrease of $116 million, or 15 percent, compared with the second quarter of 2019. Second-quarter 2020 profit was $59 million, a $20 million, or 25 percent, decrease from the second quarter of 2019.

The decrease in revenues was primarily due to a $60 million unfavorable impact from lower average financing rates and a $48 million unfavorable impact from lower average earning assets.

Second-quarter 2020 profit before income taxes was $89 million, a $52 million, or 37 percent, decrease from the second quarter of 2019. The decrease was primarily due to a $25 million decrease in net yield on average earning assets, a $23 million unfavorable impact from lower average earning assets and a $15 million increase in provision for credit losses. These unfavorable impacts were partially offset by a $22 million decrease in general, operating and administrative expenses primarily due to lower short-term incentive compensation and employee benefit expenses.

The provision for income taxes reflected an estimated annual tax rate of 27 percent in the second quarter of 2020 compared with 29 percent in the second quarter of 2019, excluding a discrete item in the second quarter of 2019 of $13 million for a valuation allowance against the deferred tax assets of a non-U.S. subsidiary. The decrease in the estimated annual tax rate was primarily due to changes in the geographic mix of profits.

During the second quarter of 2020, retail new business volume was $2.74 billion, a decrease of $607 million, or 18 percent, from the second quarter of 2019. The decrease was driven by lower volume across all segments with the exception of a slight increase in Asia/Pacific.

At the end of the second quarter of 2020, past dues were 3.74 percent, compared with 3.38 percent at the end of the second quarter of 2019. Past dues increased primarily due to the impact of the COVID-19 pandemic. Write-offs, net of recoveries, were $30 million for the second quarter of 2020, compared with $74 million for the second quarter of 2019. As of June 30, 2020, the allowance for credit losses totaled $515 million, or 1.92 percent of finance receivables, compared with $457 million, or 1.69 percent of finance receivables at March 31, 2020. The increase in allowance for credit losses was driven in part by expectations of a lingering impact from COVID-19. The allowance for credit losses at year-end 2019 was $424 million, or 1.50 percent of finance receivables.

Response to COVID-19 and Global Business Conditions

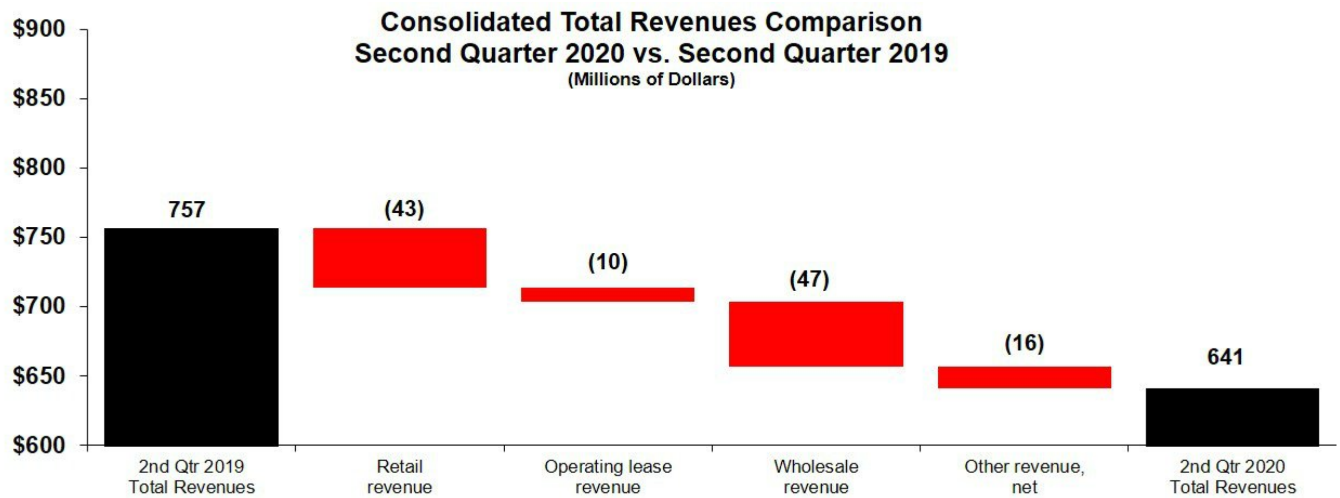
Operational Status

We continue to implement safeguards in our facilities to protect team members, including increased frequency of cleaning and disinfecting, social distancing practices and other measures consistent with specific regulatory requirements and guidance from health authorities.

We are monitoring the situation closely and continue to focus on portfolio health. We are responding to government requirements globally to adjust the repayment terms for customers and are providing payment relief through Customer Care Programs launched globally, including account modifications to accommodate customer needs. We continue to provide qualified customers and dealers with new loans and leases to support their current and future business needs.

SECOND QUARTER 2020 COMPARED WITH SECOND QUARTER 2019

Consolidated Total Revenues



The chart above graphically illustrates reasons for the change in Consolidated Total Revenues between second quarter 2019 (at left) and second quarter 2020 (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 2020 was $307 million, a decrease of $43 million from the same period in 2019. The decrease was due to a $37 million unfavorable impact from lower interest rates on retail finance receivables and a $6 million unfavorable impact from lower average earning assets. For the quarter ended June 30, 2020, retail average earning assets were $22.43 billion, a decrease of $445 million from the same period in 2019. The annualized average yield was 5.47 percent for the second quarter of 2020, compared with 6.13 percent for the second quarter of 2019.

Operating lease revenue for the second quarter of 2020 was $247 million, a decrease of $10 million from the same period in 2019. The decrease was due to a $9 million unfavorable impact from lower average earning assets and a $1 million unfavorable impact from lower average rental rates on operating leases.

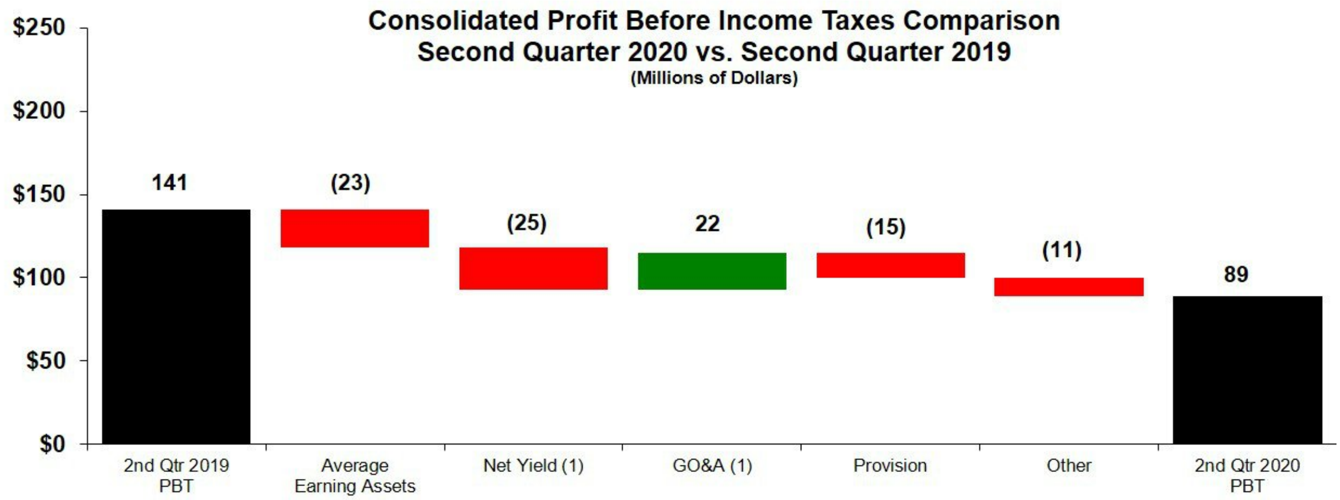
Wholesale revenue for the second quarter of 2020 was $84 million, a decrease of $47 million from the same period in 2019. The decrease was due to a $28 million unfavorable impact from lower average earning assets and a $19 million unfavorable impact from lower interest rates on wholesale finance receivables. For the quarter ended June 30, 2020, wholesale average earning assets were $4.51 billion, a decrease of $1.25 billion from the same period in 2019. The annualized average yield was 7.47 percent for the second quarter of 2020, compared with 9.13 percent for the second quarter of 2019.

Other revenue, net items were as follows:

(Millions of dollars)	**Three Months Ended June 30,**		
	2020	**2019**	**Change**
Finance receivable and operating lease fees (including late charges)	$ 11	$ 15	$ (4)
Interest income on Notes receivable from Caterpillar	4	8	(4)
Net loss on returned or repossessed equipment	(14)	(7)	(7)
Miscellaneous other revenue, net	2	3	(1)
Total Other revenue, net	$ 3	$ 19	$ (16)

There was a $12 million unfavorable impact from currency on revenues in the second quarter of 2020. Currency represents the net translation impact resulting from changes in foreign currency exchange rates versus the U.S. dollar and is included in all financial statement line items and each of the items included in the above analysis.

Consolidated Profit Before Income Taxes



(1) Analysis excludes $5 million in offsetting revenues and expenses for property taxes on operating leases for both the second quarter of 2020 and 2019.

The chart above graphically illustrates reasons for the change in Consolidated Profit Before Income Taxes between second quarter 2019 (at left) and second quarter 2020 (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.

Second-quarter 2020 profit before income taxes was $89 million, compared with $141 million for the second quarter of 2019. The decrease was primarily due to a $25 million decrease in net yield on average earning assets, a $23 million unfavorable impact from lower average earning assets and a $15 million increase in provision for credit losses. These unfavorable impacts were partially offset by a $22 million decrease in general, operating and administrative expenses primarily due to lower short-term incentive compensation and employee benefit expenses.

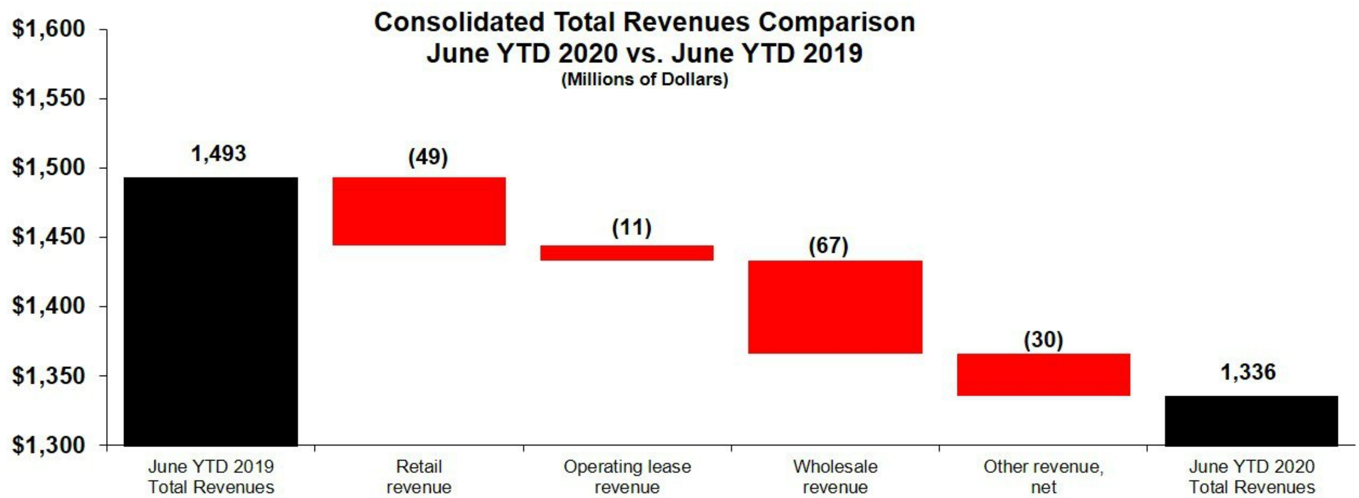
There was a $4 million unfavorable impact from currency on profit before income taxes in the second quarter of 2020. Currency represents the net translation impact resulting from changes in foreign currency exchange rates versus the U.S. dollar and is included in all financial statement line items and each of the items included in the above analysis.

Provision for Income Taxes

The provision for income taxes reflected an estimated annual tax rate of 27 percent in the second quarter of 2020 compared with 29 percent in the second quarter of 2019, excluding a discrete item in the second quarter of 2019 of $13 million for a valuation allowance against the deferred tax assets of a non-U.S. subsidiary. The decrease in the estimated annual tax rate was primarily due to changes in the geographic mix of profits.

SIX MONTHS ENDED JUNE 30, 2020 VS. SIX MONTHS ENDED JUNE 30, 2019

Consolidated Total Revenues



The chart above graphically illustrates reasons for the change in Consolidated Total Revenues between June YTD 2019 (at left) and June YTD 2020 (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 2020 was $636 million, a decrease of $49 million from the same period in 2019. The decrease was due to a $39 million unfavorable impact from lower interest rates on retail finance receivables and a $10 million unfavorable impact from lower average earning assets. For the six months ended June 30, 2020, retail average earning assets were $22.59 billion, a decrease of $340 million from the same period in 2019. The annualized average yield was 5.63 percent for the first six months of 2020, compared with 5.98 percent for the same period in 2019.

Operating lease revenue for the first six months of 2020 was $504 million, a decrease of $11 million from the same period in 2019. The decrease was due to an $11 million unfavorable impact from lower average earning assets.

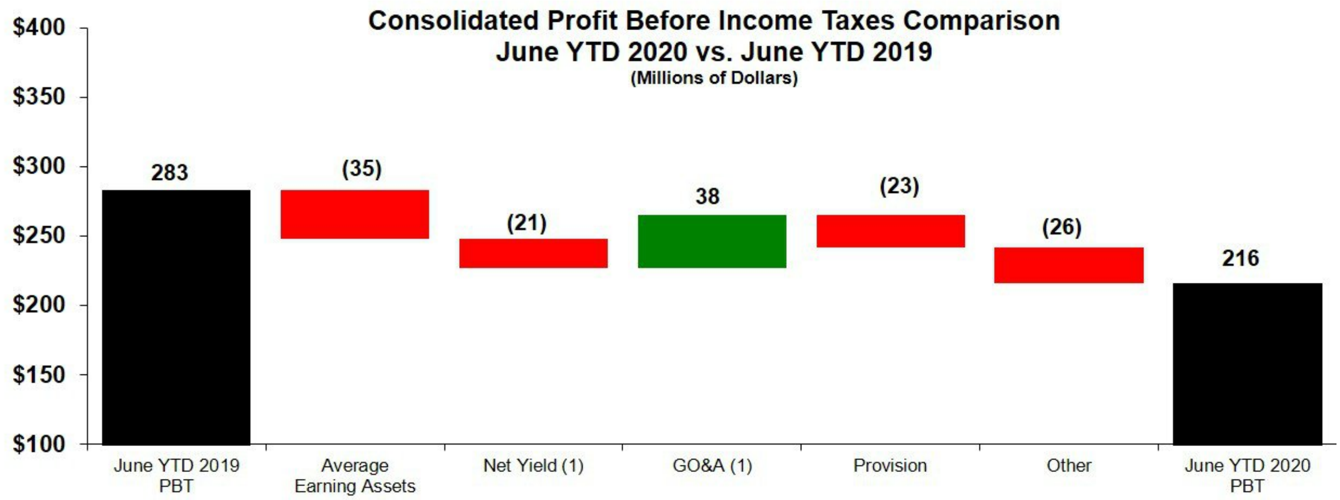
Wholesale revenue for the first six months of 2020 was $183 million, a decrease of $67 million from the same period in 2019. The decrease was due to a $42 million unfavorable impact from lower average earning assets and a $25 million unfavorable impact from lower interest rates on wholesale finance receivables. For the six months ended June 30, 2020, wholesale average earning assets were $4.65 billion, a decrease of $944 million from the same period in 2019. The annualized average yield was 7.88 percent for the first six months of 2020, compared with 8.94 percent for the same period in 2019.

Other revenue, net items were as follows:

(Millions of dollars)	**Six Months Ended June 30,**		
	2020	**2019**	**Change**
Finance receivable and operating lease fees (including late charges)	$ 24	$ 30	$ (6)
Fees on committed credit facility extended to Caterpillar	—	5	(5)
Interest income on Notes receivable from Caterpillar	7	15	(8)
Net loss on returned or repossessed equipment	(23)	(15)	(8)
Miscellaneous other revenue, net	5	8	(3)
Total Other revenue, net	$ 13	$ 43	$ (30)

There was a $17 million unfavorable impact from currency on revenues in the first six months of 2020. Currency represents the net translation impact resulting from changes in foreign currency exchange rates versus the U.S. dollar and is included in all financial statement line items and each of the items included in the above analysis.

Consolidated Profit Before Income Taxes



(1) Analysis excludes $10 million in offsetting revenues and expenses for property taxes on operating leases for both June YTD 2020 and 2019.

The chart above graphically illustrates reasons for the change in Consolidated Profit Before Income Taxes between June YTD 2019 (at left) and June YTD 2020 (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 $216 million for the first six months of 2020, compared with $283 million for the same period in 2019. The decrease was primarily due to a $35 million unfavorable impact from lower average earning assets, a $23 million increase in provision for credit losses and a $21 million decrease in net yield on average earning assets. These unfavorable impacts were partially offset by a $38 million decrease in general, operating and administrative expenses primarily due to lower short-term incentive compensation and employee benefit expenses.

There was a $7 million unfavorable impact from currency on profit before income taxes in the first six months of 2020. Currency represents the net translation impact resulting from changes in foreign currency exchange rates versus the U.S. dollar and is included in all financial statement line items and each of the items included in the above analysis.

Provision for Income Taxes

The provision for income taxes reflected an estimated annual tax rate of 27 percent for the first six months of 2020 compared with 29 percent for the same period in 2019 , excluding a discrete item in the first six months of 2019 of $13 million for a valuation allowance against the deferred tax assets of a non-U.S. subsidiary. The decrease in the estimated annual tax rate was primarily due to changes in the geographic mix of profits.

Finance Receivables and Equipment on Operating Leases

New Business Volume

(Millions of dollars)	Six Months Ended June 30, 2020	2019	Change
New retail financing	$ 4,540	$ 4,967	$ (427)
New operating lease activity	510	730	(220)
New wholesale financing	16,924	23,566	(6,642)
Total	$ 21,974	$ 29,263	$ (7,289)

New retail financing decreased due to lower volume across all segments with the exception of slight increases in North America and Asia/Pacific. New operating lease activity (which is substantially related to retail) decreased due to lower rentals of Cat equipment across all segments. New wholesale financing decreased primarily due to lower purchases of trade receivables from Caterpillar.

Total Managed Portfolio

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

(Millions of dollars)	June 30, 2020	December 31, 2019	Change
Finance receivables, net	$ 26,341	$ 27,832	$ (1,491)
Equipment on operating leases, net	3,355	3,583	(228)
Total portfolio	$ 29,696	$ 31,415	$ (1,719)
Retail loans, net	$ 182	$ 186	$ (4)
Retail leases, net	69	81	(12)
Operating leases	23	26	(3)
Total off-balance sheet managed assets	$ 274	$ 293	$ (19)
Total managed portfolio	$ 29,970	$ 31,708	$ (1,738)

Total Portfolio Metrics

At the end of the second quarter of 2020, past dues were 3.74 percent, compared with 3.38 percent at the end of the second quarter of 2019. Past dues increased primarily due to the impact of the COVID-19 pandemic. Total non-performing finance receivables, which represent finance receivables currently on non-accrual status, were $832 million and $805 million at June 30, 2020 and December 31, 2019, respectively. Total non-performing finance receivables as a percentage of our finance receivables were 3.10 percent and 2.85 percent at June 30, 2020 and December 31, 2019, respectively.

We are continuing to respond to government requirements globally to adjust the repayment terms for customers and are providing payment relief through Customer Care Programs launched globally, including account modifications to accommodate customer needs. Generally, the Customer Care Programs provide payment relief for customers that are current in their payment obligations and include payment deferrals of three months, with the option to extend for an additional three months. Since the start of the pandemic, modification requests were received from customers representing approximately 25 percent of the customer portfolio.

Our allowance for credit losses as of June 30, 2020 was $515 million or 1.92 percent of finance receivables compared with $424 million or 1.50 percent as of December 31, 2019. The increase in allowance for credit losses was driven by the impact of deteriorating economic conditions from the COVID-19 pandemic. 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 economic forecasts. We believe our allowance is sufficient to provide for losses over the remaining life of our finance receivable portfolio as of June 30, 2020.

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 2020, we experienced favorable liquidity conditions. We ended the second quarter of 2020 with $630 million of cash, a decrease of $60 million from year-end 2019. Our cash balances are held in numerous locations throughout the world with approximately $198 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 credit rating agencies. Moody’s long- and short-term ratings of our debt are A3 and Prime-2, while Fitch and S&P maintain a "mid-A" debt rating. This split rating has not had a material impact on our borrowing costs or our overall financial health. However, a downgrade of our credit ratings by any of the major credit rating agencies would result in increased borrowing costs and could make access to certain credit markets more difficult. In the event economic conditions deteriorate such that access to debt markets becomes unavailable, we would rely on cash flows from our existing portfolio, existing cash balances, access to our committed credit facilities and other credit line facilities, commercial paper support facilities sponsored by the U.S. Federal Reserve and the Bank of Canada, and potential borrowings from Caterpillar. In addition, Caterpillar maintains a support agreement with us, which requires Caterpillar to remain our sole owner and may, under certain circumstances, require Caterpillar to make payments to us should we fail to maintain certain financial ratios.

Total borrowings outstanding as of June 30, 2020 were $27.61 billion, a decrease of $1.51 billion over December 31, 2019 due to lower portfolio funding requirements. Outstanding borrowings were as follows:

(Millions of dollars)	June 30, 2020	December 31, 2019
Medium-term notes, net of unamortized discount and debt issuance costs	$ 22,717	$ 22,692
Commercial paper, net of unamortized discount	3,467	4,168
Bank borrowings – long-term	467	642
Bank borrowings – short-term	459	605
Variable denomination floating rate demand notes	375	388
Notes payable to Caterpillar	121	618
Total outstanding borrowings	$ 27,606	$ 29,113

Medium-term notes

We issue medium-term unsecured notes through securities dealers or underwriters in the U.S., Canada, Europe, Australia, Japan, Hong Kong, and China to both retail and institutional investors. These notes are offered in several currencies and with a variety of maturities. These notes are senior unsecured obligations of the Company. Medium-term notes issued totaled $4.01 billion and redeemed totaled $4.02 billion for the six months ended June 30, 2020. Medium-term notes outstanding as of June 30, 2020, mature as follows:

(Millions of dollars)	
2020	$ 1,943
2021	7,513
2022	6,460
2023	3,153
2024	2,650
Thereafter	998
Total	$ 22,717

Medium-term notes of $1.50 billion will mature during the third quarter of 2020 but were excluded from Current maturities of long-term debt in the Consolidated Statements of Financial Position as of June 30, 2020 due to an issuance on July 8, 2020 of $500 million of medium-term notes maturing in 2022 and $1.00 billion of medium-term notes maturing in 2023. The preceding table reflects the maturity dates of the new medium-term notes.

Commercial paper

We issue unsecured commercial paper in the U.S., Europe and other international capital markets. These short-term promissory notes are issued on a discounted basis and are payable at maturity. As of June 30, 2020, there was $3.47 billion outstanding in commercial paper.

Revolving credit facilities

As of June 30, 2020, we had 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, 2020 was $7.75 billion. Information on our Credit Facility is as follows:

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

At June 30, 2020, Caterpillar’s consolidated net worth was $13.79 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, 2020, our covenant interest coverage ratio was 1.75 to 1. This was 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, 2020, our six-month covenant leverage ratio was 7.00 to 1. This was 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, 2020, there were no borrowings under the Credit Facility.

Bank borrowings

Available credit lines with banks as of June 30, 2020 totaled $2.86 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, 2020, we had $926 million 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, 2020, there was $375 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 $3.71 billion from Caterpillar and Caterpillar may borrow up to $2.05 billion from us. The variable amount lending agreements are in effect for indefinite periods of time and may be changed or terminated by either party with 30 days notice. The term lending agreements have remaining maturities ranging up to ten years. We had notes payable of $121 million and notes receivable of $339 million outstanding under these agreements as of June 30, 2020.

Impact from COVID-19 on liquidity

Since the outbreak of the COVID-19 global pandemic, we continue to take actions to maintain our strong financial position and increase liquidity. In April 2020, we registered for $4.1 billion in commercial paper support programs now available in the United States and Canada. In addition, we also benefit from the incremental $3.9 billion short-term credit facility that was arranged by Caterpillar that expires on December 31, 2020. We have not made any drawings under this new credit facility or our existing global credit facilities nor do we have any outstanding borrowings under either commercial paper support program as of the date of this filing. As previously mentioned, in July 2020, we issued $1.5 billion of new three-year and 18-month medium-term notes to supplement our liquidity position.

OFF-BALANCE SHEET ARRANGEMENTS

We have potential payment exposure for guarantees issued to third parties totaling $37 million as of June 30, 2020.

CASH FLOWS

Operating cash flow was $583 million in the first six months of 2020, compared with $907 million for the same period in 2019. The decrease was primarily due to an overpayment received on a foreign currency exchange settlement in 2019. The overpayment received on the last day of June 2019 was returned the first week of July 2019. The cash was reflected as Payable to dealers and others as of June 30, 2019. Net cash provided by investing activities was $801 million for the first six months of 2020, compared with net cash used of $710 million for the same period in 2019. The change was primarily due to higher cash provided by net changes in Caterpillar purchased receivables and other portfolio related activity. Net cash used for financing activities was $1.43 billion for the first six months of 2020, compared with $204 million for the same period in 2019. The change was primarily due to lower portfolio funding requirements.

RECENT ACCOUNTING PRONOUNCEMENTS

For a discussion of recent accounting pronouncements, see Part I, Item 1. Note 2 - New Accounting Pronouncements.

CRITICAL ACCOUNTING POLICIES

For a discussion of the Company's critical accounting policies, see Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations in our 2019 Form 10-K. We have revised the following critical accounting policy since our 2019 Form 10-K:

Allowance for credit losses

The allowance for credit losses is management's estimate of expected losses over the life of our finance receivable portfolio calculated using loss forecast models that take into consideration historical credit loss experience, current economic conditions and forecasts and scenarios that capture country and industry-specific economic factors. In addition, qualitative factors not able to be fully captured in our loss forecast models, including borrower-specific and company-specific macro-economic factors, are considered in the evaluation of the adequacy of our allowance for credit losses. These qualitative factors are subjective and require a degree of management judgment.

The allowance for credit losses is measured on a collective (pool) basis when similar risk characteristics exist and on an individual basis when it is determined that similar risk characteristics do not exist. Finance receivables are identified for individual evaluation 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 is based on the present value of expected future cash flows discounted at the receivables' effective interest rate, the fair value of the collateral for collateral-dependent receivables or the observable market price of the receivable. In determining collateral value, we estimate the current fair market value of the collateral less selling costs. We also consider credit enhancements such as additional collateral and contractual third-party guarantees.

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

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

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

Cat Financial’s actual results may differ materially from those described or implied in our forward-looking statements based on a number of factors, including, but not limited to: (i) government monetary or fiscal policies; (ii) political and economic risks, commercial instability and events beyond our control in the countries in which we operate; (iii) demand for Caterpillar products; (iv) our ability to develop, produce and market quality products that meet our customers’ needs; (v) information technology security threats and computer crime; (vi) disruptions or volatility in global financial markets limiting our sources of liquidity or the liquidity of our customers, dealers and suppliers; (vii) failure to maintain our credit ratings and potential resulting increases to our cost of borrowing and adverse effects on our cost of funds, liquidity, competitive position and access to capital markets; (viii) changes in interest rates, currency fluctuations or market liquidity conditions; (ix) an increase in delinquencies, repossessions or net losses of our customers; (x) our compliance with financial and other restrictive covenants in debt agreements; (xi) alleged or actual violations of trade or anti-corruption laws and regulations; (xii) additional tax expense or exposure; (xiii) new regulations or changes in financial services regulations; (xiv) residual values of leased equipment; (xv) marketing, operational or administrative support received from Caterpillar; (xvi) changes in accounting guidance; (xvii) the recent global coronavirus pandemic, which has led to periods of significant volatility in financial and other markets; and (xviii) other factors described in more detail in Cat Financial’s Forms 10-Q, 10-K and other filings with the Securities and Exchange Commission.

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 2020 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

This section supplements and updates certain of the information found under Part I, Item 1A. “Risk Factors” of our Annual Report on Form 10-K for the year ended December 31, 2019 filed with the SEC on February 19, 2020 (the 2019 Form 10-K), the information disclosed in the Current Report on Form 8-K filed with the SEC on March 30, 2020 relating to COVID-19 (the COVID-19 8-K) and our Quarterly Report on Form 10-Q filed with the SEC on May 6, 2020 (the First Quarter 10-Q) based on information currently known to us and recent developments since the date of the 2019 Form 10-K filing, the COVID-19 8-K filing and the First Quarter 10-Q filing. The matters discussed below should be read in conjunction with the risk factors set forth in the 2019 Form 10-K and the First Quarter 10-Q and the information disclosed in COVID-19 8-K. However, the risks and uncertainties that we face are not limited to those described below and those set forth in the 2019 Form 10-K and the COVID-19 8-K. Additional risks and uncertainties not presently known to us or that we currently believe to be immaterial may also adversely affect our business.

The recent global coronavirus pandemic could materially adversely affect our business, financial condition, results of operations and/or liquidity.

COVID-19 was identified in China in late 2019 and has spread globally. The rapid spread has resulted in weaker demand and supply constraints and the implementation of numerous measures to try to contain the virus, such as travel bans and restrictions, quarantines, shelter in place orders and shutdowns. These factors have impacted and may continue to impact all or portions of Caterpillar’s workforce and operations, particularly as Caterpillar has temporarily closed certain of its facilities and may continue to temporarily close facilities as the situation warrants.

Future restrictions on Caterpillar’s access to its manufacturing facilities or on its support operations or workforce, any future closure of additional manufacturing facilities due to weaker demand or supply constraints, or similar limitations for its suppliers, disruptions to its supply chain or restrictions or disruptions of transportation, could have a material adverse effect on our business, results of operations or liquidity and the financial health and credit risk associated with our customers. The overall magnitude of the COVID-19 pandemic, including the extent of its impact on our business, results of operations or liquidity cannot be reasonably estimated due to the rapid development and fluidity of the situation. Recent actions by US federal, state and foreign governments to address the pandemic may also have a significant adverse effect on the markets in which we conduct our business.

In recent weeks, the COVID-19 pandemic has also caused, and is likely to continue to cause economic, market and other disruptions worldwide. Such volatility in the global capital markets could increase our cost of capital and could adversely impact our access to capital. In addition, the COVID-19 pandemic has caused and may continue to cause requests by borrowers for contract modifications and possibly delinquencies or defaults by borrowers on contractual obligations. As such we have experienced some increase in provision expense and may add additional provision as we manage the business.

Additional risks in Item 1A of our 2019 Form 10-K that may be impacted by these developments include “Risk Factors-Financial Risks,” “Risk Factors-Macroeconomic Risks” and “Risk Factors-Operational Risks-The success of our business depends upon the demand for Caterpillar’s products.”

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

Exhibit No.	Description of Exhibit
10.1	Credit Agreement (Short-Term Facility), dated as of April 21, 2020, among the Company, Caterpillar Inc., certain financial institutions named therein, Citibank, N.A., as Agent, Citibank, N.A., BofA Securities, Inc., JPMorgan Chase Bank, N.A., and Société Générale, as joint lead arrangers and joint bookrunners (incorporated by reference from Exhibit 99.1 to the Company’s Current Report on Form 8-K filed April 24, 2020)
31.1	Certification of 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 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	Certification of President, Director and Chief Executive Officer of Caterpillar Financial Services Corporation, and 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
Date: August 5, 2020	*/s/David T. Walton*
	David T. Walton, President, Director and Chief Executive Officer
Date: August 5, 2020	*/s/Patrick T. McCartan*
	Patrick T. McCartan, Executive Vice President and Chief Financial Officer
Date: August 5, 2020	*/s/Michael G. Sposato*
	Michael G. Sposato, Secretary
Date: August 5, 2020	*/s/Jeffry D. Everett*
	Jeffry D. Everett, Controller

EXHIBIT 31.1

SECTION 302 CERTIFICATION

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 5, 2020

/s/David T. Walton

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

EXHIBIT 31.2

SECTION 302 CERTIFICATION

I, Patrick T. McCartan, certify that:

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

Date: August 5, 2020

/s/Patrick T. McCartan

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

EXHIBIT 32

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

In connection with the quarterly report of Caterpillar Financial Services Corporation (the "Company") on Form 10-Q for the period ended June 30, 2020, 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 5, 2020	*/s/David T. Walton*
	David T. Walton
	President, Director and Chief Executive Officer
Date: August 5, 2020	*/s/Patrick T. McCartan*
	Patrick T. McCartan
	Executive Vice President and Chief Financial Officer

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