

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



FORM 10-Q

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

For the quarterly period ended March 31, 2017

OR

[] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File Number: 1-768

CATERPILLAR INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of incorporation)

100 NE Adams Street, Peoria, Illinois
(Address of principal executive offices)

37-0602744
(IRS Employer I.D. No.)

61629
(Zip Code)

Registrant's telephone number, including area code: **(309) 675-1000**

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

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

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

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	(Do not check if a smaller reporting company)	
		Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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

At March 31, 2017, 589,090,308 shares of common stock of the registrant were outstanding.

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* Item omitted because no answer is called for or item is not applicable.

Part I. FINANCIAL INFORMATION**Item 1. Financial Statements**

Caterpillar Inc.
Consolidated Statement of Results of Operations
(Unaudited)
(Dollars in millions except per share data)

	Three Months Ended March 31	
	2017	2016
Sales and revenues:		
Sales of Machinery, Energy & Transportation	\$ 9,130	\$ 8,780
Revenues of Financial Products	692	681
Total sales and revenues	<u>9,822</u>	<u>9,461</u>
Operating costs:		
Cost of goods sold	6,758	6,822
Selling, general and administrative expenses	1,045	1,088
Research and development expenses	418	508
Interest expense of Financial Products	159	152
Other operating (income) expenses	1,025	397
Total operating costs	<u>9,405</u>	<u>8,967</u>
Operating profit	417	494
Interest expense excluding Financial Products	123	129
Other income (expense)	<u>(5)</u>	<u>—</u>
Consolidated profit before taxes	289	365
Provision (benefit) for income taxes	90	92
Profit of consolidated companies	<u>199</u>	<u>273</u>
Equity in profit (loss) of unconsolidated affiliated companies	<u>(5)</u>	<u>(1)</u>
Profit of consolidated and affiliated companies	194	272
Less: Profit (loss) attributable to noncontrolling interests	<u>2</u>	<u>1</u>
Profit ¹	<u>\$ 192</u>	<u>\$ 271</u>
Profit per common share	\$ 0.33	\$ 0.46
Profit per common share – diluted ²	\$ 0.32	\$ 0.46
Weighted-average common shares outstanding (millions)		
– Basic	587.5	582.8
– Diluted ²	593.2	587.7
Cash dividends declared per common share	\$ —	\$ —

¹ Profit attributable to common shareholders.

² Diluted by assumed exercise of stock-based compensation awards using the treasury stock method.

See accompanying notes to Consolidated Financial Statements.

Caterpillar Inc.
Consolidated Statement of Comprehensive Income
(Unaudited)
(Dollars in millions)

	Three Months Ended	
	March 31	
	2017	2016
Profit of consolidated and affiliated companies	\$ 194	\$ 272
Other comprehensive income (loss), net of tax:		
Foreign currency translation, net of tax (provision)/benefit of: 2017 - \$7; 2016 - \$32	147	408
Pension and other postretirement benefits:		
Current year prior service credit (cost), net of tax (provision)/benefit of: 2017 - \$(4); 2016 - \$(69)	8	118
Amortization of prior service (credit) cost, net of tax (provision)/benefit of: 2017 - \$1; 2016 - \$5	(4)	(10)
Derivative financial instruments:		
Gains (losses) deferred, net of tax (provision)/benefit of: 2017 - \$(5); 2016 - \$(6)	10	9
(Gains) losses reclassified to earnings, net of tax (provision)/benefit of: 2017 - \$(22); 2016 - \$(5)	40	9
Available-for-sale securities:		
Gains (losses) deferred, net of tax (provision)/benefit of: 2017 - \$(6); 2016 - \$(5)	8	6
(Gains) losses reclassified to earnings, net of tax (provision)/benefit of: 2017 - \$(1); 2016 - \$(1)	3	2
Total other comprehensive income (loss), net of tax	<u>212</u>	<u>542</u>
Comprehensive income	406	814
Less: comprehensive income attributable to the noncontrolling interests	(2)	(1)
Comprehensive income attributable to shareholders	<u>\$ 404</u>	<u>\$ 813</u>

See accompanying notes to Consolidated Financial Statements.

Caterpillar Inc.
Consolidated Statement of Financial Position
(Unaudited)
(Dollars in millions)

	March 31, 2017	December 31, 2016
Assets		
Current assets:		
Cash and short-term investments	\$ 9,472	\$ 7,168
Receivables – trade and other	6,533	5,981
Receivables – finance	8,684	8,522
Prepaid expenses and other current assets	1,777	1,682
Inventories	9,082	8,614
Total current assets	35,548	31,967
Property, plant and equipment – net	14,727	15,322
Long-term receivables – trade and other	944	1,029
Long-term receivables – finance	13,426	13,556
Noncurrent deferred and refundable income taxes	2,940	2,790
Intangible assets	2,287	2,349
Goodwill	6,051	6,020
Other assets	1,626	1,671
Total assets	\$ 77,549	\$ 74,704
Liabilities		
Current liabilities:		
Short-term borrowings:		
Machinery, Energy & Transportation	\$ 436	\$ 209
Financial Products	7,385	7,094
Accounts payable	5,302	4,614
Accrued expenses	3,086	3,003
Accrued wages, salaries and employee benefits	1,666	1,296
Customer advances	1,383	1,167
Dividends payable	—	452
Other current liabilities	1,641	1,635
Long-term debt due within one year:		
Machinery, Energy & Transportation	505	507
Financial Products	6,231	6,155
Total current liabilities	27,635	26,132
Long-term debt due after one year:		
Machinery, Energy & Transportation	8,804	8,436
Financial Products	14,921	14,382
Liability for postemployment benefits	9,291	9,357
Other liabilities	3,238	3,184
Total liabilities	63,889	61,491
Commitments and contingencies (Notes 10 and 13)		
Shareholders' equity		
Common stock of \$1.00 par value:		
Authorized shares: 2,000,000,000		
Issued shares: (3/31/17 and 12/31/16 – 814,894,624) at paid-in amount	5,222	5,277
Treasury stock (3/31/17 – 225,804,316 shares; 12/31/16 – 228,408,600 shares) at cost	(17,391)	(17,478)
Profit employed in the business	27,584	27,377
Accumulated other comprehensive income (loss)	(1,827)	(2,039)
Noncontrolling interests	72	76
Total shareholders' equity	13,660	13,213
Total liabilities and shareholders' equity	\$ 77,549	\$ 74,704

See accompanying notes to Consolidated Financial Statements.

Caterpillar Inc.
Consolidated Statement of Changes in Shareholders' Equity
(Unaudited)
(Dollars in millions)

	Common stock	Treasury stock	Profit employed in the business	Accumulated other comprehensive income (loss)	Noncontrolling interests	Total
Three Months Ended March 31, 2016						
Balance at December 31, 2015	\$ 5,238	\$ (17,640)	\$ 29,246	\$ (2,035)	\$ 76	\$ 14,885
Profit of consolidated and affiliated companies	—	—	271	—	1	272
Foreign currency translation, net of tax	—	—	—	408	—	408
Pension and other postretirement benefits, net of tax	—	—	—	108	—	108
Derivative financial instruments, net of tax	—	—	—	18	—	18
Available-for-sale securities, net of tax	—	—	—	8	—	8
Distribution to noncontrolling interests	—	—	—	—	(1)	(1)
Common shares issued from treasury stock for stock-based compensation: 1,546,856	(90)	45	—	—	—	(45)
Stock-based compensation expense	101	—	—	—	—	101
Net excess tax benefits from stock-based compensation	(6)	—	—	—	—	(6)
Other	4	—	—	—	1	5
Balance at March 31, 2016	\$ 5,247	\$ (17,595)	\$ 29,517	\$ (1,493)	\$ 77	\$ 15,753
Three Months Ended March 31, 2017						
Balance at December 31, 2016	\$ 5,277	\$ (17,478)	\$ 27,377	\$ (2,039)	\$ 76	\$ 13,213
Adjustment to adopt stock-based compensation guidance ¹	—	—	15	—	—	15
Balance at January 1, 2017	\$ 5,277	\$ (17,478)	\$ 27,392	\$ (2,039)	\$ 76	\$ 13,228
Profit of consolidated and affiliated companies	—	—	192	—	2	194
Foreign currency translation, net of tax	—	—	—	147	—	147
Pension and other postretirement benefits, net of tax	—	—	—	4	—	4
Derivative financial instruments, net of tax	—	—	—	50	—	50
Available-for-sale securities, net of tax	—	—	—	11	—	11
Distribution to noncontrolling interests	—	—	—	—	(6)	(6)
Common shares issued from treasury stock for stock-based compensation: 2,604,284	(106)	87	—	—	—	(19)
Stock-based compensation expense	49	—	—	—	—	49
Other	2	—	—	—	—	2
Balance at March 31, 2017	\$ 5,222	\$ (17,391)	\$ 27,584	\$ (1,827)	\$ 72	\$ 13,660

¹ See Note 2 for additional information.

See accompanying notes to Consolidated Financial Statements.

Caterpillar Inc.
Consolidated Statement of Cash Flow
(Unaudited)
(Millions of dollars)

	Three Months Ended	
	March 31	
	2017	2016
Cash flow from operating activities:		
Profit of consolidated and affiliated companies	\$ 194	\$ 272
Adjustments for non-cash items:		
Depreciation and amortization	710	740
Other	301	269
Changes in assets and liabilities, net of acquisitions and divestitures:		
Receivables – trade and other	(353)	14
Inventories	(444)	(74)
Accounts payable	732	211
Accrued expenses	132	33
Accrued wages, salaries and employee benefits	360	(852)
Customer advances	193	174
Other assets – net	(261)	(145)
Other liabilities – net	(23)	(152)
Net cash provided by (used for) operating activities	<u>1,541</u>	<u>490</u>
Cash flow from investing activities:		
Capital expenditures – excluding equipment leased to others	(204)	(357)
Expenditures for equipment leased to others	(305)	(383)
Proceeds from disposals of leased assets and property, plant and equipment	234	173
Additions to finance receivables	(2,122)	(2,014)
Collections of finance receivables	2,272	2,047
Proceeds from sale of finance receivables	17	10
Investments and acquisitions (net of cash acquired)	(18)	(12)
Proceeds from sale of securities	89	49
Investments in securities	(65)	(62)
Other – net	(23)	(23)
Net cash provided by (used for) investing activities	<u>(125)</u>	<u>(572)</u>
Cash flow from financing activities:		
Dividends paid	(452)	(448)
Distribution to noncontrolling interests	(6)	(1)
Common stock issued, including treasury shares reissued	(19)	(45)
Proceeds from debt issued (original maturities greater than three months):		
Machinery, Energy & Transportation	360	1
Financial Products	2,355	1,210
Payments on debt (original maturities greater than three months):		
Machinery, Energy & Transportation	(4)	(3)
Financial Products	(1,973)	(1,703)
Short-term borrowings – net (original maturities three months or less)	618	486
Net cash provided by (used for) financing activities	<u>879</u>	<u>(503)</u>
Effect of exchange rate changes on cash	9	11
Increase (decrease) in cash and short-term investments	<u>2,304</u>	<u>(574)</u>
Cash and short-term investments at beginning of period	7,168	6,460
Cash and short-term investments at end of period	<u>\$ 9,472</u>	<u>\$ 5,886</u>

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

See accompanying notes to Consolidated Financial Statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

1. A. Nature of operations

Information in our financial statements and related commentary are presented in the following categories:

Machinery, Energy & Transportation – Represents the aggregate total of Construction Industries, Resource Industries, Energy & Transportation and All Other operating segments and related corporate items and eliminations.

Financial Products – Primarily includes the company's Financial Products Segment. This category includes Caterpillar Financial Services Corporation (Cat Financial), Caterpillar Financial Insurance Services (Insurance Services) and their respective subsidiaries.

B. Basis of presentation

In the opinion of management, the accompanying unaudited financial statements include all adjustments, consisting only of normal recurring adjustments, necessary for a fair statement of (a) the consolidated results of operations for the three months ended March 31, 2017 and 2016, (b) the consolidated comprehensive income for the three months ended March 31, 2017 and 2016, (c) the consolidated financial position at March 31, 2017 and December 31, 2016, (d) the consolidated changes in shareholders' equity for the three months ended March 31, 2017 and 2016 and (e) the consolidated cash flow for the three months ended March 31, 2017 and 2016. The financial statements have been prepared in conformity with generally accepted accounting principles in the United States of America (U.S. GAAP) and pursuant to the rules and regulations of the Securities and Exchange Commission (SEC).

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 financial statements and notes thereto included in our company's annual report on Form 10-K for the year ended December 31, 2016 (2016 Form 10-K).

The December 31, 2016 financial position data included herein is derived from the audited consolidated financial statements included in the 2016 Form 10-K but does not include all disclosures required by U.S. GAAP. Certain amounts for prior periods have been reclassified to conform to the current period financial statement presentation. See Note 2 for more information.

Unconsolidated Variable Interest Entities (VIEs)

We have affiliates, suppliers and dealers that are VIEs of which we are not the primary beneficiary. Although we have provided financial support, we do not have the power to direct the activities that most significantly impact the economic performance of each entity.

Our maximum exposure to loss from VIEs for which we are not the primary beneficiary was as follows:

(Millions of dollars)	March 31, 2017	December 31, 2016
Receivables - trade and other	\$ 64	\$ 55
Receivables - finance	147	174
Long-term receivables - finance	233	246
Investments in unconsolidated affiliated companies	36	31
Guarantees	216	210
Total	\$ 696	\$ 716

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

2. **New accounting guidance**

Revenue recognition - In May 2014, the Financial Accounting Standards Board (FASB) issued new revenue recognition guidance to provide a single, comprehensive revenue recognition model for all contracts with customers. Under the new guidance, an entity will recognize revenue to depict the transfer of promised goods or services to customers at an amount that the entity expects to be entitled to in exchange for those goods or services. A five step model has been introduced for an entity to apply when recognizing revenue. The new guidance also includes enhanced disclosure requirements, and is effective January 1, 2018, with early adoption permitted for January 1, 2017. Entities have the option to apply the new guidance under a retrospective approach to each prior reporting period presented, or a modified retrospective approach with the cumulative effect of initially applying the new guidance recognized at the date of initial application within the Consolidated Statement of Changes in Shareholders' Equity. We plan to adopt the new guidance effective January 1, 2018. We have made substantial progress in our evaluation of the impact of the new standard. Under the new guidance, we anticipate sales of certain turbine machinery units will change to a point-in-time recognition model. Under current guidance, we account for these sales under an over-time model following the percentage-of-completion method as the product is manufactured. In addition, under the new guidance we will begin to recognize an asset for the value of expected replacement part returns. At this time we have not identified any impacts to our financial statements that we believe will be material in the year of adoption. We are still evaluating the impact to certain revenue streams within our Energy & Transportation and Resource Industries segments and expect that evaluation to be completed during the second quarter of 2017. Based on the current estimated impact to our financial statements, we plan to adopt the new guidance under the modified retrospective approach.

Simplifying the measurement of inventory - In July 2015, the FASB issued accounting guidance which requires that inventory be measured at the lower of cost or net realizable value. Prior to the issuance of the new guidance, inventory was measured at the lower of cost or market. Replacing the concept of market with the single measurement of net realizable value is intended to create efficiencies for preparers. Inventory measured using the last-in, first-out (LIFO) method and the retail inventory method are not impacted by the new guidance. The guidance was effective January 1, 2017, and was applied prospectively. The adoption did not have a material impact on our financial statements.

Recognition and measurement of financial assets and financial liabilities - In January 2016, the FASB issued accounting guidance that affects the accounting for equity investments, financial liabilities accounted for under the fair value option and the presentation and disclosure requirements for financial instruments. Under the new guidance, all equity investments in unconsolidated entities (other than those accounted for using the equity method of accounting) will generally be measured at fair value through earnings. There will no longer be an available-for-sale classification for equity securities with readily determinable fair values. For financial liabilities when the fair value option has been elected, changes in fair value due to instrument-specific credit risk will be recognized separately in other comprehensive income. In addition, the FASB clarified guidance related to the valuation allowance assessment when recognizing deferred tax assets resulting from unrealized losses on available-for-sale debt securities. The new guidance is effective January 1, 2018, with the cumulative effect adjustment from initially applying the new guidance recognized in the Consolidated Statement of Financial Position as of the beginning of the year of adoption. The impact on our financial statements at the time of adoption will primarily be based on changes in the fair value of our available-for-sale equity securities subsequent to January 1, 2018, which will be recorded through earnings.

Lease accounting - In February 2016, the FASB issued accounting guidance that revises the accounting for leases. Under the new guidance, lessees are required to recognize a right-of-use asset and a lease liability for all leases. The new guidance will continue to classify leases as either financing or operating, with classification affecting the pattern of expense recognition. The accounting applied by a lessor under the new guidance will be substantially equivalent to current lease accounting guidance. The new guidance is effective January 1, 2019, with early adoption permitted. The new standard is required to be applied with a modified retrospective approach to each prior reporting period presented and provides for certain practical expedients. We are in the process of evaluating the effect of the new guidance on our financial statements.

Stock-based compensation – In March 2016, the FASB issued accounting guidance to simplify several aspects of the accounting for share-based payments. The new guidance changes how reporting entities account for certain aspects of share-based payments, including the accounting for income taxes and the classification of the tax impact on the Consolidated Statement of Cash Flow. Under the new guidance all excess tax benefits and deficiencies during the period are to be recognized in income (rather than equity) on a prospective basis. The guidance removes the requirement to delay recognition of excess tax benefits until it reduces income taxes currently payable. This change was required to be applied on a modified retrospective basis, resulting in a cumulative-effect adjustment to opening retained earnings in the period of adoption. In addition, Cash flows related to excess tax benefits will be included in Cash provided by operating activities and will no longer be separately classified as a financing activity. This change was adopted retrospectively. The guidance was effective January 1, 2017, and did not have a material impact on our financial statements.

Measurement of credit losses on financial instruments – In June 2016, the FASB issued accounting guidance to introduce a new model for recognizing credit losses on financial instruments based on an estimate of current expected credit losses. The new guidance will apply to loans, accounts receivable, trade receivables, other financial assets measured at amortized cost, loan commitments and other off-balance sheet credit exposures. The new guidance will also apply to debt securities and other financial assets measured at fair value through other comprehensive income. The new guidance is effective January 1, 2020, with early adoption permitted beginning January 1, 2019. We are in the process of evaluating the effect of the new guidance on our financial statements.

Classification for certain cash receipts and cash payments – In August 2016, the FASB issued accounting guidance related to the presentation and classification of certain transactions in the statement of cash flows where diversity in practice exists. The guidance is effective January 1, 2018, with early adoption permitted. We do not expect the adoption to have a material impact on our financial statements.

Tax accounting for intra-entity asset transfers – In October 2016, the FASB issued accounting guidance that will require the tax effects of intra-entity asset transfers to be recognized in the period when the transfer occurs. Under current guidance, the tax effects of intra-entity sales of assets are deferred until the transferred asset is sold to a third party or otherwise recovered through use. The new guidance does not apply to intra-entity transfers of inventory. The guidance is effective January 1, 2018, and is required to be applied on a modified retrospective basis through a cumulative effect adjustment to retained earnings as of the beginning of the period of adoption. We are in the process of evaluating the effect of the new guidance on our financial statements.

Classification of restricted cash – In November 2016, the FASB issued accounting guidance related to the presentation and classification of changes in restricted cash on the statement of cash flows where diversity in practice exists. The new standard is required to be applied with a retrospective approach. The guidance is effective January 1, 2018, with early adoption permitted. We do not expect the adoption to have a material impact on our financial statements.

Clarification on the definition of a business – In January 2017, the FASB issued accounting guidance to clarify the definition of a business with the objective of adding guidance to assist entities with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The guidance is effective January 1, 2018, with early adoption permitted. We adopted the guidance effective January 1, 2017, and the adoption did not have a material impact on our financial statements.

Simplifying the measurement for goodwill – In January 2017, the FASB issued guidance to simplify the accounting for goodwill impairment. The guidance removes Step 2 of the goodwill impairment test, which requires a hypothetical purchase price allocation. A goodwill impairment will now be the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. The new guidance will be applied prospectively and is effective January 1, 2020, with early adoption permitted beginning January 1, 2017. We adopted the guidance effective January 1, 2017. The adoption did not have a material impact on our financial statements.

Presentation of net periodic pension costs and net periodic postretirement benefit costs – In March 2017, the FASB issued accounting guidance that will require that an employer disaggregate the service cost component from the other components of net benefit cost. Service cost is required to be reported in the same line item or items as other compensation costs arising from services rendered by the pertinent employees during the period. The other components of net periodic benefit cost are required to be reported outside the subtotal for income from operations. Additionally, only the service cost component of net benefit costs are eligible for capitalization. The guidance is effective January 1, 2018, with early adoption permitted. We will adopt this guidance on January 1, 2018, and apply the presentation changes retrospectively and the capitalization change prospectively. The impact on our financial statements at the time of adoption will primarily

be reclassification of other components of net periodic benefit cost outside of Operating profit in the Consolidated Statement of Results of Operations.

Premium amortization on purchased callable debt securities – In March 2017, the FASB issued accounting guidance related to the amortization period for certain purchased callable debt securities held at a premium. Securities held at a premium will be required to be amortized to the earliest call date rather than the maturity date. The new standard is required to be applied with a modified retrospective approach through a cumulative-effect adjustment directly to retained earnings as of the beginning of the period of adoption. The guidance is effective January 1, 2019, with early adoption permitted. We do not expect the adoption to have a material impact on our financial statements.

3. Stock-based compensation

Accounting for stock-based compensation requires that the cost resulting from all stock-based payments be recognized in the financial statements based on the grant date fair value of the award. Our stock-based compensation primarily consists of stock options, restricted stock units (RSUs), performance-based restricted stock units (PRSUs) and stock-settled stock appreciation rights (SARs).

Upon separation from service, if the participant is 55 years of age or older with more than five years of service, the participant meets the criteria for a "Long Service Separation." Award terms for awards granted prior to 2017 allow for immediate vesting upon separation of all outstanding options and RSUs with no requisite service period for employees who meet the criteria for a "Long Service Separation." Compensation expense was fully recognized immediately on the grant date for these employees. Award terms for the 2017 grant allow for continued vesting as of each vesting date specified in the award document for employees who meet the criteria for a "Long Service Separation" and fulfill a requisite service period of six months. Compensation expense for eligible employees for the 2017 grant is recognized over the period from the grant date to the end date of the six-month requisite service period. For employees who become eligible for a "Long Service Separation" subsequent to the end date of the six-month requisite service period and prior to the completion of the vesting period, compensation expense is recognized over the period from the grant date to the date eligibility is achieved.

Prior to 2017, all outstanding PRSU awards granted to employees with a "Long Service Separation" may vest at the end of the performance period based upon achievement of the performance target. For PRSU awards granted in 2017, only a prorated number of shares may vest at the end of the performance period based upon achievement of the performance target, with the proration based upon the number of months of continuous employment during the three-year performance period. Employees with a "Long Service Separation" must also fulfill a six-month requisite service period in order to be eligible for the prorated vesting of outstanding PRSU awards granted in 2017.

We recognized pretax stock-based compensation expense in the amount of \$49 million and \$101 million for the three months ended March 31, 2017 and 2016, respectively. The decrease in stock-based compensation expense was primarily due to the change in award terms for participants that meet the criteria for a "Long Service Separation", as the establishment of the six-month requisite service period results in lower expense in the first quarter (period of grant) and higher expense over the following two quarters.

The following table illustrates the type and fair value of the stock-based compensation awards granted during the three months ended March 31, 2017 and 2016, respectively:

	Three Months Ended March 31, 2017			Three Months Ended March 31, 2016		
	Shares Granted	Weighted-Average Fair Value Per Share	Weighted-Average Grant Date Stock Price	Shares Granted	Weighted-Average Fair Value Per Share	Weighted-Average Grant Date Stock Price
Stock options	2,701,644	\$ 25.01	\$ 95.66	4,243,272	\$ 20.64	\$ 74.77
RSUs	906,068	\$ 89.76	\$ 95.63	1,085,505	\$ 68.04	\$ 74.77
PRSUs	437,385	\$ 86.78	\$ 95.66	614,347	\$ 64.71	\$ 74.77

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The following table provides the assumptions used in determining the fair value of the stock-based awards for the three months ended March 31, 2017 and 2016, respectively:

	Grant Year	
	2017	2016
Weighted-average dividend yield	3.42%	3.23%
Weighted-average volatility	29.2%	31.1%
Range of volatilities	22.1-33.0%	22.5-33.4%
Range of risk-free interest rates	0.81-2.35%	0.62-1.73%
Weighted-average expected lives	8 years	8 years

As of March 31, 2017, the total remaining unrecognized compensation expense related to nonvested stock-based compensation awards was \$306 million, which will be amortized over the weighted-average remaining requisite service periods of approximately 1.8 years.

4. Derivative financial instruments and risk management

Our earnings and cash flow are subject to fluctuations due to changes in foreign currency exchange rates, interest rates and commodity prices. Our Risk Management Policy (policy) allows for the use of derivative financial instruments to prudently manage foreign currency exchange rate, interest rate and commodity price 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, interest rate contracts and commodity forward and option contracts. Our derivative activities are subject to the management, direction and control of our senior financial officers. Risk management practices, including the use of financial derivative instruments, are presented to the Audit Committee of the Board of Directors at least annually.

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

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 Statement 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 values 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 the derecognition criteria for hedge accounting.

Foreign Currency Exchange Rate Risk

Foreign currency exchange rate movements create a degree of risk by affecting the U.S. dollar value of sales made and costs incurred in foreign currencies. Movements in foreign currency rates also affect our competitive position as these changes may affect business practices and/or pricing strategies of non-U.S.-based competitors. Additionally, we have balance sheet positions denominated in foreign currencies, thereby creating exposure to movements in exchange rates.

Our Machinery, Energy & Transportation operations purchase, manufacture and sell products in many locations around the world. As we have a diversified revenue and cost base, we manage our future foreign currency cash flow exposure on a net basis. We use foreign currency forward and option contracts to manage unmatched foreign currency cash inflow and outflow. Our objective is to minimize the risk of exchange rate movements that would reduce the U.S. dollar value of our foreign currency cash flow. Our policy allows for managing anticipated foreign currency cash flow for up to five years. As of March 31, 2017, the maximum term of these outstanding contracts was approximately 51 months.

We generally designate as cash flow hedges at inception of the contract any Australian dollar, Brazilian real, British pound, Canadian dollar, Chinese yuan, euro, Indian rupee, Japanese yen, Mexican peso, Norwegian krona, Singapore dollar or Thailand baht forward or option contracts that meet the requirements for hedge accounting and the maturity extends beyond the current quarter-end. Designation is performed on a specific exposure basis to support hedge accounting. The remainder of Machinery, Energy & Transportation foreign currency contracts are undesignated.

As of March 31, 2017, \$11 million of deferred net losses, net of tax, included in equity (AOCI in the Consolidated Statement of Financial Position), are expected to be reclassified to current earnings (Other income (expense) in the Consolidated Statement of Results of Operations) over the next twelve months when earnings are affected by the hedged transactions. The actual amount recorded in Other income (expense) will vary based on exchange rates at the time the hedged transactions impact earnings.

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

Interest Rate Risk

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

Our Machinery, Energy & Transportation operations generally use fixed-rate debt as a source of funding. Our objective is to minimize the cost of borrowed funds. Our policy allows us to enter into fixed-to-floating interest rate contracts and forward rate agreements to meet that objective. We designate fixed-to-floating interest rate contracts as fair value hedges at inception of the contract, and we designate certain forward rate agreements as cash flow hedges at inception of the contract.

Financial Products operations has a match-funding policy that addresses interest rate risk by aligning the interest rate profile (fixed or floating rate) of Cat Financial's debt portfolio with the interest rate profile of their receivables 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 receivables 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.

We have, at certain times, liquidated fixed-to-floating and floating-to-fixed interest rate contracts at both Machinery, Energy & Transportation and Financial Products. The gains or losses associated with these contracts at the time of liquidation are amortized into earnings over the original term of the previously designated hedged item.

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Commodity Price Risk

Commodity price movements create a degree of risk by affecting the price we must pay for certain raw material. Our policy is to use commodity forward and option contracts to manage the commodity risk and reduce the cost of purchased materials.

Our Machinery, Energy & Transportation operations purchase base and precious metals embedded in the components we purchase from suppliers. Our suppliers pass on to us price changes in the commodity portion of the component cost. In addition, we are subject to price changes on energy products such as natural gas and diesel fuel purchased for operational use.

Our objective is to minimize volatility in the price of these commodities. Our policy allows us to enter into commodity forward and option contracts to lock in the purchase price of a portion of these commodities within a five-year horizon. All such commodity forward and option contracts are undesignated.

The location and fair value of derivative instruments reported in the Consolidated Statement of Financial Position are as follows:

(Millions of dollars)	Consolidated Statement of Financial Position Location	Asset (Liability) Fair Value	
		March 31, 2017	December 31, 2016
Designated derivatives			
Foreign exchange contracts			
Machinery, Energy & Transportation	Receivables – trade and other	\$ 14	\$ 13
Machinery, Energy & Transportation	Accrued expenses	(32)	(93)
Machinery, Energy & Transportation	Other liabilities	(27)	(36)
Financial Products	Long-term receivables – trade and other	24	29
Financial Products	Accrued expenses	(16)	(3)
Interest rate contracts			
Financial Products	Long-term receivables – trade and other	3	4
Financial Products	Accrued expenses	(1)	(1)
		<u>\$ (35)</u>	<u>\$ (87)</u>
Undesignated derivatives			
Foreign exchange contracts			
Machinery, Energy & Transportation	Receivables – trade and other	\$ 4	\$ —
Machinery, Energy & Transportation	Accrued expenses	(15)	(30)
Financial Products	Receivables – trade and other	28	39
Financial Products	Accrued expenses	(10)	(4)
Commodity contracts			
Machinery, Energy & Transportation	Receivables – trade and other	7	10
		<u>\$ 14</u>	<u>\$ 15</u>

The total notional amounts of the derivative instruments are as follows:

(Millions of dollars)	March 31, 2017	December 31, 2016
Machinery, Energy & Transportation	\$ 2,412	\$ 2,530
Financial Products	\$ 3,008	\$ 2,626

The notional amounts of the derivative financial instruments do not represent amounts exchanged by the parties. The amounts exchanged by the parties are calculated by reference to the notional amounts and by other terms of the derivatives, such as foreign currency exchange rates, interest rates or commodity prices.

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The effect of derivatives designated as hedging instruments on the Consolidated Statement of Results of Operations is as follows:

Fair Value Hedges		Three Months Ended		Three Months Ended	
		March 31, 2017		March 31, 2016	
(Millions of dollars)	Classification	Gains (Losses)	Gains (Losses)	Gains (Losses)	Gains (Losses)
		on Derivatives	on Borrowings	on Derivatives	on Borrowings
Interest rate contracts					
Financial Products	Other income (expense)	\$ (1)	\$ 1	\$ 3	\$ (4)
		<u>\$ (1)</u>	<u>\$ 1</u>	<u>\$ 3</u>	<u>\$ (4)</u>

Cash Flow Hedges

		Three Months Ended March 31, 2017			
		Recognized in Earnings			
(Millions of dollars)	Amount of Gains (Losses) Recognized in AOCI (Effective Portion)	Classification of Gains (Losses)	Amount of	Recognized	
			Gains (Losses) Reclassified from AOCI to Earnings	in Earnings (Ineffective Portion)	
Foreign exchange contracts					
Machinery, Energy & Transportation	\$ 33	Other income (expense)	\$ (39)	\$ —	
Financial Products	(18)	Other income (expense)	(22)	—	
Interest rate contracts					
Machinery, Energy & Transportation	—	Interest expense excluding Financial Products	(2)	—	
Financial Products	—	Interest expense of Financial Products	1	—	
	<u>\$ 15</u>		<u>\$ (62)</u>	<u>\$ —</u>	
		Three Months Ended March 31, 2016			
		Recognized in Earnings			
(Millions of dollars)	Amount of Gains (Losses) Recognized in AOCI (Effective Portion)	Classification of Gains (Losses)	Amount of	Recognized	
			Gains (Losses) Reclassified from AOCI to Earnings	in Earnings (Ineffective Portion)	
Foreign exchange contracts					
Machinery, Energy & Transportation	\$ 16	Other income (expense)	\$ (10)	\$ —	
Interest rate contracts					
Machinery, Energy & Transportation	—	Interest expense excluding Financial Products	(2)	—	
Financial Products	(1)	Interest expense of Financial Products	(2)	—	
	<u>\$ 15</u>		<u>\$ (14)</u>	<u>\$ —</u>	

The effect of derivatives not designated as hedging instruments on the Consolidated Statement of Results of Operations is as follows:

(Millions of dollars)	Classification of Gains (Losses)	Three Months Ended	Three Months Ended
		March 31, 2017	March 31, 2016
Foreign exchange contracts			
Machinery, Energy & Transportation	Other income (expense)	\$ 13	\$ 22
Financial Products	Other income (expense)	(7)	(4)
Commodity contracts			
Machinery, Energy & Transportation	Other income (expense)	1	—
		<u>\$ 7</u>	<u>\$ 18</u>

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We enter into International Swaps and Derivatives Association (ISDA) master netting agreements within Machinery, Energy & Transportation and Financial Products that permit the net settlement of amounts owed under their respective derivative contracts. Under these master netting agreements, net settlement generally permits the company 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 of our company under the master netting agreements. As of March 31, 2017 and December 31, 2016, no cash collateral was received or pledged under the master netting agreements.

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The effect of the net settlement provisions of the master netting agreements on our derivative balances upon an event of default or termination event is as follows:

			<u>Gross Amounts Not Offset in the Statement of Financial Position</u>			
March 31, 2017	<u>Gross Amount of Recognized Assets</u>	<u>Gross Amounts Offset in the Statement of Financial Position</u>	<u>Net Amount of Assets Presented in the Statement of Financial Position</u>	<u>Financial Instruments</u>	<u>Cash Collateral Received</u>	<u>Net Amount of Assets</u>
Derivatives						
Machinery, Energy & Transportation	\$ 25	\$ —	\$ 25	\$ (23)	\$ —	\$ 2
Financial Products	55	—	55	(5)	—	50
Total	<u>\$ 80</u>	<u>\$ —</u>	<u>\$ 80</u>	<u>\$ (28)</u>	<u>\$ —</u>	<u>\$ 52</u>
			<u>Gross Amounts Not Offset in the Statement of Financial Position</u>			
March 31, 2017	<u>Gross Amount of Recognized Liabilities</u>	<u>Gross Amounts Offset in the Statement of Financial Position</u>	<u>Net Amount of Liabilities Presented in the Statement of Financial Position</u>	<u>Financial Instruments</u>	<u>Cash Collateral Pledged</u>	<u>Net Amount of Liabilities</u>
Derivatives						
Machinery, Energy & Transportation	\$ (74)	\$ —	\$ (74)	\$ 23	\$ —	\$ (51)
Financial Products	(27)	—	(27)	5	—	(22)
Total	<u>\$ (101)</u>	<u>\$ —</u>	<u>\$ (101)</u>	<u>\$ 28</u>	<u>\$ —</u>	<u>\$ (73)</u>
			<u>Gross Amounts Not Offset in the Statement of Financial Position</u>			
December 31, 2016	<u>Gross Amount of Recognized Assets</u>	<u>Gross Amounts Offset in the Statement of Financial Position</u>	<u>Net Amount of Assets Presented in the Statement of Financial Position</u>	<u>Financial Instruments</u>	<u>Cash Collateral Received</u>	<u>Net Amount of Assets</u>
Derivatives						
Machinery, Energy & Transportation	\$ 23	\$ —	\$ 23	\$ (21)	\$ —	\$ 2
Financial Products	72	—	72	(7)	—	65
Total	<u>\$ 95</u>	<u>\$ —</u>	<u>\$ 95</u>	<u>\$ (28)</u>	<u>\$ —</u>	<u>\$ 67</u>
			<u>Gross Amounts Not Offset in the Statement of Financial Position</u>			
December 31, 2016	<u>Gross Amount of Recognized Liabilities</u>	<u>Gross Amounts Offset in the Statement of Financial Position</u>	<u>Net Amount of Liabilities Presented in the Statement of Financial Position</u>	<u>Financial Instruments</u>	<u>Cash Collateral Pledged</u>	<u>Net Amount of Liabilities</u>
Derivatives						
Machinery, Energy & Transportation	\$ (159)	\$ —	\$ (159)	\$ 21	\$ —	\$ (138)
Financial Products	(8)	—	(8)	7	—	(1)
Total	<u>\$ (167)</u>	<u>\$ —</u>	<u>\$ (167)</u>	<u>\$ 28</u>	<u>\$ —</u>	<u>\$ (139)</u>

5. Inventories

Inventories (principally using the last-in, first-out (LIFO) method) are comprised of the following:

(Millions of dollars)	March 31, 2017	December 31, 2016
Raw materials	\$ 2,325	\$ 2,102
Work-in-process	1,850	1,719
Finished goods	4,698	4,576
Supplies	209	217
Total inventories	<u>\$ 9,082</u>	<u>\$ 8,614</u>

6. Investments in unconsolidated affiliated companies

Investments in unconsolidated affiliated companies, included in Other assets in the Consolidated Statement of Financial Position, were as follows:

(Millions of dollars)	March 31, 2017	December 31, 2016
Investments in equity method companies	\$ 193	\$ 192
Plus: Investments in cost method companies	37	57
Total investments in unconsolidated affiliated companies	<u>\$ 230</u>	<u>\$ 249</u>

7. Intangible assets and goodwill

A. Intangible assets

Intangible assets are comprised of the following:

(Millions of dollars)	Weighted Amortizable Life (Years)	March 31, 2017		
		Gross Carrying Amount	Accumulated Amortization	Net
Customer relationships	15	\$ 2,388	\$ (978)	\$ 1,410
Intellectual property	11	1,497	(729)	768
Other	13	191	(82)	109
Total finite-lived intangible assets	14	<u>\$ 4,076</u>	<u>\$ (1,789)</u>	<u>\$ 2,287</u>
		December 31, 2016		
	Weighted Amortizable Life (Years)	Gross Carrying Amount	Accumulated Amortization	Net
Customer relationships	15	\$ 2,378	\$ (934)	\$ 1,444
Intellectual property	11	1,496	(706)	790
Other	14	192	(77)	115
Total finite-lived intangible assets	14	<u>\$ 4,066</u>	<u>\$ (1,717)</u>	<u>\$ 2,349</u>

Amortization expense for the three months ended March 31, 2017 and 2016 was \$79 million and \$82 million, respectively. Amortization expense related to intangible assets is expected to be:

(Millions of dollars)					
Remaining Nine Months of 2017	2018	2019	2020	2021	Thereafter
\$237	\$311	\$305	\$295	\$277	\$862

B. Goodwill

No goodwill was impaired during the three months ended March 31, 2017 or 2016.

The changes in carrying amount of goodwill by reportable segment for the three months ended March 31, 2017 were as follows:

(Millions of dollars)	December 31, 2016	Other Adjustments ¹	March 31, 2017
Construction Industries			
Goodwill	\$ 296	\$ 3	\$ 299
Impairments	(22)	—	(22)
Net goodwill	274	3	277
Resource Industries			
Goodwill	4,110	21	4,131
Impairments	(1,175)	—	(1,175)
Net goodwill	2,935	21	2,956
Energy & Transportation			
Goodwill	2,756	7	2,763
All Other ²			
Goodwill	55	—	55
Consolidated total			
Goodwill	7,217	31	7,248
Impairments	(1,197)	—	(1,197)
Net goodwill	\$ 6,020	\$ 31	\$ 6,051

¹ Other adjustments are comprised primarily of foreign currency translation.

² Includes All Other operating segments (See Note 15).

8. Investments in debt and equity securities

We have investments in certain debt and equity securities, primarily at Insurance Services, that have been classified as available-for-sale and recorded at fair value. In addition, Insurance Services has an equity security investment in a real estate investment trust (REIT) which is recorded at fair value based on the net asset value (NAV) of the investment. These investments are primarily included in Other assets in the Consolidated Statement of Financial Position. Unrealized gains and losses arising from the revaluation of debt and equity securities are included, net of applicable deferred income taxes, in equity (Accumulated other comprehensive income (loss) in the Consolidated Statement of Financial Position). Realized gains and losses on sales of investments are generally determined using the specific identification method for debt and equity securities and are included in Other income (expense) in the Consolidated Statement of Results of Operations.

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The cost basis and fair value of debt and equity securities were as follows:

(Millions of dollars)	March 31, 2017			December 31, 2016		
	Cost Basis	Unrealized Pretax Net Gains (Losses)	Fair Value	Cost Basis	Unrealized Pretax Net Gains (Losses)	Fair Value
Government debt						
U.S. treasury bonds	\$ 9	\$ —	\$ 9	\$ 9	\$ —	\$ 9
Other U.S. and non-U.S. government bonds	58	—	58	60	—	60
Corporate bonds						
Corporate bonds	479	3	482	489	3	492
Asset-backed securities	88	—	88	90	—	90
Mortgage-backed debt securities						
U.S. governmental agency	214	(2)	212	225	(2)	223
Residential	9	—	9	10	—	10
Commercial	31	—	31	36	—	36
Equity securities						
Large capitalization value	281	44	325	280	32	312
Real estate investment trust (REIT)	84	4	88	77	2	79
Smaller company growth	41	19	60	41	15	56
Total	<u>\$ 1,294</u>	<u>\$ 68</u>	<u>\$ 1,362</u>	<u>\$ 1,317</u>	<u>\$ 50</u>	<u>\$ 1,367</u>

Available-for-sale investments in an unrealized loss position that are not other-than-temporarily impaired:

		March 31, 2017					
		Less than 12 months ¹		12 months or more ¹		Total	
(Millions of dollars)		Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Corporate bonds							
	Corporate bonds	\$ 121	\$ 1	\$ 12	\$ —	\$ 133	\$ 1
Mortgage-backed debt securities							
	U.S. governmental agency	140	2	12	—	152	2
Equity securities							
	Large capitalization value	42	5	8	1	50	6
	Small company growth	6	1	2	—	8	1
	Total	\$ 309	\$ 9	\$ 34	\$ 1	\$ 343	\$ 10

		December 31, 2016					
		Less than 12 months ¹		12 months or more ¹		Total	
(Millions of dollars)		Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Corporate bonds							
	Corporate bonds	\$ 131	\$ 1	\$ 13	\$ —	\$ 144	\$ 1
Mortgage-backed debt securities							
	U.S. governmental agency	167	2	11	—	178	2
Equity securities							
	Large capitalization value	68	6	11	2	79	8
	Smaller company growth	10	1	3	1	13	2
	Total	\$ 376	\$ 10	\$ 38	\$ 3	\$ 414	\$ 13

¹ Indicates length of time that individual securities have been in a continuous unrealized loss position.

Corporate Bonds. The unrealized losses on our investments in corporate bonds relate to changes in interest rates and credit-related yield spreads since time of purchase. We do not intend to sell the investments and it is not likely that we will be required to sell the investments before recovery of their amortized cost basis. We do not consider these investments to be other-than-temporarily impaired as of March 31, 2017.

Mortgage-Backed Debt Securities. The unrealized losses on our investments in U.S. government agency mortgage-backed securities relate to changes in interest rates and credit-related yield spreads since time of purchase. We do not intend to sell the investments and it is not likely that we will be required to sell the investments before recovery of their amortized cost basis. We do not consider these investments to be other-than-temporarily impaired as of March 31, 2017.

Equity Securities. The unrealized losses on our investments in equity securities relate to inherent risks of individual holdings and/or their respective sectors. We do not consider these investments to be other-than-temporarily impaired as of March 31, 2017.

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The cost basis and fair value of the available-for-sale debt securities at March 31, 2017, by contractual maturity, is shown below. Expected maturities will differ from contractual maturities because borrowers may have the right to prepay and creditors may have the right to call obligations.

(Millions of dollars)	March 31, 2017	
	Cost Basis	Fair Value
Due in one year or less	\$ 198	\$ 200
Due after one year through five years	386	387
Due after five years through ten years	24	24
Due after ten years	26	26
U.S. governmental agency mortgage-backed securities	214	212
Residential mortgage-backed securities	9	9
Commercial mortgage-backed securities	31	31
Total debt securities – available-for-sale	<u>\$ 888</u>	<u>\$ 889</u>

Sales of Securities:

(Millions of dollars)	Three Months Ended March 31	
	2017	2016
Proceeds from the sale of available-for-sale securities	\$ 89	\$ 49
Gross gains from the sale of available-for-sale securities	\$ 1	\$ 1
Gross losses from the sale of available-for-sale securities	\$ 1	\$ 1

9. Postretirement benefits**A. Pension and postretirement benefit costs**

In the first quarter of 2017, we announced the closure of our Gosselies, Belgium, facility. This announcement impacted certain employees that participate in a defined benefit pension plan and resulted in a curtailment and the recognition of termination benefits. In March 2017, we recognized a net loss of \$20 million for the curtailment and termination benefits. In addition, we announced the decision to phase out production at our Aurora, Illinois, facility which resulted in termination benefits of \$9 million for certain hourly employees that participate in our U.S. hourly defined benefit pension plan.

See Note 18 for more information on the Gosselies and Aurora announcements.

(Millions of dollars)	U.S. Pension Benefits		Non-U.S. Pension Benefits		Other Postretirement Benefits	
	March 31		March 31		March 31	
	2017	2016	2017	2016	2017	2016
For the three months ended:						
Components of net periodic benefit cost:						
Service cost	\$ 29	\$ 30	\$ 23	\$ 23	\$ 19	\$ 20
Interest cost	131	129	25	30	33	33
Expected return on plan assets	(184)	(189)	(57)	(58)	(9)	(11)
Amortization of prior service cost (credit) ¹	—	—	—	—	(5)	(15)
Net periodic benefit cost (benefit)	(24)	(30)	(9)	(5)	38	27
Curtailments and termination benefits ²	9	—	20	—	—	(2)
Total cost (benefit) included in operating profit	\$ (15)	\$ (30)	\$ 11	\$ (5)	\$ 38	\$ 25

Weighted-average assumptions used to determine net cost:

Discount rate used to measure service cost	4.2%	4.5%	2.3%	2.9%	3.9%	4.4%
Discount rate used to measure interest cost	3.3%	3.4%	2.3%	2.8%	3.3%	3.3%
Expected rate of return on plan assets	6.7%	6.9%	5.9%	6.1%	7.5%	7.5%
Rate of compensation increase	4.0%	4.0%	4.0%	3.5%	4.0%	4.0%

¹ Prior service cost (credit) for both pension and other postretirement benefits is generally amortized using the straight-line method over the average remaining service period of active employees expected to receive benefits from the plan. For pension plans in which all or almost all of the plan's participants are inactive and other postretirement benefit plans in which all or almost all of the plan's participants are fully eligible for benefits under the plan, prior service cost (credit) is amortized using the straight-line method over the remaining life expectancy of those participants.

² Curtailments and termination benefits were recognized in Other operating (income) expenses in the Consolidated Statement of Results of Operations.

We made \$106 million of contributions to our pension and other postretirement plans during the three months ended March 31, 2017. We currently anticipate full-year 2017 contributions of approximately \$610 million. We made \$115 million of contributions to our pension and other postretirement plans during the three months ended March 31, 2016.

B. Defined contribution benefit costs

Total company costs related to our defined contribution plans were as follows:

(Millions of dollars)	Three Months Ended March 31	
	2017	2016
U.S. Plans	\$ 80	\$ 85
Non-U.S. Plans	16	18
	\$ 96	\$ 103

10. Guarantees and product warranty

Caterpillar dealer performance guarantees

We have provided an indemnity to a third-party insurance company for potential losses related to performance bonds issued on behalf of Caterpillar dealers. The bonds have varying terms and are issued to insure governmental agencies against nonperformance by certain dealers. We also provided guarantees to third-parties related to the performance of contractual obligations by certain Caterpillar dealers. These guarantees have varying terms and cover potential financial losses incurred by the third-parties resulting from the dealers' nonperformance.

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In 2016, we provided a guarantee to an end user related to the performance of contractual obligations by a Caterpillar dealer. Under the guarantee, which expires in 2025, non-performance by the Caterpillar dealer could require Caterpillar to satisfy the contractual obligations by providing goods, services or financial compensation to the end user up to an annual designated cap.

Customer loan 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. In addition, Cat Financial participates in standby letters of credit issued to third parties on behalf of their customers. These standby letters of credit have varying terms and beneficiaries and are secured by customer assets.

Supplier consortium performance guarantee

We have provided a guarantee to one of our customers in Brazil related to the performance of contractual obligations by a supplier consortium to which one of our Caterpillar subsidiaries is a member. The guarantee covers potential damages (some of them capped) incurred by the customer resulting from the supplier consortium's non-performance. The guarantee will expire when the supplier consortium performs all its contractual obligations, which is expected to be completed in 2025.

Third party logistics business lease guarantees

We have provided guarantees to third-party lessors for certain properties leased by a third party logistics business, formerly Caterpillar Logistics Services LCC, in which we sold our 35 percent equity interest in the first quarter of 2015. The guarantees are for the possibility that the third party logistics business would default on real estate lease payments. The guarantees were granted at lease inception and generally will expire at the end of the lease terms.

We have dealer performance guarantees and third party performance guarantees that do not limit potential payment to end users related to indemnities and other commercial contractual obligations. For these unlimited guarantees, we are unable to estimate a maximum potential amount of future payments that could result from claims made.

No significant loss has been experienced or is anticipated under any of these guarantees. At both March 31, 2017 and December 31, 2016, the related liability was \$8 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 are as follows:

(Millions of dollars)	March 31, 2017	December 31, 2016
Caterpillar dealer performance guarantees	\$ 1,436	\$ 1,384
Customer loan guarantees	42	51
Supplier consortium performance guarantee	282	278
Third party logistics business lease guarantees	82	87
Other guarantees	77	56
Total guarantees	<u>\$ 1,919</u>	<u>\$ 1,856</u>

Cat Financial provides guarantees to repurchase certain loans of Caterpillar dealers from a special-purpose corporation (SPC) that qualifies as a variable interest entity. 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. Cat Financial has a loan purchase agreement with the SPC that obligates Cat Financial to purchase certain loans that are not paid at maturity. Cat Financial receives a fee for providing this guarantee, which provides a source of liquidity for the SPC. Cat Financial is the primary beneficiary of the SPC as its guarantees result in Cat Financial 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 Cat Financial has consolidated the financial statements of the SPC. As of March 31, 2017 and December 31, 2016, the SPC's assets of \$1,153 million and \$1,088 million, respectively, were primarily comprised of loans to dealers and the SPC's liabilities of \$1,152 million and \$1,087 million, respectively, were primarily comprised of commercial paper. The assets of the SPC are not available to pay Cat Financial's creditors. Cat Financial 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.

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Our product warranty liability is determined by applying historical claim rate experience to the current field population and dealer inventory. Generally, historical claim rates are based on actual warranty experience for each product by machine model/engine size by customer or dealer location (inside or outside North America). Specific rates are developed for each product shipment month and are updated monthly based on actual warranty claim experience.

(Millions of dollars)	2017
Warranty liability, January 1	\$ 1,258
Reduction in liability (payments)	(206)
Increase in liability (new warranties)	220
Warranty liability, March 31	<u>\$ 1,272</u>

(Millions of dollars)	2016
Warranty liability, January 1	\$ 1,354
Reduction in liability (payments)	(909)
Increase in liability (new warranties)	813
Warranty liability, December 31	<u>\$ 1,258</u>

11. Profit per share

Computations of profit per share:	Three Months Ended March 31	
(Dollars in millions except per share data)	2017	2016
Profit for the period (A) ¹	<u>\$ 192</u>	<u>\$ 271</u>
Determination of shares (in millions):		
Weighted-average number of common shares outstanding (B)	587.5	582.8
Shares issuable on exercise of stock awards, net of shares assumed to be purchased out of proceeds at average market price	5.7	4.9
Average common shares outstanding for fully diluted computation (C) ²	<u>593.2</u>	<u>587.7</u>
Profit per share of common stock:		
Assuming no dilution (A/B)	\$ 0.33	\$ 0.46
Assuming full dilution (A/C) ²	\$ 0.32	\$ 0.46
Shares outstanding as of March 31 (in millions)	589.1	583.9

¹ Profit attributable to common shareholders.

² Diluted by assumed exercise of stock-based compensation awards using the treasury stock method.

SARs and stock options to purchase 12,644,654 and 29,093,289 common shares were outstanding for the three months ended March 31, 2017 and 2016, respectively, which were not included in the computation of diluted earnings per share because the effect would have been anti-dilutive.

In January 2014, the Board authorized the repurchase of up to \$10.0 billion of Caterpillar common stock, which will expire on December 31, 2018. As of March 31, 2017, approximately \$4.5 billion of the \$10.0 billion authorization was spent.

12. Accumulated other comprehensive income (loss)

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

(Millions of dollars)	Foreign currency translation	Pension and other postretirement benefits	Derivative financial instruments	Available-for-sale securities	Total
<u>Three Months Ended March 31, 2017</u>					
Balance at December 31, 2016	\$ (1,970)	\$ 14	\$ (115)	\$ 32	\$ (2,039)
Other comprehensive income (loss) before reclassifications	145	8	10	8	171
Amounts reclassified from accumulated other comprehensive (income) loss	2	(4)	40	3	41
Other comprehensive income (loss)	147	4	50	11	212
Balance at March 31, 2017	<u>\$ (1,823)</u>	<u>\$ 18</u>	<u>\$ (65)</u>	<u>\$ 43</u>	<u>\$ (1,827)</u>
<u>Three Months Ended March 31, 2016</u>					
Balance at December 31, 2015	\$ (1,953)	\$ (69)	\$ (50)	\$ 37	\$ (2,035)
Other comprehensive income (loss) before reclassifications	408	118	9	6	541
Amounts reclassified from accumulated other comprehensive (income) loss	—	(10)	9	2	1
Other comprehensive income (loss)	408	108	18	8	542
Balance at March 31, 2016	<u>\$ (1,545)</u>	<u>\$ 39</u>	<u>\$ (32)</u>	<u>\$ 45</u>	<u>\$ (1,493)</u>

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The effect of the reclassifications out of Accumulated other comprehensive income (loss) on the Consolidated Statement of Results of Operations is as follows:

(Millions of dollars)	Classification of income (expense)	Three Months Ended March 31	
		2017	2016
Foreign currency translation			
Gain (loss) on foreign currency translation	Other income (expense)	\$ (2)	\$ —
Tax (provision) benefit		—	—
Reclassifications net of tax		<u>\$ (2)</u>	<u>\$ —</u>
Pension and other postretirement benefits:			
Amortization of prior service credit (cost)	Note 9 ¹	\$ 5	\$ 15
Tax (provision) benefit		(1)	(5)
Reclassifications net of tax		<u>\$ 4</u>	<u>\$ 10</u>
Derivative financial instruments:			
Foreign exchange contracts	Other income (expense)	\$ (61)	\$ (10)
Interest rate contracts	Interest expense excluding Financial Products	(2)	(2)
Interest rate contracts	Interest expense of Financial Products	1	(2)
Reclassifications before tax		(62)	(14)
Tax (provision) benefit		22	5
Reclassifications net of tax		<u>\$ (40)</u>	<u>\$ (9)</u>
Available-for-sale securities:			
Realized gain (loss)	Other income (expense)	\$ (4)	\$ (3)
Tax (provision) benefit		1	1
Reclassifications net of tax		<u>\$ (3)</u>	<u>\$ (2)</u>
Total reclassifications from Accumulated other comprehensive income (loss)		<u>\$ (41)</u>	<u>\$ (1)</u>

¹ Amounts are included in the calculation of net periodic benefit cost. See Note 9 for additional information.

13. Environmental and legal matters

The Company is regulated by federal, state and international environmental laws governing our use, transport and disposal of substances and control of emissions. In addition to governing our manufacturing and other operations, these laws often impact the development of our products, including, but not limited to, required compliance with air emissions standards applicable to internal combustion engines. We have made, and will continue to make, significant research and development and capital expenditures to comply with these emissions standards.

We are engaged in remedial activities at a number of locations, often with other companies, pursuant to federal and state laws. When it is probable we will pay remedial costs at a site, and those costs can be reasonably estimated, the investigation, remediation, and operating and maintenance costs are accrued against our earnings. Costs are accrued based on consideration of currently available data and information with respect to each individual site, including available technologies, current applicable laws and regulations, and prior remediation experience. Where no amount within a range of estimates is more likely, we accrue the minimum. Where multiple potentially responsible parties are involved, we consider our proportionate share of the probable costs. In formulating the estimate of probable costs, we do not consider amounts expected to be recovered from insurance companies or others. We reassess these accrued amounts on a quarterly

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basis. The amount recorded for environmental remediation is not material and is included in Accrued expenses. We believe there is no more than a remote chance that a material amount for remedial activities at any individual site, or at all the sites in the aggregate, will be required.

On January 7, 2015, the Company received a grand jury subpoena from the U.S. District Court for the Central District of Illinois. The subpoena requests documents and information from the Company relating to, among other things, financial information concerning U.S. and non-U.S. Caterpillar subsidiaries (including undistributed profits of non-U.S. subsidiaries and the movement of cash among U.S. and non-U.S. subsidiaries). The Company has received additional subpoenas relating to this investigation requesting additional documents and information relating to, among other things, the purchase and resale of replacement parts by Caterpillar Inc. and non-U.S. Caterpillar subsidiaries, dividend distributions of certain non-U.S. Caterpillar subsidiaries, and Caterpillar SARM and related structures. On March 2-3, 2017, agents with the Department of Commerce, the Federal Deposit Insurance Corporation and the Internal Revenue Service executed search and seizure warrants at three facilities of the Company in the Peoria, Illinois area, including its corporate headquarters. The warrants identify, and agents seized, documents and information related to, among other things, the export of products from the United States, the movement of products between the United States and Switzerland, the relationship between Caterpillar Inc. and Caterpillar SARM, and sales outside the United States. It is the Company's understanding that the warrants, which concern both tax and export activities, are related to the ongoing grand jury investigation. The Company is continuing to cooperate with this investigation. The Company is unable to predict the outcome or reasonably estimate any potential loss; however, we currently believe that this matter will not have a material adverse effect on the Company's consolidated results of operations, financial position or liquidity.

Beginning on September 10, 2014, the SEC issued to Caterpillar subpoenas seeking information concerning the Company's accounting for the goodwill relating to its acquisition of Bucyrus International Inc. in 2011 and related matters. On February 17, 2017, the Company was notified by the SEC that it concluded its investigation and that it did not intend to recommend an enforcement action against Caterpillar in these matters.

On March 20, 2014, Brazil's Administrative Council for Economic Defense (CADE) published a Technical Opinion which named 18 companies and over 100 individuals as defendants, including two subsidiaries of Caterpillar Inc., MGE - Equipamentos e Serviços Ferroviários Ltda. (MGE) and Caterpillar Brasil Ltda. The publication of the Technical Opinion opened CADE's official administrative investigation into allegations that the defendants participated in anticompetitive bid activity for the construction and maintenance of metro and train networks in Brazil. While companies cannot be held criminally liable for anticompetitive conduct in Brazil, criminal charges have been brought against two current employees of MGE and one former employee of MGE involving the same conduct alleged by CADE. The Company has responded to all requests for information from the authorities. The Company is unable to predict the outcome or reasonably estimate the potential loss; however, we currently believe that this matter will not have a material adverse effect on the Company's consolidated results of operations, financial position or liquidity.

On October 24, 2013, Progress Rail received a grand jury subpoena from the U.S. District Court for the Central District of California. The subpoena requests documents and information from Progress Rail, United Industries Corporation, a wholly-owned subsidiary of Progress Rail, and Caterpillar Inc. relating to allegations that Progress Rail conducted improper or unnecessary railcar inspections and repairs and improperly disposed of parts, equipment, tools and other items. In connection with this subpoena, Progress Rail was informed by the U.S. Attorney for the Central District of California that it is a target of a criminal investigation into potential violations of environmental laws and alleged improper business practices. The Company is cooperating with the authorities and is currently in discussions regarding a potential resolution of the matter. Although the Company believes a loss is probable, we currently believe that this matter will not have a material adverse effect on the Company's consolidated results of operations, financial position or liquidity.

In addition, we are involved in other unresolved legal actions that arise in the normal course of business. The most prevalent of these unresolved actions involve disputes related to product design, manufacture and performance liability (including claimed asbestos and welding fumes exposure), contracts, employment issues, environmental matters, intellectual property rights, and securities laws. The aggregate range of reasonably possible losses in excess of accrued liabilities, if any, associated with these unresolved legal actions is not material. In some cases, we cannot reasonably estimate a range of loss because there is insufficient information regarding the matter. However, we believe there is no more than a remote chance that any liability arising from these matters would be material. Although it is not possible to predict with certainty the outcome of these unresolved legal actions, we believe that these actions will not individually or in the aggregate have a material adverse effect on our consolidated results of operations, financial position or liquidity.

14. Income taxes

The provision for income taxes in the first quarter reflects an estimated annual tax rate of 32 percent, which excludes the discrete items discussed in the following paragraph, compared to 25 percent for the first quarter of 2016. The increase is primarily due to higher non-U.S. restructuring costs in 2017 that are taxed at relatively lower non-U.S. tax rates, along with other changes in the geographic mix of profits from a tax perspective. Under the terms of a manufacturing service agreement, Caterpillar SARL (CSARL) will bear substantially all of the restructuring costs related to the closure of our Gosselies, Belgium, facility, reducing CSARL's profits taxable in Switzerland.

In addition, during first quarter of 2017, a tax benefit of \$17 million was recorded for the settlement of stock-based compensation awards with tax deductions in excess of cumulative U.S. GAAP compensation expense. This benefit was offset by a \$15 million increase to prior year taxes related to Gosselies, Belgium restructuring costs.

In January 2015, we received a Revenue Agent's Report from the Internal Revenue Service (IRS) indicating the end of the field examination of our U.S. income tax returns for 2007 to 2009 including the impact of a loss carryback to 2005. The IRS field examination for 2010 to 2012 that began in 2015 is expected to be completed in 2017. In November 2016, we received notices of proposed adjustments from the IRS for the 2010 to 2012 exam. In both these audits, the IRS has proposed to tax in the United States profits earned from certain parts transactions by CSARL, based on the IRS examination team's application of the "substance-over-form" or "assignment-of-income" judicial doctrines. We are vigorously contesting the proposed increases to tax and penalties for these years of approximately \$2 billion. We believe that the relevant transactions complied with applicable tax laws and did not violate judicial doctrines. We have filed U.S. income tax returns on this same basis for years after 2012. Based on the information currently available, we do not anticipate a significant increase or decrease to our unrecognized tax benefits for this matter within the next 12 months. We currently believe the ultimate disposition of this matter will not have a material adverse effect on our consolidated financial position, liquidity or results of operations.

15. Segment information

A. Basis for segment information

Our Executive Office is comprised of five Group Presidents, an Executive Vice President and a CEO. Group Presidents are accountable for a related set of end-to-end businesses that they manage. The Executive Vice President leads the Law and Public Policy Division. The CEO allocates resources and manages performance at the Group President level. As such, the CEO serves as our Chief Operating Decision Maker and operating segments are primarily based on the Group President reporting structure.

Three of our operating segments, Construction Industries, Resource Industries and Energy & Transportation are led by Group Presidents. One operating segment, Financial Products, is led by a Group President who also has responsibility for Corporate Services. Corporate Services is a cost center primarily responsible for the performance of certain support functions globally and to provide centralized services; it does not meet the definition of an operating segment. One Group President leads two smaller operating segments that are included in the All Other operating segments. The Law and Public Policy Division is a cost center and does not meet the definition of an operating segment.

B. Description of segments

We have six operating segments, of which four are reportable segments. Following is a brief description of our reportable segments and the business activities included in the All Other operating segments:

Construction Industries: A segment primarily responsible for supporting customers using machinery in infrastructure, forestry and building construction applications. Responsibilities include business strategy, product design, product management and development, manufacturing, marketing and sales and product support. The product portfolio includes backhoe loaders, small wheel loaders, small track-type tractors, skid steer loaders, multi-terrain loaders, mini excavators, compact wheel loaders, telehandlers, select work tools, small, medium and large track excavators, wheel excavators, medium wheel loaders, compact track loaders, medium track-type tractors, track-type loaders, motor graders, pipelayers, forestry and paving products and related parts. Inter-segment sales are a source of revenue for this segment.

Resource Industries: A segment primarily responsible for supporting customers using machinery in mining, quarry, waste, and material handling applications. Responsibilities include business strategy, product design, product management

and development, manufacturing, marketing and sales and product support. The product portfolio includes large track-type tractors, large mining trucks, hard rock vehicles, longwall miners, electric rope shovels, draglines, hydraulic shovels, track and rotary drills, highwall miners, large wheel loaders, off-highway trucks, articulated trucks, wheel tractor scrapers, wheel dozers, landfill compactors, soil compactors, material handlers, continuous miners, scoops and haulers, hardrock continuous mining systems, select work tools, machinery components, electronics and control systems and related parts. In addition to equipment, Resource Industries also develops and sells technology products and services to provide customers fleet management, equipment management analytics and autonomous machine capabilities. Resource Industries also manages areas that provide services to other parts of the company, including integrated manufacturing and research and development. Inter-segment sales are a source of revenue for this segment.

Energy & Transportation: A segment primarily responsible for supporting customers using reciprocating engines, turbines, diesel-electric locomotives and related parts across industries serving power generation, industrial, oil and gas and transportation applications, including marine and rail-related businesses. Responsibilities include business strategy, product design, product management and development, manufacturing, marketing and sales and product support of turbines and turbine-related services, reciprocating engine powered generator sets, integrated systems used in the electric power generation industry, reciprocating engines and integrated systems and solutions for the marine and oil and gas industries; reciprocating engines supplied to the industrial industry as well as Cat machinery; the remanufacturing of Cat engines and components and remanufacturing services for other companies; the business strategy, product design, product management and development, manufacturing, remanufacturing, leasing and service of diesel-electric locomotives and components and other rail-related products and services and product support of on-highway vocational trucks for North America. Inter-segment sales are a source of revenue for this segment.

Financial Products Segment: Provides 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. The segment also provides insurance and risk management products and services that help customers and dealers manage their business risk. Insurance and risk management products offered include physical damage insurance, inventory protection plans, extended service coverage for machines and engines, and dealer property and casualty insurance. The various forms of financing, insurance and risk management products offered to customers and dealers help support the purchase and lease of our equipment.

All Other operating segments: Primarily includes activities such as: business strategy, product management and development, and manufacturing of filters and fluids, undercarriage, tires and rims, ground engaging tools, fluid transfer products, precision seals, and rubber sealing and connecting components primarily for Cat products; parts distribution; distribution services responsible for dealer development and administration including a wholly-owned dealer in Japan, dealer portfolio management and ensuring the most efficient and effective distribution of machines, engines and parts; digital investments for new customer and dealer solutions that integrate data analytics with state-of-the art digital technologies while transforming the buying experience. Results for the All Other operating segments are included as a reconciling item between reportable segments and consolidated external reporting.

C. Segment measurement and reconciliations

There are several methodology differences between our segment reporting and our external reporting. The following is a list of the more significant methodology differences:

- Machinery, Energy & Transportation segment net assets generally include inventories, receivables, property, plant and equipment, goodwill, intangibles, accounts payable, and customer advances. Liabilities other than accounts payable and customer advances are generally managed at the corporate level and are not included in segment operations. Financial Products Segment assets generally include all categories of assets.
- Segment inventories and cost of sales are valued using a current cost methodology.
- Goodwill allocated to segments is amortized using a fixed amount based on a 20 year useful life. This methodology difference only impacts segment assets; no goodwill amortization expense is included in segment profit. In addition, only a portion of goodwill for certain acquisitions made in 2011 or later has been allocated to segments.
- The present value of future lease payments for certain Machinery, Energy & Transportation operating leases is included in segment assets. The estimated financing component of the lease payments is excluded.

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- Currency exposures for Machinery, Energy & Transportation are generally managed at the corporate level and the effects of changes in exchange rates on results of operations within the year are not included in segment profit. The net difference created in the translation of revenues and costs between exchange rates used for U.S. GAAP reporting and exchange rates used for segment reporting is recorded as a methodology difference.
- Stock-based compensation expense is not included in segment profit.
- Postretirement benefit expenses are split; segments are generally responsible for service and prior service costs, with the remaining elements of net periodic benefit cost included as a methodology difference.
- Machinery, Energy & Transportation segment profit is determined on a pretax basis and excludes interest expense and other income/expense items. Financial Products Segment profit is determined on a pretax basis and includes other income/expense items.

Reconciling items are created based on accounting differences between segment reporting and our consolidated external reporting. Please refer to pages 33 to 37 for financial information regarding significant reconciling items. Most of our reconciling items are self-explanatory given the above explanations. For the reconciliation of profit, we have grouped the reconciling items as follows:

- **Corporate costs:** These costs are related to corporate requirements primarily for compliance and legal functions for the benefit of the entire organization.
- **Restructuring costs:** Primarily costs for employee separation costs, long-lived asset impairments and contract terminations. These costs are included in Other Operating (Income) Expenses. Restructuring costs also include other exit-related costs primarily for accelerated depreciation, inventory write-downs, equipment relocation, and project management. A table, Reconciliation of Restructuring costs on page 35, has been included to illustrate how segment profit would have been impacted by the restructuring costs. See Note 18 for more information.
- **Methodology differences:** See previous discussion of significant accounting differences between segment reporting and consolidated external reporting.
- **Timing:** Timing differences in the recognition of costs between segment reporting and consolidated external reporting. For example, certain costs are reported on the cash basis for segment reporting and the accrual basis for consolidated external reporting.

Reportable Segments
Three Months Ended March 31
(Millions of dollars)

	2017						
	External sales and revenues	Inter-segment sales and revenues	Total sales and revenues	Depreciation and amortization	Segment profit (loss)	Segment assets at March 31	Capital expenditures
Construction Industries	\$ 4,091	\$ 25	\$ 4,116	\$ 102	\$ 635	\$ 4,826	\$ 21
Resource Industries	1,670	91	1,761	127	158	6,797	21
Energy & Transportation	3,356	780	4,136	158	552	7,490	116
Machinery, Energy & Transportation	\$ 9,117	\$ 896	\$ 10,013	\$ 387	\$ 1,345	\$ 19,113	\$ 158
Financial Products Segment	760	—	760	208	183	36,367	246
Total	\$ 9,877	\$ 896	\$ 10,773	\$ 595	\$ 1,528	\$ 55,480	\$ 404

	2016						
	External sales and revenues	Inter-segment sales and revenues	Total sales and revenues	Depreciation and amortization	Segment profit (loss)	Segment assets at December 31	Capital expenditures
Construction Industries	\$ 4,043	\$ 8	\$ 4,051	\$ 113	\$ 440	\$ 5,367	\$ 28
Resource Industries	1,449	71	1,520	155	(96)	7,135	35
Energy & Transportation	3,278	632	3,910	166	410	7,791	147
Machinery, Energy & Transportation	\$ 8,770	\$ 711	\$ 9,481	\$ 434	\$ 754	\$ 20,293	\$ 210
Financial Products Segment	743	—	743	205	168	35,224	297
Total	\$ 9,513	\$ 711	\$ 10,224	\$ 639	\$ 922	\$ 55,517	\$ 507

Reconciliation of Sales and revenues:

(Millions of dollars)	Machinery, Energy & Transportation	Financial Products	Consolidating Adjustments	Consolidated Total
<u>Three Months Ended March 31, 2017</u>				
Total external sales and revenues from reportable segments	\$ 9,117	\$ 760	\$ —	\$ 9,877
All Other operating segments	37	—	—	37
Other	(24)	17	(85) ¹	(92)
Total sales and revenues	<u>\$ 9,130</u>	<u>\$ 777</u>	<u>\$ (85)</u>	<u>\$ 9,822</u>
<u>Three Months Ended March 31, 2016</u>				
Total external sales and revenues from reportable segments	\$ 8,770	\$ 743	\$ —	\$ 9,513
All Other operating segments	38	—	—	38
Other	(28)	16	(78) ¹	(90)
Total sales and revenues	<u>\$ 8,780</u>	<u>\$ 759</u>	<u>\$ (78)</u>	<u>\$ 9,461</u>

¹ Elimination of Financial Products revenues from Machinery, Energy & Transportation.

Reconciliation of Consolidated profit before taxes:

(Millions of dollars)	Machinery, Energy & Transportation	Financial Products	Consolidated Total
<u>Three Months Ended March 31, 2017</u>			
Total profit from reportable segments	\$ 1,345	\$ 183	\$ 1,528
All Other operating segments	(13)	—	(13)
Cost centers	7	—	7
Corporate costs	(115)	—	(115)
Timing	(38)	—	(38)
Restructuring costs	(751)	(1)	(752)
Methodology differences:			
Inventory/cost of sales	(68)	—	(68)
Postretirement benefit expense	41	—	41
Stock-based compensation expense	(47)	(2)	(49)
Financing costs	(130)	—	(130)
Currency	(39)	—	(39)
Other income/expense methodology differences	(55)	—	(55)
Other methodology differences	(32)	4	(28)
Total consolidated profit before taxes	<u>\$ 105</u>	<u>\$ 184</u>	<u>\$ 289</u>
<u>Three Months Ended March 31, 2016</u>			
Total profit from reportable segments	\$ 754	\$ 168	\$ 922
All Other operating segments	(7)	—	(7)
Cost centers	25	—	25
Corporate costs	(159)	—	(159)
Timing	32	—	32
Restructuring costs	(159)	(2)	(161)
Methodology differences:			
Inventory/cost of sales	(3)	—	(3)
Postretirement benefit expense	55	—	55
Stock-based compensation expense	(97)	(4)	(101)
Financing costs	(135)	—	(135)
Currency	(40)	—	(40)
Other income/expense methodology differences	(56)	—	(56)
Other methodology differences	(12)	5	(7)
Total consolidated profit before taxes	<u>\$ 198</u>	<u>\$ 167</u>	<u>\$ 365</u>

Reconciliation of Restructuring costs:

As noted above, restructuring costs are a reconciling item between Segment profit and Consolidated profit before taxes. Had we included the amounts in the segments' results, the profit would have been as shown below:

Reconciliation of Restructuring costs:

(Millions of dollars)

	<u>Segment profit (loss)</u>	<u>Restructuring costs</u>	<u>Segment profit (loss) with restructuring costs</u>
<u>Three Months Ended March 31, 2017</u>			
Construction Industries	\$ 635	\$ (667)	\$ (32)
Resource Industries	158	(59)	99
Energy & Transportation	552	(14)	538
Financial Products Segment	183	(1)	182
All Other operating segments	(13)	(6)	(19)
Total	<u>\$ 1,515</u>	<u>\$ (747)</u>	<u>\$ 768</u>

Three Months Ended March 31, 2016

Construction Industries	\$ 440	\$ (22)	\$ 418
Resource Industries	(96)	(25)	(121)
Energy & Transportation	410	(100)	310
Financial Products Segment	168	(2)	166
All Other operating segments	(7)	(5)	(12)
Total	<u>\$ 915</u>	<u>\$ (154)</u>	<u>\$ 761</u>

Reconciliation of Assets:

(Millions of dollars)	Machinery, Energy & Transportation	Financial Products	Consolidating Adjustments	Consolidated Total
<u>March 31, 2017</u>				
Total assets from reportable segments	\$ 19,113	\$ 36,367	\$ —	\$ 55,480
All Other operating segments	1,355	—	—	1,355
Items not included in segment assets:				
Cash and short-term investments	8,223	—	—	8,223
Intercompany receivables	1,671	—	(1,671)	—
Investment in Financial Products	3,863	—	(3,863)	—
Deferred income taxes	3,766	—	(920)	2,846
Goodwill and intangible assets	4,001	—	—	4,001
Property, plant and equipment – net and other assets	1,885	—	—	1,885
Operating lease methodology difference	(179)	—	—	(179)
Inventory methodology differences	(2,320)	—	—	(2,320)
Intercompany loan included in Financial Products' assets	—	—	(1,500)	(1,500)
Liabilities included in segment assets	8,312	—	—	8,312
Other	(484)	(21)	(49)	(554)
Total assets	<u>\$ 49,206</u>	<u>\$ 36,346</u>	<u>\$ (8,003)</u>	<u>\$ 77,549</u>
<u>December 31, 2016</u>				
Total assets from reportable segments	\$ 20,293	\$ 35,224	\$ —	\$ 55,517
All Other operating segments	1,381	—	—	1,381
Items not included in segment assets:				
Cash and short-term investments	5,257	—	—	5,257
Intercompany receivables	1,713	—	(1,713)	—
Investment in Financial Products	3,638	—	(3,638)	—
Deferred income taxes	3,648	—	(947)	2,701
Goodwill and intangible assets	3,883	—	—	3,883
Property, plant and equipment – net and other assets	1,645	—	—	1,645
Operating lease methodology difference	(186)	—	—	(186)
Inventory methodology differences	(2,373)	—	—	(2,373)
Liabilities included in segment assets	7,400	—	—	7,400
Other	(436)	(29)	(56)	(521)
Total assets	<u>\$ 45,863</u>	<u>\$ 35,195</u>	<u>\$ (6,354)</u>	<u>\$ 74,704</u>

Reconciliations of Depreciation and amortization:

(Millions of dollars)	Machinery, Energy & Transportation	Financial Products	Consolidated Total
<u>Three Months Ended March 31, 2017</u>			
Total depreciation and amortization from reportable segments	\$ 387	\$ 208	\$ 595
Items not included in segment depreciation and amortization:			
All Other operating segments	54	—	54
Cost centers	35	—	35
Other	15	11	26
Total depreciation and amortization	<u>\$ 491</u>	<u>\$ 219</u>	<u>\$ 710</u>
<u>Three Months Ended March 31, 2016</u>			
Total depreciation and amortization from reportable segments	\$ 434	\$ 205	\$ 639
Items not included in segment depreciation and amortization:			
All Other operating segments	52	—	52
Cost centers	40	—	40
Other	(1)	10	9
Total depreciation and amortization	<u>\$ 525</u>	<u>\$ 215</u>	<u>\$ 740</u>

Reconciliations of Capital expenditures:

(Millions of dollars)	Machinery, Energy & Transportation	Financial Products	Consolidating Adjustments	Consolidated Total
<u>Three Months Ended March 31, 2017</u>				
Total capital expenditures from reportable segments	\$ 158	\$ 246	\$ —	\$ 404
Items not included in segment capital expenditures:				
All Other operating segments	20	—	—	20
Cost centers	9	—	—	9
Timing	88	—	—	88
Other	(66)	57	(3)	(12)
Total capital expenditures	<u>\$ 209</u>	<u>\$ 303</u>	<u>\$ (3)</u>	<u>\$ 509</u>
<u>Three Months Ended March 31, 2016</u>				
Total capital expenditures from reportable segments	\$ 210	\$ 297	\$ —	\$ 507
Items not included in segment capital expenditures:				
All Other operating segments	16	—	—	16
Cost centers	12	—	—	12
Timing	217	—	—	217
Other	(76)	73	(9)	(12)
Total capital expenditures	<u>\$ 379</u>	<u>\$ 370</u>	<u>\$ (9)</u>	<u>\$ 740</u>

16. Cat Financial financing activities

Allowance for credit losses

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

Accounts are identified for individual review based on past-due status and using 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 Cat Financial's customers operate. The allowance for credit losses attributable to finance receivables that are individually evaluated and determined to be impaired is based either on the present value of expected future cash flows discounted at the receivables' effective interest rate or the fair value of the collateral for collateral-dependent receivables. In determining collateral value, Cat Financial estimates the current fair market value of the collateral less selling costs. Cat Financial also considers credit enhancements such as additional collateral and contractual third-party guarantees. The allowance for credit losses attributable to the remaining accounts not yet individually identified as impaired is estimated based on loss forecast models utilizing probabilities of default, our estimate of the loss emergence period and the estimated loss given default. In addition, qualitative factors not able to be fully captured in the loss forecast models including industry trends, macroeconomic factors and model imprecision are considered in the evaluation of the adequacy of the allowance for credit losses. These qualitative factors are subjective and require a degree of management judgment.

Cat Financial's allowance for credit losses is segregated into two portfolio segments:

- Customer - Finance receivables with retail customers.
- Dealer - Finance receivables with Caterpillar dealers.

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

Cat Financial further evaluates 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, Cat Financial's finance receivables within a geographic area have similar credit risk profiles and methods for assessing and monitoring credit risk. Cat Financial's classes, which align with management reporting for credit losses, are as follows:

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

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

(Millions of dollars)	March 31, 2017		
	Customer	Dealer	Total
Allowance for Credit Losses:			
Balance at beginning of year	\$ 331	\$ 10	\$ 341
Receivables written off	(24)	—	(24)
Recoveries on receivables previously written off	9	—	9
Provision for credit losses	12	2	14
Other	3	—	3
Balance at end of period	<u>\$ 331</u>	<u>\$ 12</u>	<u>\$ 343</u>
Individually evaluated for impairment	\$ 98	\$ —	\$ 98
Collectively evaluated for impairment	233	12	245
Ending Balance	<u>\$ 331</u>	<u>\$ 12</u>	<u>\$ 343</u>
Recorded Investment in Finance Receivables:			
Individually evaluated for impairment	\$ 858	\$ —	\$ 858
Collectively evaluated for impairment	18,027	3,537	21,564
Ending Balance	<u>\$ 18,885</u>	<u>\$ 3,537</u>	<u>\$ 22,422</u>

(Millions of dollars)	December 31, 2016		
	Customer	Dealer	Total
Allowance for Credit Losses:			
Balance at beginning of year	\$ 327	\$ 9	\$ 336
Receivables written off	(158)	—	(158)
Recoveries on receivables previously written off	35	—	35
Provision for credit losses	132	1	133
Other	(5)	—	(5)
Balance at end of year	<u>\$ 331</u>	<u>\$ 10</u>	<u>\$ 341</u>
Individually evaluated for impairment	\$ 85	\$ —	\$ 85
Collectively evaluated for impairment	246	10	256
Ending Balance	<u>\$ 331</u>	<u>\$ 10</u>	<u>\$ 341</u>
Recorded Investment in Finance Receivables:			
Individually evaluated for impairment	\$ 786	\$ —	\$ 786
Collectively evaluated for impairment	18,236	3,375	21,611
Ending Balance	<u>\$ 19,022</u>	<u>\$ 3,375</u>	<u>\$ 22,397</u>

Credit quality of finance receivables

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

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

March 31, 2017								
(Millions of dollars)	31-60 Days Past Due	61-90 Days Past Due	91+ Days Past Due	Total Past Due	Current	Recorded Investment in Finance Receivables	91+ Still Accruing	
Customer								
North America	\$ 56	\$ 17	\$ 61	\$ 134	\$ 7,837	\$ 7,971	\$ 7	
Europe	23	18	46	87	2,361	2,448	10	
Asia Pacific	21	8	15	44	1,529	1,573	5	
Mining	13	5	53	71	1,818	1,889	—	
Latin America	67	47	215	329	1,767	2,096	—	
Caterpillar Power Finance	30	7	66	103	2,805	2,908	6	
Dealer								
North America	—	—	—	—	2,086	2,086	—	
Europe	—	—	—	—	153	153	—	
Asia Pacific	—	—	—	—	567	567	—	
Mining	—	—	—	—	3	3	—	
Latin America	—	—	—	—	726	726	—	
Caterpillar Power Finance	—	—	—	—	2	2	—	
Total	\$ 210	\$ 102	\$ 456	\$ 768	\$ 21,654	\$ 22,422	\$ 28	

December 31, 2016								
(Millions of dollars)	31-60 Days Past Due	61-90 Days Past Due	91+ Days Past Due	Total Past Due	Current	Recorded Investment in Finance Receivables	91+ Still Accruing	
Customer								
North America	\$ 50	\$ 16	\$ 59	\$ 125	\$ 7,938	\$ 8,063	\$ 5	
Europe	16	12	39	67	2,388	2,455	6	
Asia Pacific	17	7	15	39	1,435	1,474	4	
Mining	3	2	63	68	1,756	1,824	2	
Latin America	40	33	214	287	1,808	2,095	—	
Caterpillar Power Finance	11	9	73	93	3,018	3,111	1	
Dealer								
North America	—	—	—	—	1,916	1,916	—	
Europe	—	—	—	—	161	161	—	
Asia Pacific	—	—	—	—	541	541	—	
Mining	—	—	—	—	3	3	—	
Latin America	—	—	—	—	752	752	—	
Caterpillar Power Finance	—	—	—	—	2	2	—	
Total	\$ 137	\$ 79	\$ 463	\$ 679	\$ 21,718	\$ 22,397	\$ 18	

Impaired finance receivables

For all classes, a finance receivable is considered impaired, based on current information and events, if it is probable that Cat Financial 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 restructurings.

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There were no impaired finance receivables as of March 31, 2017 or December 31, 2016, for the Dealer portfolio segment. Cat Financial's recorded investment in impaired finance receivables and the related unpaid principal balances and allowance for the Customer portfolio segment were as follows:

(Millions of dollars)	March 31, 2017			December 31, 2016		
	Recorded Investment	Unpaid Principal Balance	Related Allowance	Recorded Investment	Unpaid Principal Balance	Related Allowance
<u>Impaired Finance Receivables With No Allowance Recorded</u>						
North America	\$ 11	\$ 11	\$ —	\$ 10	\$ 10	\$ —
Europe	48	47	—	49	48	—
Asia Pacific	30	29	—	3	2	—
Mining	133	132	—	129	129	—
Latin America	67	67	—	68	68	—
Caterpillar Power Finance	289	289	—	271	271	—
Total	\$ 578	\$ 575	\$ —	\$ 530	\$ 528	\$ —
<u>Impaired Finance Receivables With An Allowance Recorded</u>						
North America	\$ 56	\$ 54	\$ 22	\$ 61	\$ 60	\$ 22
Europe	4	4	2	7	7	3
Asia Pacific	31	31	4	50	50	8
Mining	—	—	—	—	—	—
Latin America	110	121	39	93	104	34
Caterpillar Power Finance	79	78	31	45	44	18
Total	\$ 280	\$ 288	\$ 98	\$ 256	\$ 265	\$ 85
<u>Total Impaired Finance Receivables</u>						
North America	\$ 67	\$ 65	\$ 22	\$ 71	\$ 70	\$ 22
Europe	52	51	2	56	55	3
Asia Pacific	61	60	4	53	52	8
Mining	133	132	—	129	129	—
Latin America	177	188	39	161	172	34
Caterpillar Power Finance	368	367	31	316	315	18
Total	\$ 858	\$ 863	\$ 98	\$ 786	\$ 793	\$ 85

(Millions of dollars)	Three Months Ended March 31, 2017		Three Months Ended March 31, 2016	
	Average Recorded Investment	Interest Income Recognized	Average Recorded Investment	Interest Income Recognized
<u>Impaired Finance Receivables With No Allowance Recorded</u>				
North America	\$ 10	\$ —	\$ 14	\$ —
Europe	49	—	40	—
Asia Pacific	9	—	2	—
Mining	128	1	81	1
Latin America	72	1	27	—
Caterpillar Power Finance	267	3	253	3
Total	\$ 535	\$ 5	\$ 417	\$ 4
<u>Impaired Finance Receivables With An Allowance Recorded</u>				
North America	\$ 61	\$ —	\$ 14	\$ —
Europe	6	—	12	—
Asia Pacific	45	1	33	1
Mining	—	—	11	—
Latin America	96	1	51	1
Caterpillar Power Finance	63	1	59	—
Total	\$ 271	\$ 3	\$ 180	\$ 2
<u>Total Impaired Finance Receivables</u>				
North America	\$ 71	\$ —	\$ 28	\$ —
Europe	55	—	52	—
Asia Pacific	54	1	35	1
Mining	128	1	92	1
Latin America	168	2	78	1
Caterpillar Power Finance	330	4	312	3
Total	\$ 806	\$ 8	\$ 597	\$ 6

Recognition of income is suspended and the finance receivable is placed on non-accrual status when management determines that collection of future income is not probable (generally after 120 days past due). Recognition is resumed and previously suspended income is recognized when the finance receivable becomes current and collection of remaining amounts is considered probable. Payments received while the finance receivable is on non-accrual status are applied to interest and principal in accordance with the contractual terms.

As of March 31, 2017 and December 31, 2016, there were no finance receivables on non-accrual status for the Dealer portfolio segment.

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The recorded investment in customer finance receivables on non-accrual status was as follows:

(Millions of dollars)	March 31, 2017	December 31, 2016
North America	\$ 66	\$ 66
Europe	37	35
Asia Pacific	15	12
Mining	56	69
Latin America	308	307
Caterpillar Power Finance	70	90
Total	\$ 552	\$ 579

Troubled Debt Restructurings

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

As of March 31, 2017, there were no additional funds committed to lend to a borrower whose terms have been modified in a TDR. As of December 31, 2016, there was \$11 million of additional funds committed to lend to a borrower whose terms have been modified in a TDR.

There were no finance receivables modified as TDRs during the three months ended March 31, 2017 or 2016 for the Dealer portfolio segment. Our recorded investment in finance receivables in the Customer portfolio segment modified as TDRs during the three months ended March 31, 2017 and 2016, were as follows:

(Millions of dollars)	Three Months Ended March 31, 2017			Three Months Ended March 31, 2016		
	Number of Contracts	Pre-TDR Recorded Investment	Post-TDR Recorded Investment	Number of Contracts	Pre-TDR Recorded Investment	Post-TDR Recorded Investment
North America	9	\$ 1	\$ 1	11	\$ 10	\$ 10
Europe	1	—	—	—	—	—
Asia Pacific	5	39	30	4	3	3
Mining	2	57	56	—	—	—
Latin America	7	2	2	2	—	—
Caterpillar Power Finance	6	25	24	4	39	27
Total	30	\$ 124	\$ 113	21	\$ 52	\$ 40

17. Fair value disclosures

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.

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- **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 Caterpillar) will not be fulfilled. For financial assets traded in an active market (Level 1 and certain Level 2), the nonperformance risk is included in the market price. For certain other financial assets and liabilities (certain Level 2 and Level 3), our fair value calculations have been adjusted accordingly.

Investments in debt and equity securities

Investments in certain debt and equity securities, primarily at Insurance Services, have been classified as available-for-sale and recorded at fair value. Fair values for our U.S. treasury bonds and large capitalization value and smaller company growth equity securities are based upon valuations for identical instruments in active markets. Fair values for other government bonds, corporate bonds and mortgage-backed debt securities are based upon models that take into consideration such market-based factors as recent sales, risk-free yield curves and prices of similarly rated bonds.

In addition, Insurance Services has an equity investment in a real estate investment trust (REIT) which is recorded at fair value based on the net asset value (NAV) of the investment.

See Note 8 for additional information on our investments in debt and equity securities.

Derivative financial instruments

The fair value of interest rate contracts is primarily based on 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 and commodity forward, option and cross currency contracts is based on a valuation model that discounts cash flows resulting from the differential between the contract price and the market-based forward rate.

Assets and liabilities measured on a recurring basis at fair value, primarily related to Financial Products, included in our Consolidated Statement of Financial Position as of March 31, 2017 and December 31, 2016 are summarized below:

(Millions of dollars)	March 31, 2017			Total Assets / Liabilities, at Fair Value
	Level 1	Level 2	Level 3	
Assets				
Available-for-sale securities				
Government debt				
U.S. treasury bonds	\$ 9	\$ —	\$ —	\$ 9
Other U.S. and non-U.S. government bonds	—	58	—	58
Corporate bonds				
Corporate bonds	—	482	—	482
Asset-backed securities	—	88	—	88
Mortgage-backed debt securities				
U.S. governmental agency	—	212	—	212
Residential	—	9	—	9
Commercial	—	31	—	31
Equity securities				
Large capitalization value	325	—	—	325
Smaller company growth	60	—	—	60
Total available-for-sale securities	394	880	—	1,274
REIT	—	—	88	88
Total Assets	\$ 394	\$ 880	\$ 88	\$ 1,362
Liabilities				
Derivative financial instruments, net	—	21	—	21
Total Liabilities	\$ —	\$ 21	\$ —	\$ 21

(Millions of dollars)	December 31, 2016			Total Assets / Liabilities, at Fair Value
	Level 1	Level 2	Level 3	
Assets				
Available-for-sale securities				
Government debt				
U.S. treasury bonds	\$ 9	\$ —	\$ —	\$ 9
Other U.S. and non-U.S. government bonds	—	60	—	60
Corporate bonds				
Corporate bonds	—	492	—	492
Asset-backed securities	—	90	—	90
Mortgage-backed debt securities				
U.S. governmental agency	—	223	—	223
Residential	—	10	—	10
Commercial	—	36	—	36
Equity securities				
Large capitalization value	312	—	—	312
Smaller company growth	56	—	—	56
Total available-for-sale securities	377	911	—	1,288
REIT	—	—	79	79
Total Assets	\$ 377	\$ 911	\$ 79	\$ 1,367
Liabilities				
Derivative financial instruments, net	\$ —	\$ 72	\$ —	\$ 72
Total Liabilities	\$ —	\$ 72	\$ —	\$ 72

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The fair value of our REIT investment is measured based on NAV, which is considered a Level 3 input. A roll-forward for the three months ended March 31, 2017 of our REIT investment is as follows.

(Millions of dollars)	REIT
Balance at December 31, 2016	\$ 79
Purchases of securities	7
Sale of securities	—
Gains (losses) included in Accumulated other comprehensive income (loss)	2
Balance at March 31, 2017	\$ 88

In addition to the amounts above, Cat Financial 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, or the fair value of the collateral for collateral-dependent receivables. In determining collateral value, Cat Financial estimates the current fair market value of the collateral less selling costs. Cat Financial had impaired loans with a fair value of \$127 million and \$137 million as of March 31, 2017 and December 31, 2016, respectively.

B. Fair values of financial instruments

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

Cash and short-term investments

Carrying amount approximated fair value.

Restricted cash and short-term investments

Carrying amount approximated fair value. Restricted cash and short-term investments are included in Prepaid expenses and other current assets in the Consolidated Statement of Financial Position.

Finance receivables

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

Wholesale inventory receivables

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

Short-term borrowings

Carrying amount approximated fair value.

Long-term debt

Fair value for fixed and floating rate debt was estimated based on quoted market prices.

Guarantees

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

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

(Millions of dollars)	Fair Value of Financial Instruments					
	March 31, 2017		December 31, 2016		Fair Value Levels	Reference
	Carrying Amount	Fair Value	Carrying Amount	Fair Value		
Assets						
Cash and short-term investments	\$ 9,472	\$ 9,472	\$ 7,168	\$ 7,168	1	
Restricted cash and short-term investments	63	63	31	31	1	
Investments in debt and equity securities	1,362	1,362	1,367	1,367	1, 2 & 3	Note 8
Finance receivables – net (excluding finance leases ¹)	16,002	15,983	16,172	16,056	3	Note 16
Wholesale inventory receivables – net (excluding finance leases ¹)	1,424	1,391	1,500	1,464	3	Note 16
Interest rate contracts – net	2	2	3	3	2	Note 4
Commodity contracts – net	7	7	10	10	2	Note 4
Liabilities						
Short-term borrowings	7,821	7,821	7,303	7,303	1	
Long-term debt (including amounts due within one year)						
Machinery, Energy & Transportation	9,309	10,771	8,943	10,348	2	
Financial Products	21,152	21,341	20,537	20,724	2	
Foreign currency contracts – net	30	30	85	85	2	Note 4
Guarantees	8	8	8	8	3	Note 10

¹ Total excluded items have a net carrying value at March 31, 2017 and December 31, 2016 of \$6,301 million and \$6,111 million, respectively.

18. Restructuring costs

Our accounting for employee separations is dependent upon how the particular program is designed. For voluntary programs, eligible separation costs are recognized at the time of employee acceptance unless the acceptance requires explicit approval by the company. For involuntary programs, eligible costs are recognized when management has approved the program, the affected employees have been properly notified and the costs are estimable.

Restructuring costs for the three months ended March 31, 2017 and 2016 were as follows:

(Millions of dollars)	Three Months Ended March 31	
	2017	2016
Employee separations ¹	\$ 464	\$ 31
Contract terminations ¹	9	11
Long-lived asset impairments ¹	212	82
Defined benefit plan curtailments and termination benefits ¹	29	—
Other ²	38	37
Total restructuring costs	\$ 752	\$ 161

¹ Recognized in Other operating (income) expenses.

² Represents costs related to our restructuring programs, primarily for accelerated depreciation, inventory write-downs, equipment relocation and project management, which were recognized primarily in Cost of goods sold.

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In March 2017, Caterpillar informed Belgian authorities of the decision to proceed to a collective dismissal, which will lead to the closure of the Gosselies site, impacting about 2,000 employees. Production of Caterpillar products at the Gosselies site will be gradually phased out, with all production operations expected to end by mid-year 2017. The other operations and functions at the Gosselies site are expected to be gradually phased out until the end of 2017. We estimate restructuring costs incurred under this program to be about \$750 million. For the three months ended March 31, 2017, we recognized \$671 million of restructuring costs which included \$439 million of employee separation costs, \$199 million for long-lived asset impairments and \$33 million of other costs. The majority of the remaining costs are expected to be recognized in 2017. The remaining restructuring costs in the first quarter of 2017 primarily related to our decision to move production from the Aurora, Illinois, facility into other U.S. manufacturing facilities by the end of 2018, as well as other ongoing manufacturing facility consolidations.

The restructuring costs in the first quarter of 2016 were related to our decision to discontinue production of on-highway vocational trucks, as discussed below, and other restructuring actions across the company.

Restructuring costs are a reconciling item between Segment profit and Consolidated profit before taxes. See Note 15 for more information.

The following table summarizes the 2016 and 2017 employee separation activity:

(Millions of dollars)	
Liability balance at December 31, 2015	\$ 483
Increase in liability (separation charges)	297
Reduction in liability (payments)	(633)
Liability balance at December 31, 2016	\$ 147
Increase in liability (separation charges)	464
Reduction in liability (payments)	(62)
Liability balance at March 31, 2017	<u>\$ 549</u>

Most of the liability balance at March 31, 2017 is expected to be paid in 2017 and primarily includes employee separation payments related to our decision to close the Gosselies facility.

Restructuring costs for the year ended December 31, 2016 were \$1,019 million. Throughout 2016, we initiated the following restructuring plans:

- In February 2016, we made the decision to discontinue production of on-highway vocational trucks. Based on the business climate in the truck industry and a thorough evaluation of the business, the company decided it would withdraw from this market. We recognized \$104 million of restructuring costs, primarily related to long-lived asset impairments and sales discounts and expect to recognize the remaining \$6 million for this restructuring plan in 2017.
- In the second half of 2016, we took additional restructuring actions in Resource Industries, including ending the production of track drills; pursuing strategic alternatives, including a possible divestiture of room and pillar products; consolidation of two product development divisions; and additional actions in response to ongoing weakness in the mining industry. For the year ended December 31, 2016, we incurred \$369 million of restructuring costs for these plans primarily related to long-lived asset impairments, employee separation costs and inventory write-downs. For the three months ended March 31, 2017, we recognized \$5 million of restructuring costs for these plans and expect to recognize the remaining \$12 million for these plans in 2017.

In September 2015, we announced a large scale restructuring plan (the Plan) including a voluntary retirement enhancement program for qualifying U.S. employees, several voluntary separation programs outside of the U.S., additional involuntary programs throughout the company and manufacturing facility consolidations and closures expected to occur through 2018. The largest action among those included in the Plan was related to our European manufacturing footprint, which led to the Gosselies facility closure as discussed above. In the first quarter of 2017, we incurred \$705 million of restructuring costs related to the Plan, and we incurred \$281 million and \$569 million in 2016 and 2015, respectively, for a total of \$1,555 million through March 31, 2017. We expect to recognize approximately \$265 million of additional restructuring costs related to the Plan in 2017.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Overview

First-quarter 2017 sales and revenues were \$9.822 billion, a 4 percent increase from first-quarter 2016 sales and revenues of \$9.461 billion. The sales increase was primarily due to higher *sales volume*, with the most significant increase in *Resource Industries* mostly due to higher end-user demand for aftermarket parts, and favorable price realization. Profit per share for the first quarter of 2017 was \$0.32, a 30 percent decrease from first-quarter 2016 profit per share of \$0.46. Profit was \$192 million in the first quarter of 2017, a decrease of 29 percent from \$271 million in the first quarter of 2016. Profit declined primarily due to higher restructuring costs, but was largely offset by an increase in sales volume, lower *period costs*, improved *variable manufacturing costs* and favorable *price realization*.

Highlights for the first quarter of 2017 include:

- First-quarter sales and revenues were \$9.822 billion, compared with \$9.461 billion in the first quarter of 2016. Sales increased in Resource Industries and *Energy & Transportation* and were about flat in *Construction Industries*. *Financial Products' segment* revenues also increased.
- *Restructuring costs* were \$752 million in the first quarter of 2017 with an after-tax impact of \$0.96 per share, compared with restructuring costs of \$161 million in the first quarter of 2016 with an after-tax impact of \$0.18 per share.
- Profit per share was \$0.32 in the first quarter of 2017 and excluding restructuring costs of \$0.96 per share was \$1.28 per share. Profit per share in the first quarter of 2016 was \$0.46 and excluding restructuring costs of \$0.18 per share was \$0.64 per share.
- *Machinery, Energy & Transportation (ME&T)* operating cash flow was \$1.524 billion in the first quarter of 2017, compared to \$219 million in the first quarter of 2016.
- ME&T *debt-to-capital ratio* was 41.7 percent at March 31, 2017 compared to 41.0 percent at the end of 2016.

Restructuring Costs

In the first quarter of 2017, we continued our focus on structural cost reduction to help improve our long-term results. Restructuring costs of \$752 million were primarily related to the announced closure of the facility in Gosselies, Belgium. For 2017, we anticipate these and other restructuring actions will result in costs of about \$1.25 billion.

Notes:

- Glossary of terms is included on pages 57-59; first occurrence of terms shown in bold italics.
- Information on non-GAAP financial measures is included on page 64.

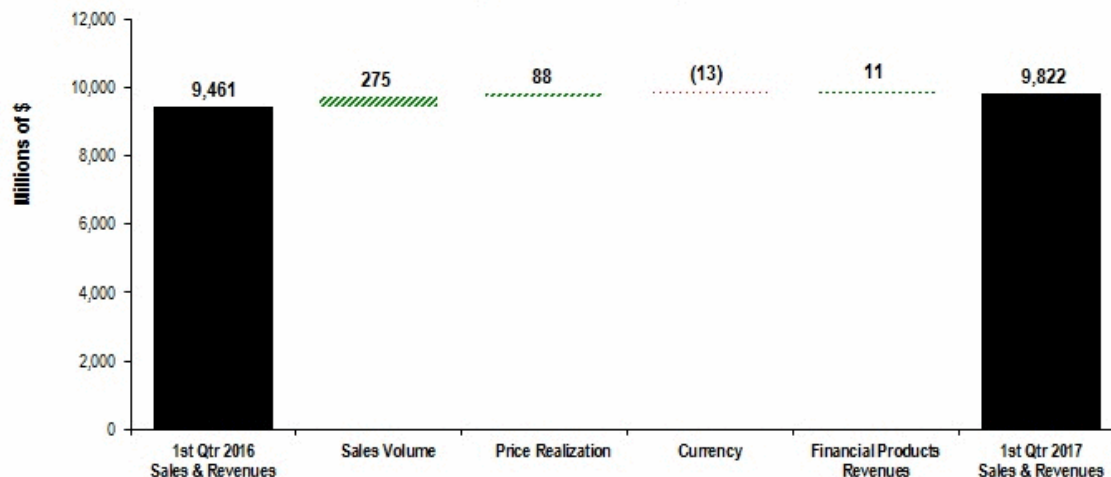
Consolidated Results of Operations

THREE MONTHS ENDED MARCH 31, 2017 COMPARED WITH THREE MONTHS ENDED MARCH 31, 2016

CONSOLIDATED SALES AND REVENUES

Consolidated Sales and Revenues Comparison

First Quarter 2017 vs. First Quarter 2016



The chart above graphically illustrates reasons for the change in Consolidated Sales and Revenues between the first quarter of 2016 (at left) and the first quarter of 2017 (at right). Items favorably impacting sales and revenues appear as upward stair steps with the corresponding dollar amounts above each bar, while items negatively impacting sales and revenues appear as downward stair steps with dollar amounts reflected in parentheses above each bar. Caterpillar management utilizes these charts internally to visually communicate with the company's board of directors and employees.

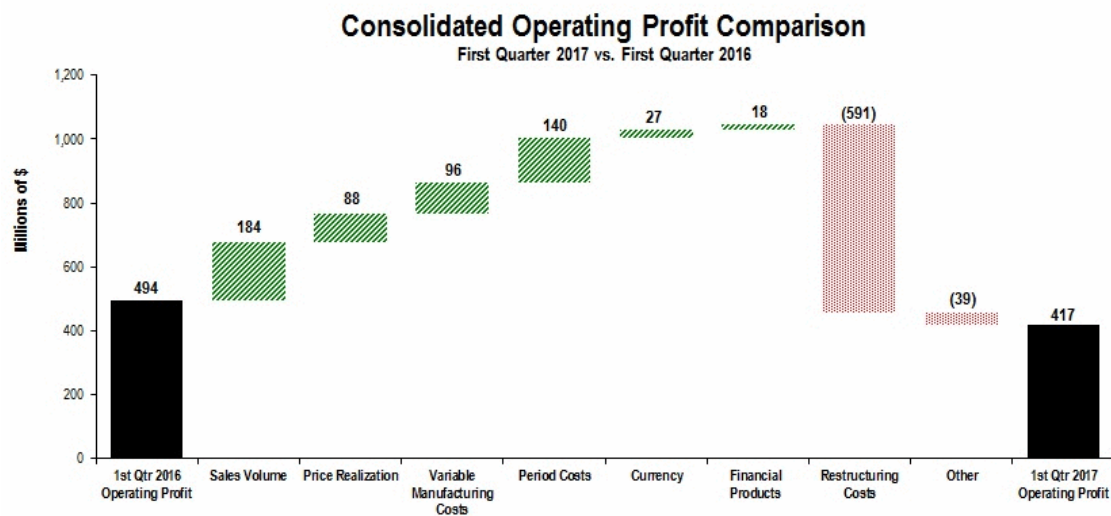
Sales and Revenues

Total sales and revenues were \$9.822 billion in the first quarter of 2017, an increase of \$361 million, or 4 percent, compared with \$9.461 billion in the first quarter of 2016. The increase was primarily due to higher sales volume, with the most significant increase in Resource Industries mostly due to higher end-user demand for aftermarket parts. Sales volume for Energy & Transportation increased slightly mostly due to aftermarket parts for reciprocating engines. Construction Industries' sales volume was about flat. Favorable price realization also contributed to the sales improvement. We believe the pricing environment will be competitive during the remainder of 2017 and expect price realization for the full year to be neutral to slightly positive. Financial Products' segment revenues increased 2 percent primarily due to higher average financing rates.

Sales increased in Asia/Pacific and *Latin America* and were about flat in *EAME* and North America. Asia/Pacific sales increased 12 percent primarily due to an increase in construction equipment sales in China resulting from increased infrastructure and residential investment, credit growth and decreased availability of used equipment. In addition, higher commodity prices and increased mining production favorably impacted demand for aftermarket parts in Australia. Sales increased 14 percent in Latin America primarily due to stabilizing economic conditions in several countries in the region that resulted in improved end-user demand from low levels. In North America, sales were flat as higher demand for aftermarket parts was offset by lower end-user demand for new equipment and the unfavorable impact of changes in dealer inventories as dealers increased inventories more in the first quarter of 2016 than in the first quarter of 2017. Also, increased demand in North America for oil and gas applications was about offset by lower sales for infrastructure construction equipment.

Dealer machine and engine inventories increased about \$200 million in the first quarter of 2017, compared to an increase of about \$300 million in the first quarter of 2016. Dealers generally increase inventories in the first quarter in preparation for the spring selling season. However, dealers are independent, and there could be many reasons for changes in their inventory levels, including their expectations of future demand and product delivery times. Dealers' demand expectations take into account seasonal changes, macroeconomic conditions, machine rental rates and other factors. Delivery times can vary based on availability of product from Caterpillar factories and product distribution centers. We expect dealers will reduce inventories in 2017, but the reduction will not be as significant as in 2016. We believe the level of dealer inventories at the end of 2017 will depend on dealer expectations for business in 2018.

CONSOLIDATED OPERATING PROFIT



The chart above graphically illustrates reasons for the change in Consolidated Operating Profit between the first quarter of 2016 (at left) and the first quarter of 2017 (at right). Items favorably impacting operating profit appear as upward stair steps with the corresponding dollar amounts above each bar, while items negatively impacting operating profit appear as downward stair steps with dollar amounts reflected in parentheses above each bar. Caterpillar management utilizes these charts internally to visually communicate with the company's board of directors and employees. The bar entitled Other includes *consolidating adjustments* and *Machinery, Energy & Transportation other operating (income) expenses*.

Operating profit for the first quarter of 2017 was \$417 million, compared with \$494 million in the first quarter of 2016, an unfavorable change of \$77 million driven by a significant increase in restructuring costs. Excluding restructuring costs, operating profit improved by \$514 million, compared with the first quarter of 2016. The increase was primarily due to higher sales volume, with nearly half of that increase due to a favorable mix of products. Lower period costs, improved variable manufacturing costs and favorable price realization also contributed to the increase in operating profit. About half of the variable manufacturing cost improvement was from lower material costs, and price realization was favorable in Construction Industries. We expect that material costs will increase from current levels in the second half of the year.

Period costs were lower primarily due to substantial restructuring and cost reduction actions over the past year. The reductions impacted period manufacturing costs, selling, general and administrative expenses and research and development expenses (R&D), with the most significant reduction in R&D. In addition, stock-based compensation expense was lower. These reductions were partially offset by higher short-term incentive compensation expense.

Stock-based compensation expense decreased \$52 million primarily due to timing. In the first quarter of 2017, we changed the vesting policy for the annual equity award to require six months of continuous employment prior to separation for participants who meet certain criteria (generally, 55 years of age or older and at least five years of service with the company) rather than to permit immediate vesting upon separation. Stock-based compensation expense for these individuals is now recognized over a six-month period, rather than in the first quarter. This change will not impact stock-based compensation expense for the year but does impact the quarterly expense pattern.

Restructuring costs of \$752 million in the first quarter of 2017 were primarily related to the announced closure of the facility in Gosselies, Belgium. In the first quarter of 2016, restructuring costs were \$161 million.

Short-term incentive compensation expense is directly related to financial and operational performance, measured against targets set annually. First-quarter 2017 expense was about \$235 million, compared with first-quarter 2016 expense of about \$120 million. We expect that short-term incentive compensation expense will be significantly higher in 2017 than in 2016.

Other Profit/Loss Items

- **Other income/expense** in the first quarter of 2017 was expense of \$5 million, compared with zero income/expense in the first quarter of 2016. The unfavorable change was primarily due to the impact from *currency* translation and hedging gains and losses. Net losses were higher in the first quarter of 2017, compared with the first quarter of 2016.
- The **provision for income taxes** in the first quarter reflects an estimated annual tax rate of 32 percent, which excludes the discrete items discussed in the following paragraph, compared to 25 percent for the first quarter of 2016. The increase is

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primarily due to higher non-U.S. restructuring costs in 2017 that are taxed at relatively lower non-U.S. tax rates, along with other changes in the geographic mix of profits from a tax perspective. Under the terms of a manufacturing service agreement, Caterpillar SARL (CSARL) will bear substantially all of the restructuring costs related to the closure of our Gosselies, Belgium, facility, reducing CSARL's profits taxable in Switzerland.

In addition, during first quarter of 2017, a tax benefit of \$17 million was recorded for the settlement of stock-based compensation awards with tax deductions in excess of cumulative U.S. GAAP compensation expense. This benefit was offset by a \$15 million increase to prior year taxes related to Gosselies, Belgium restructuring costs.

Excluding restructuring costs and discrete items, the 2017 estimated annual tax rate is expected to be 28 percent.

Segment Information

Sales and Revenues by Geographic Region

(Millions of dollars)	Total	% Change	North America	% Change	Latin America	% Change	EAME	% Change	Asia/ Pacific	% Change
First Quarter 2017										
Construction Industries ¹	\$ 4,091	1 %	\$ 1,913	(7)%	\$ 250	8 %	\$ 812	(4)%	\$ 1,116	23 %
Resource Industries ²	1,670	15 %	598	(1)%	269	— %	416	59 %	387	23 %
Energy & Transportation ³	3,356	2 %	1,722	10 %	275	38 %	900	(8)%	459	(13)%
All Other Segments ⁴	37	(3)%	8	(47)%	—	(100)%	16	78 %	13	— %
Corporate Items and Eliminations	(24)		(23)		—		(2)		1	
Machinery, Energy & Transportation Sales	9,130	4 %	4,218	— %	794	14 %	2,142	2 %	1,976	12 %
Financial Products Segment	760	2 %	486	6 %	83	(5)%	100	2 %	91	(8)%
Corporate Items and Eliminations	(68)		(38)		(14)		(4)		(12)	
Financial Products Revenues	692	2 %	448	5 %	69	(5)%	96	2 %	79	(11)%
Consolidated Sales and Revenues	\$ 9,822	4 %	\$ 4,666	— %	\$ 863	12 %	\$ 2,238	2 %	\$ 2,055	11 %
First Quarter 2016										
Construction Industries ¹	\$ 4,043		\$ 2,058		\$ 231		\$ 847		\$ 907	
Resource Industries ²	1,449		604		268		262		315	
Energy & Transportation ³	3,278		1,566		200		982		530	
All Other Segments ⁴	38		15		1		9		13	
Corporate Items and Eliminations	(28)		(24)		(1)		(2)		(1)	
Machinery, Energy & Transportation Sales	8,780		4,219		699		2,098		1,764	
Financial Products Segment	743		459		87		98		99	
Corporate Items and Eliminations	(62)		(34)		(14)		(4)		(10)	
Financial Products Revenues	681		425		73		94		89	
Consolidated Sales and Revenues	\$ 9,461		\$ 4,644		\$ 772		\$ 2,192		\$ 1,853	

¹ Does not include inter-segment sales of \$25 million and \$8 million in first quarter 2017 and 2016, respectively.

² Does not include inter-segment sales of \$91 million and \$71 million in first quarter 2017 and 2016, respectively.

³ Does not include inter-segment sales of \$780 million and \$632 million in first quarter 2017 and 2016, respectively.

⁴ Does not include inter-segment sales of \$95 million and \$92 million in first quarter 2017 and 2016, respectively.

Sales and Revenues by Segment

(Millions of dollars)	First Quarter 2016	Sales Volume	Price Realization	Currency	Other	First Quarter 2017	\$ Change	% Change
Construction Industries	\$ 4,043	\$ (68)	\$ 123	\$ (7)	\$ —	\$ 4,091	\$ 48	1 %
Resource Industries	1,449	246	(32)	7	—	1,670	221	15 %
Energy & Transportation	3,278	93	(1)	(14)	—	3,356	78	2 %
All Other Segments	38	(1)	—	—	—	37	(1)	(3)%
Corporate Items and Eliminations	(28)	5	(2)	1	—	(24)	4	
Machinery, Energy & Transportation Sales	8,780	275	88	(13)	—	9,130	350	4 %
Financial Products Segment	743	—	—	—	17	760	17	2 %
Corporate Items and Eliminations	(62)	—	—	—	(6)	(68)	(6)	
Financial Products Revenues	681	—	—	—	11	692	11	2 %
Consolidated Sales and Revenues	\$ 9,461	\$ 275	\$ 88	\$ (13)	\$ 11	\$ 9,822	\$ 361	4 %

Operating Profit / (Loss) by Segment

(Millions of dollars)	First Quarter 2017	First Quarter 2016	\$ Change	% Change
Construction Industries	\$ 635	\$ 440	\$ 195	44 %
Resource Industries	158	(96)	254	265 %
Energy & Transportation	552	410	142	35 %
All Other Segments	(13)	(7)	(6)	(86)%
Corporate Items and Eliminations	(1,030)	(357)	(673)	
Machinery, Energy & Transportation	302	390	(88)	(23)%
Financial Products Segment	183	168	15	9 %
Corporate Items and Eliminations	3	(1)	4	
Financial Products	186	167	19	11 %
Consolidating Adjustments	(71)	(63)	(8)	
Consolidated Operating Profit / (Loss)	\$ 417	\$ 494	\$ (77)	(16)%

Construction Industries

Construction Industries' sales were \$4.091 billion in the first quarter of 2017, compared with \$4.043 billion in the first quarter of 2016. The increase was due to favorable price realization, partially offset by slightly lower volume.

- Although market conditions remain competitive, price realization was favorable due to a particularly weak pricing environment in the first quarter of 2016 and previously announced price increases impacting the first quarter of 2017.
- Sales volume declined primarily due to the unfavorable impact of changes in dealer inventories resulting from a more significant increase in dealer inventories in the first quarter of 2016 than in the first quarter of 2017. This was partially offset by higher end-user demand, primarily for equipment in Asia/Pacific.

Sales increased in Asia/Pacific and decreased in North America. Sales were about flat in EAME and Latin America.

- Sales in Asia/Pacific were higher as a result of an increase in end-user demand, primarily in China, stemming from increased government support for infrastructure and strong residential investment, credit growth and decreased availability of used equipment. This increase was partially offset by an unfavorable impact from changes in dealer inventories, primarily in China, which were about flat in the first quarter of 2016 and decreased in the first quarter of 2017 as end-user demand outpaced our sales to dealers.
- In North America, the sales decline was primarily due to an unfavorable impact from changes in dealer inventories and lower end-user demand, partially offset by favorable price realization. End-user demand was lower in part due to lower deliveries into rental fleets in the first quarter of 2017, compared with the first quarter of 2016. Although residential and non-residential building construction activity improved, the company believes demand for new construction equipment has remained low due to end users' utilization of existing used equipment and weak infrastructure development. The unfavorable impact of

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changes in dealer inventories resulted from a more significant increase in dealer inventories in the first quarter of 2016 than in the first quarter of 2017.

Construction Industries' profit was \$635 million in the first quarter of 2017, compared with \$440 million in the first quarter of 2016. The increase in profit was primarily due to favorable price realization and lower period costs. The lower period costs were mostly a result of the favorable impact of restructuring and cost reduction actions.

Resource Industries

Resource Industries' sales were \$1.670 billion in the first quarter of 2017, an increase of \$221 million, or 15 percent, from the first quarter of 2016. The increase was primarily due to higher sales volume. While sales improved for both new equipment and aftermarket parts, most of the increase was for aftermarket parts, which have increased sequentially in each of the last four quarters. Sales for new equipment were favorably impacted by changes in dealer inventories, which more than offset lower end-user demand. We believe that mining companies are beginning to increase capital spending from low levels and this is expected to favorably impact sales for new equipment in the second half of the year. Dealer inventories increased slightly in the first quarter of 2017, compared with a decrease in the first quarter of 2016. Increases in certain commodity prices over the past year, along with continued commodity consumption, have resulted in increased mining production driving the need for maintenance and rebuild activities. We believe a decrease in idle mining trucks on customer sites is also having a positive impact on end-user demand. The company believes commodity prices need to stabilize at these higher levels to drive stronger activity and longer-term demand for both equipment and aftermarket parts.

Resource Industries' profit was \$158 million in the first quarter of 2017, compared with a loss of \$96 million in the first quarter of 2016. The favorable change was due to higher sales volume and lower period costs. Period costs were lower primarily due to the favorable impact of restructuring and cost reduction actions, partially offset by an increase in short-term incentive compensation expense.

Energy & Transportation

Energy & Transportation's sales were \$3.356 billion in the first quarter of 2017, compared with \$3.278 billion in the first quarter of 2016. The increase was primarily due to higher sales of aftermarket parts for reciprocating engines.

- **Oil and Gas** - The sales increase was primarily in North America, due to higher demand for aftermarket parts as a result of relatively stable oil prices and increasing fleet utilization as well as for reciprocating engines used in gas compression as natural gas pipeline build-out continued. This was partially offset by a decrease in Asia/Pacific primarily due to lower demand for equipment used in drilling and production applications.
- **Power Generation** - Sales decreased in EAME and were about flat in all other regions. The decline in EAME was primarily a result of continued weakness in the Middle East with oil prices continuing to limit investments.
- **Industrial** - Sales were about flat as increases in Asia/Pacific and Latin America were mostly offset by a decrease in EAME, reflecting changes in end-user demand for industrial applications.
- **Transportation** - Sales were about flat with an increase in demand for rail applications mostly offset by a decrease in sales for marine applications. Rail application sales increased primarily for rail services and aftermarket in North America despite continued weakness in the rail industry. The North American rail industry continues to be depressed with a significant number of idle locomotives. Sales declined in marine applications mostly due to lower demand, primarily for work boats and offshore vessels.

Energy & Transportation's profit was \$552 million in the first quarter of 2017, compared with \$410 million in the first quarter of 2016. The increase was primarily due to higher sales volume, a favorable impact from cost absorption and improved material costs. Cost absorption was favorable as inventory increased more in the first quarter of 2017 than in the first quarter of 2016. Period costs were about flat as the favorable impact of restructuring and cost reduction actions was about offset by higher short-term incentive compensation expense.

Financial Products Segment

Financial Products' revenues were \$760 million in the first quarter of 2017, an increase of \$17 million, or 2 percent, from the first quarter of 2016. The increase was primarily due to higher average financing rates in North America, partially offset by lower average *earning assets* in North America, Latin America and Asia/Pacific and lower average financing rates in Asia/Pacific.

Financial Products' profit was \$183 million in the first quarter of 2017, compared with \$168 million in the first quarter of 2016. The increase was primarily due to a decrease in the provision for credit losses at Cat Financial.

At the end of the first quarter of 2017, past dues at Cat Financial were 2.64 percent, compared with 2.78 percent at the end of the first quarter of 2016. Write-offs, net of recoveries, in the first quarter of 2017 were \$15 million, or 0.23 percent of the average

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retail portfolio, compared with \$31 million, or 0.47 percent of the average retail portfolio in the first quarter of 2016, and were below historical averages for the first quarter.

As of March 31, 2017, Cat Financial's allowance for credit losses totaled \$346 million, or 1.28 percent of finance receivables, compared with \$340 million, or 1.21 percent of finance receivables at March 31, 2016. The allowance for credit losses at year-end 2016 was \$343 million, or 1.29 percent of finance receivables.

Corporate Items and Eliminations

Expense for corporate items and eliminations was \$1.027 billion in the first quarter of 2017, an increase of \$669 million from the first quarter of 2016. Corporate items and eliminations include: restructuring costs; corporate-level expenses; timing differences, as some expenses are reported in segment profit on a cash basis; retirement benefit costs other than service cost; currency differences for ME&T, as segment profit is reported using annual fixed exchange rates; cost of sales methodology differences as segments use a current cost methodology; and inter-segment eliminations.

Restructuring costs in the first quarter of 2017 were \$752 million, \$591 million higher than the first quarter of 2016, primarily due to the announced closure of the facility in Gosselies, Belgium. Excluding restructuring costs, expense for corporate items and eliminations was \$275 million, an increase of \$78 million from the first quarter of 2016, primarily due to timing differences.

RESTRUCTURING COSTS

Restructuring costs for the three months ended March 31, 2017 and 2016 were as follows:

(Millions of dollars)	Three Months Ended March 31	
	2017	2016
Employee separations ¹	\$ 464	\$ 31
Contract terminations ¹	9	11
Long-lived asset impairments ¹	212	82
Defined benefit plan curtailments and termination benefits ¹	29	—
Other ²	38	37
Total restructuring costs	<u>\$ 752</u>	<u>\$ 161</u>

¹ Recognized in Other operating (income) expenses.

² Represents costs related to our restructuring programs, primarily for accelerated depreciation, inventory write-downs, equipment relocation and project management, which were recognized primarily in Cost of goods sold.

In March 2017, Caterpillar informed Belgian authorities of the decision to proceed to a collective dismissal, which will lead to the closure of the Gosselies site, impacting about 2,000 employees. Production of Caterpillar products at the Gosselies site will be gradually phased out, with all production operations expected to end by mid-year 2017. The other operations and functions at the Gosselies site are expected to be gradually phased out until the end of 2017. We estimate restructuring costs incurred under this program to be about \$750 million. For the three months ended March 31, 2017, we recognized \$671 million of restructuring costs which included \$439 million of employee separation costs, \$199 million for long-lived asset impairments and \$33 million of other costs. The majority of the remaining costs are expected to be recognized in 2017. The remaining restructuring costs in the first quarter of 2017 primarily related to our decision to move production from the Aurora, Illinois, facility into other U.S. manufacturing facilities by the end of 2018, as well as other ongoing manufacturing facility consolidations.

The restructuring costs in the first quarter of 2016 were related to our decision to discontinue production of on-highway vocational trucks, as discussed below, and other restructuring actions across the company.

Restructuring costs are a reconciling item between Segment profit and Consolidated profit before taxes.

The following table summarizes the 2016 and 2017 employee separation activity:

(Millions of dollars)	
Liability balance at December 31, 2015	\$ 483
Increase in liability (separation charges)	297
Reduction in liability (payments)	(633)
Liability balance at December 31, 2016	<u>\$ 147</u>
Increase in liability (separation charges)	464
Reduction in liability (payments)	(62)
Liability balance at March 31, 2017	<u><u>\$ 549</u></u>

Most of the liability balance at March 31, 2017 is expected to be paid in 2017 and primarily includes employee separation payments related to our decision to close the Gosselies facility.

Restructuring costs for the year ended December 31, 2016 were \$1,019 million. Throughout 2016, we initiated the following restructuring plans:

- In February 2016, we made the decision to discontinue production of on-highway vocational trucks. Based on the business climate in the truck industry and a thorough evaluation of the business, the company decided it would withdraw from this market. We recognized \$104 million of restructuring costs, primarily related to long-lived asset impairments and sales discounts and expect to recognize the remaining \$6 million for this restructuring plan in 2017.

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- In the second half of 2016, we took additional restructuring actions in Resource Industries, including ending the production of track drills; pursuing strategic alternatives, including a possible divestiture of room and pillar products; consolidation of two product development divisions; and additional actions in response to ongoing weakness in the mining industry. For the year ended December 31, 2016, we incurred \$369 million of restructuring costs for these plans primarily related to long-lived asset impairments, employee separation costs and inventory write-downs. For the three months ended March 31, 2017, we recognized \$5 million of restructuring costs for these plans and expect to recognize the remaining \$12 million for these plans in 2017.

In September 2015, we announced a large scale restructuring plan (the Plan) including a voluntary retirement enhancement program for qualifying U.S. employees, several voluntary separation programs outside of the U.S., additional involuntary programs throughout the company and manufacturing facility consolidations and closures expected to occur through 2018. The largest action among those included in the Plan was related to our European manufacturing footprint, which led to the Gosselies facility closure as discussed above. In the first quarter of 2017, we incurred \$705 million of restructuring costs related to the Plan, and we incurred \$281 million and \$569 million in 2016 and 2015, respectively, for a total of \$1,555 million through March 31, 2017. We expect to recognize approximately \$265 million of additional restructuring costs related to the Plan in 2017.

We expect 2017 restructuring costs will be approximately \$1.25 billion, an increase of \$750 million from our previous estimate of about \$500 million primarily due to the announced closure of our Gosselies, Belgium, manufacturing facility. We expect that restructuring actions will result in a benefit to operating costs, primarily SG&A expenses and Cost of goods sold of about \$450 million in 2017 compared with 2016.

GLOSSARY OF TERMS

1. **All Other Segments** - Primarily includes activities such as: business strategy, product management and development, and manufacturing of filters and fluids, undercarriage, tires and rims, ground engaging tools, fluid transfer products, precision seals, and rubber sealing and connecting components primarily for Cat® products; parts distribution; distribution services responsible for dealer development and administration including a wholly owned dealer in Japan, dealer portfolio management and ensuring the most efficient and effective distribution of machines, engines and parts; digital investments for new customer and dealer solutions that integrate data analytics with state-of-the art digital technologies while transforming the buying experience.
2. **Consolidating Adjustments** - Elimination of transactions between Machinery, Energy & Transportation and Financial Products.
3. **Construction Industries** - A segment primarily responsible for supporting customers using machinery in infrastructure, forestry and building construction applications. Responsibilities include business strategy, product design, product management and development, manufacturing, marketing and sales and product support. The product portfolio includes backhoe loaders, small wheel loaders, small track-type tractors, skid steer loaders, multi-terrain loaders, mini excavators, compact wheel loaders, telehandlers, select work tools, small, medium and large track excavators, wheel excavators, medium wheel loaders, compact track loaders, medium track-type tractors, track-type loaders, motor graders, pipelayers, forestry and paving products and related parts.
4. **Currency** - With respect to sales and revenues, currency represents the translation impact on sales resulting from changes in foreign currency exchange rates versus the U.S. dollar. With respect to operating profit, currency represents the net translation impact on sales and operating costs resulting from changes in foreign currency exchange rates versus the U.S. dollar. Currency includes the impact on sales and operating profit for the Machinery, Energy & Transportation lines of business only excluding restructuring costs; currency impacts on Financial Products' revenues and operating profit are included in the Financial Products' portions of the respective analyses. With respect to other income/expense, currency represents the effects of forward and option contracts entered into by the company to reduce the risk of fluctuations in exchange rates (hedging) and the net effect of changes in foreign currency exchange rates on our foreign currency assets and liabilities for consolidated results (translation).
5. **Debt-to-Capital Ratio** - A key measure of Machinery, Energy & Transportation's financial strength used by management. The metric is defined as Machinery, Energy & Transportation's short-term borrowings, long-term debt due within one year and long-term debt due after one year (debt) divided by the sum of Machinery, Energy & Transportation's debt and shareholders' equity. Debt also includes Machinery, Energy & Transportation's long-term borrowings from Financial Products.
6. **EAME** - A geographic region including Europe, Africa, the Middle East and the Commonwealth of Independent States (CIS).
7. **Earning Assets** - Assets consisting primarily of total finance receivables net of unearned income, plus equipment on operating leases, less accumulated depreciation at Cat Financial.

8. **Energy & Transportation** - A segment primarily responsible for supporting customers using reciprocating engines, turbines, diesel-electric locomotives and related parts across industries serving power generation, industrial, oil and gas and transportation applications, including marine and rail-related businesses. Responsibilities include business strategy, product design, product management and development, manufacturing, marketing and sales and product support of turbines and turbine-related services, reciprocating engine powered generator sets, integrated systems used in the electric power generation industry, reciprocating engines and integrated systems and solutions for the marine and oil and gas industries; reciprocating engines supplied to the industrial industry as well as Cat machinery; the remanufacturing of Cat engines and components and remanufacturing services for other companies; the business strategy, product design, product management and development, manufacturing, remanufacturing, leasing and service of diesel-electric locomotives and components and other rail-related products and services and product support of on-highway vocational trucks for North America.
9. **Financial Products Segment** - Provides 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. The segment also provides insurance and risk management products and services that help customers and dealers manage their business risk. Insurance and risk management products offered include physical damage insurance, inventory protection plans, extended service coverage for machines and engines, and dealer property and casualty insurance. The various forms of financing, insurance and risk management products offered to customers and dealers help support the purchase and lease of our equipment. Financial Products segment profit is determined on a pretax basis and includes other income/expense items.
10. **Latin America** - A geographic region including Central and South American countries and Mexico.
11. **Machinery, Energy & Transportation (ME&T)** - Represents the aggregate total of Construction Industries, Resource Industries, Energy & Transportation and All Other Segments and related corporate items and eliminations.
12. **Machinery, Energy & Transportation Other Operating (Income) Expenses** - Comprised primarily of gains/losses on disposal of long-lived assets, gains/losses on divestitures and legal settlements and accruals. Restructuring costs classified as other operating expenses on the Results of Operations are presented separately on the Operating Profit Comparison.
13. **Period Costs** - Includes period manufacturing costs, ME&T selling, general and administrative (SG&A) and research and development (R&D) expenses excluding the impact of currency and exit-related costs that are included in restructuring costs (see definition below). Period manufacturing costs support production but are defined as generally not having a direct relationship to short-term changes in volume. Examples include machinery and equipment repair, depreciation on manufacturing assets, facility support, procurement, factory scheduling, manufacturing planning and operations management. SG&A and R&D costs are not linked to the production of goods or services and include marketing, legal and finance services and the development of new and significant improvements in products or processes.
14. **Price Realization** - The impact of net price changes excluding currency and new product introductions. Price realization includes geographic mix of sales, which is the impact of changes in the relative weighting of sales prices between geographic regions.
15. **Resource Industries** - A segment primarily responsible for supporting customers using machinery in mining, quarry, waste, and material handling applications. Responsibilities include business strategy, product design, product management and development, manufacturing, marketing and sales and product support. The product portfolio includes large track-type tractors, large mining trucks, hard rock vehicles, longwall miners, electric rope shovels, draglines, hydraulic shovels, track and rotary drills, highwall miners, large wheel loaders, off-highway trucks, articulated trucks, wheel tractor scrapers, wheel dozers, landfill compactors, soil compactors, material handlers, continuous miners, scoops and haulers, hardrock continuous mining systems, select work tools, machinery components, electronics and control systems and related parts. In addition to equipment, Resource Industries also develops and sells technology products and services to provide customers fleet management, equipment management analytics and autonomous machine capabilities. Resource Industries also manages areas that provide services to other parts of the company, including integrated manufacturing and research and development.
16. **Restructuring Costs** - Primarily costs for employee separation costs, long-lived asset impairments and contract terminations. These costs are included in Other Operating (Income) Expenses. Restructuring costs also include other exit-related costs primarily for accelerated depreciation, inventory write-downs, equipment relocation and project management (primarily included in Cost of goods sold).
17. **Sales Volume** - With respect to sales and revenues, sales volume represents the impact of changes in the quantities sold for Machinery, Energy & Transportation as well as the incremental revenue impact of new product introductions, including emissions-related product updates. With respect to operating profit, sales volume represents the impact of changes in the quantities sold for Machinery, Energy & Transportation combined with product mix as well as the net operating profit impact of new product introductions, including emissions-related product updates. Product mix represents the net operating profit

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impact of changes in the relative weighting of Machinery, Energy & Transportation sales with respect to total sales. The impact of sales volume on segment profit includes intersegment sales.

18. **Variable Manufacturing Costs** - Represents volume-adjusted costs excluding the impact of currency and restructuring costs (see definition above). Variable manufacturing costs are defined as having a direct relationship with the volume of production. This includes material costs, direct labor and other costs that vary directly with production volume such as freight, power to operate machines and supplies that are consumed in the manufacturing process.

LIQUIDITY AND CAPITAL RESOURCES

Sources of funds

We generate significant capital resources from operating activities, which are the primary source of funding for our ME&T operations. Funding for these businesses is also available from commercial paper and long-term debt issuances. Financial Products' operations are funded primarily from commercial paper, term debt issuances and collections from its existing portfolio. During the first quarter of 2017, we experienced favorable liquidity conditions globally in both our ME&T and Financial Products' operations. On a consolidated basis, we ended the first quarter of 2017 with \$9.47 billion of cash, an increase of \$2.30 billion from year-end 2016. We intend to maintain a strong cash and liquidity position.

Our cash balances are held in numerous locations throughout the world with approximately \$7.7 billion held by our non-U.S. subsidiaries. Amounts held by non-U.S. subsidiaries are available for general corporate use. However, if non-U.S. earnings were repatriated in excess of the amount previously taxed in the United States, U.S. tax would generally be payable net of any available foreign tax credits.

Consolidated operating cash flow for the first quarter of 2017 was \$1.54 billion, up from \$490 million for the same period last year. The increase was primarily due to higher profit excluding restructuring costs in the first quarter of 2017, compared with the first quarter of 2016. First-quarter 2017 restructuring costs were primarily for severance costs that have not yet been paid and for non-cash impairment charges. Most of the severance costs will be paid during 2017. In addition, there were lower severance and short-term incentive compensation payments in the first quarter of 2017 versus the first quarter of 2016. See further discussion of operating cash flow under ME&T and Financial Products.

Total debt as of March 31, 2017 was \$38.28 billion, an increase of \$1.50 billion from year-end 2016. Debt related to Financial Products increased \$906 million, primarily due to the impact of lending activity with ME&T. Debt related to ME&T increased \$593 million in the first quarter of 2017, primarily due to the recognition of a liability related to a sale-leaseback transaction in Japan that has been accounted for as a financing as well as issuance of commercial paper used for general liquidity purposes.

We have three global credit facilities with a syndicate of banks totaling \$10.50 billion (Credit Facility) available in the aggregate to both Caterpillar and Cat Financial 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 ME&T as of March 31, 2017 was \$2.75 billion. Information on our three Global Credit Facilities is as follows:

- The 364-day facility of \$3.15 billion (of which \$0.82 billion is available to ME&T) expires in September 2017.
- The three-year facility of \$2.73 billion (of which \$0.72 billion is available to ME&T) expires in September 2019.
- The five-year facility of \$4.62 billion (of which \$1.21 billion is available to ME&T) expires in September 2021.

At March 31, 2017, Caterpillar's consolidated net worth was \$13.64 billion, which was above the \$9.00 billion required under the Credit Facility. The consolidated net worth is defined as the consolidated shareholders' equity including preferred stock but excluding the pension and other postretirement benefits balance within Accumulated other comprehensive income (loss).

At March 31, 2017, Cat Financial's covenant interest coverage ratio was 1.94 to 1. This is above the 1.15 to 1 minimum ratio calculated as (1) profit excluding income taxes, interest expense and net gain/(loss) from interest rate derivatives to (2) interest expense calculated at the end of each calendar quarter for the rolling four quarter period then most recently ended, required by the Credit Facility.

In addition, at March 31, 2017, Cat Financial's covenant leverage ratio was 7.44 to 1. This is below the maximum ratio of debt to net worth of 10 to 1, calculated (1) on a monthly basis as the average of the leverage ratios determined on the last day of each of the six preceding calendar months and (2) at each December 31, required by the Credit Facility.

In the event Caterpillar or Cat Financial does not meet one or more of their 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 Cat Financial's other lenders under other loan

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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 March 31, 2017, there were no borrowings under the Credit Facility.

Our total credit commitments and available credit as of March 31, 2017 were:

(Millions of dollars)	March 31, 2017		
	Consolidated	Machinery, Energy & Transportation	Financial Products
Credit lines available:			
Global credit facilities	\$ 10,500	\$ 2,750	\$ 7,750
Other external	4,423	10	4,413
Total credit lines available	14,923	2,760	12,163
Less: Commercial paper outstanding	(6,508)	(427)	(6,081)
Less: Utilized credit	(1,558)	(9)	(1,549)
Available credit	\$ 6,857	\$ 2,324	\$ 4,533

The other external consolidated credit lines with banks as of March 31, 2017 totaled \$4.42 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 subsidiaries for local funding requirements. Caterpillar or Cat Financial may guarantee subsidiary borrowings under these lines.

We receive debt ratings from the major rating agencies. In December 2016, Moody's Investors Service downgraded our long-term ratings to A3 from A2, and short-term ratings to Prime-2 from Prime-1. The Moody's downgrade did not have a material impact on our borrowing costs or our overall financial health. A further downgrade of our credit ratings by Moody's or one of the other major credit rating agencies would result in increased borrowing costs and could make access to certain credit markets more difficult. In the event economic conditions deteriorate such that access to debt markets becomes unavailable, ME&T's operations would rely on cash flow from operations, use of existing cash balances, borrowings from Cat Financial and access to our Credit Facility. Our Financial Products' operations would rely on cash flow from its existing portfolio, existing cash balances, access to our Credit Facility and other credit line facilities of Cat Financial and potential borrowings from Caterpillar. In addition, we maintain a support agreement with Cat Financial, which requires Caterpillar to remain the sole owner of Cat Financial and may, under certain circumstances, require Caterpillar to make payments to Cat Financial should Cat Financial fail to maintain certain financial ratios.

Machinery, Energy & Transportation

Net cash provided by operating activities was \$1.52 billion in the first quarter of 2017, compared with \$219 million for the same period in 2016. The increase was primarily due to higher profit excluding restructuring costs in the first quarter of 2017, compared with the first quarter of 2016. First-quarter 2017 restructuring costs were primarily for severance costs that have not yet been paid and for non-cash impairment charges. Most of the severance costs will be paid during 2017. In addition, there were lower severance and short-term incentive compensation payments in the first quarter of 2017 versus the first quarter of 2016.

Net cash used for investing activities in the first quarter of 2017 was \$166 million, compared with net cash used of \$1.32 billion in the first quarter of 2016. The change was primarily due to the absence of ME&T lending activity with Financial Products that occurred in the first quarter of 2016.

Net cash provided by financing activities during the first quarter of 2017 was \$1.61 billion, compared with \$508 million in the same period of 2016. The change was primarily due to an increase in ME&T borrowings from Financial Products in the first quarter of 2017 versus the first quarter of 2016. The first quarter of 2017 also included the recognition of a liability related to a sale-leaseback transaction in Japan that has been accounted for as a financing as well as increased issuance of commercial paper used for general liquidity purposes.

Although our short-term priorities for the use of cash may vary from time to time as business needs and conditions dictate, our long-term cash deployment strategy remains unchanged: maintain a strong financial position in support of our credit rating, provide capital to support growth, appropriately fund employee benefit plans, pay dividends and repurchase common stock.

Strong financial position – A key measure of ME&T's financial strength used by management is ME&T's debt-to-capital ratio. Debt-to-capital is defined as short-term borrowings, long-term debt due within one year and long-term debt due after one year (debt) divided by the sum of debt and shareholders' equity. Debt also includes ME&T's long-term borrowings from Financial Products. The debt-to-capital ratio for ME&T was 41.7 percent at March 31, 2017, within our target range

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of 30 to 45 percent. ME&T's debt-to-capital ratio was 41.0 percent at December 31, 2016. The increase in the debt-to-capital ratio was primarily due to the increase in debt during the first quarter of 2017.

Capital to support growth – Capital expenditures were \$209 million during the first quarter of 2017, compared to \$379 million for the same period in 2016. We expect ME&T's capital expenditures in 2017 to be about the same as 2016.

Appropriately funded employee benefit plans – We made \$106 million of contributions to our pension and other postretirement plans during the first quarter of 2017. We currently anticipate full-year 2017 contributions of approximately \$610 million. We made \$115 million of contributions to our pension and other postretirement plans during the first quarter of 2016. We believe we have adequate resources to fund our employee benefit plans.

Paying dividends – Dividends totaled \$452 million in the first quarter of 2017, representing 77 cents per share paid. Each quarter, our Board of Directors reviews the company's dividend for the applicable quarter. The Board evaluates the financial condition of the company and considers the economic outlook, corporate cash flow, the company's liquidity needs, and the health and stability of global credit markets to determine whether to maintain or change the quarterly dividend.

Common stock repurchases – In January 2014, the Board of Directors approved an authorization to repurchase up to \$10 billion of Caterpillar common stock (the 2014 Authorization), which will expire on December 31, 2018. We did not purchase any Caterpillar common stock in the first quarter of 2017. As of March 31, 2017, \$5.47 billion remained available under the 2014 Authorization. Caterpillar's basic shares outstanding as of March 31, 2017 were approximately 589 million.

Financial Products

Financial Products' operating cash flow was \$375 million in the first quarter of 2017, compared with \$355 million for the same period a year ago. Net cash used for investing activities was \$1.77 billion for the first quarter of 2017, compared with \$1.26 billion for the same period in 2016. The change was primarily due to the impact of intercompany lending with ME&T. Net cash provided by financing activities was \$724 million for the first quarter of 2017, compared with \$916 million for the same period in 2016. The change was primarily due to the impact of borrowings with ME&T.

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 2016 Annual Report on Form 10-K. Critical accounting policies that have been revised since our 2016 Annual Report on Form 10-K are as follows.

Fair values for goodwill impairment tests - We test goodwill for impairment annually, at the reporting unit level, and whenever events or circumstances make it likely that an impairment may have occurred, such as a significant adverse change in the business climate or a decision to sell all or a portion of a reporting unit. We perform our annual goodwill impairment test as of October 1 and monitor for interim triggering events on an ongoing basis.

Goodwill is reviewed for impairment utilizing either a qualitative assessment or a quantitative goodwill impairment test. If we choose to perform a qualitative assessment and determine the fair value more likely than not exceeds the carrying value, no further evaluation is necessary. Beginning in 2017, for reporting units where we perform the quantitative goodwill impairment test, we compare the fair value of each reporting unit, which we primarily determine using an income approach based on the present value of discounted cash flows, to the respective carrying value, which includes goodwill. If the fair value of the reporting unit exceeds its carrying value, the goodwill is not considered impaired. If the carrying value is higher than the fair value, the difference is recognized as an impairment loss. Prior to 2017, a two-step process was used. For reporting units where we performed the two-step process, the first step required us to compare the fair value of each reporting unit, which we primarily determined using an income approach based on the present value of discounted cash flows, to the respective carrying value, which includes goodwill. If the fair value of the reporting unit exceeded its carrying value, the goodwill was not considered impaired. If the carrying value was higher than the fair value, there was an indication that an impairment may have existed and the second step was required. In step two, the implied fair value of goodwill was calculated as the excess of the fair value of a reporting unit over the fair values assigned to its assets and liabilities. If the implied fair value of goodwill was less than the carrying value of the reporting unit's goodwill, the difference was recognized as an impairment loss.

The impairment test process requires valuation of the respective reporting unit, which we primarily determine using an income approach based on a discounted five year forecasted cash flow with a year-five residual value. The residual value is computed using the constant growth method, which values the forecasted cash flows in perpetuity. The income approach is supported by a reconciliation of our calculated fair value for Caterpillar to the company's market capitalization. The assumptions about future

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cash flows and growth rates are based on each reporting unit's long-term forecast and are subject to review and approval by senior management. A reporting unit's discount rate is a risk-adjusted weighted average cost of capital, which we believe approximates the rate from a market participant's perspective. The estimated fair value could be impacted by changes in market conditions, interest rates, growth rates, tax rates, costs, pricing and capital expenditures. The fair value determination is categorized as Level 3 in the fair value hierarchy due to its use of internal projections and unobservable measurement inputs.

An unfavorable change in our expectations for the financial performance of our reporting units, particularly long-term growth and profitability, would reduce the fair value of our reporting units. The demand for our equipment and related parts is highly cyclical and significantly impacted by commodity prices, although the impact may vary by reporting unit. The energy and mining industries are major users of our products, including the coal, iron ore, gold, copper, oil and natural gas industries. Decisions to purchase our products are dependent upon the performance of those industries, which in turn are dependent in part on commodity prices. Lower commodity prices or industry specific circumstances that have a negative impact to the valuation assumptions may reduce the fair value of our reporting units. Should such events occur and it becomes more likely than not that a reporting unit's fair value has fallen below its carrying value, we will perform an interim goodwill impairment test(s), in addition to the annual impairment test. Future impairment tests may result in a goodwill impairment, depending on the outcome of the quantitative impairment test. A goodwill impairment would be reported as a non-cash charge to earnings.

Stock-based compensation - We use a lattice-based option-pricing model to calculate the fair value of our stock options and SARs. The calculation of the fair value of the awards using the lattice-based option-pricing model is affected by our stock price on the date of grant as well as assumptions regarding the following:

- Volatility is a measure of the amount by which the stock price is expected to fluctuate each year during the expected term of the award and is based on historical Caterpillar stock price movement and current implied volatilities from traded options on Caterpillar stock. The implied volatilities from traded options are impacted by changes in market conditions. An increase in the volatility would result in an increase in our expense.
- The expected term represents the period of time that awards granted are expected to be outstanding and is an output of the lattice-based option-pricing model. In determining the expected term of the award, future exercise and forfeiture patterns are estimated from Caterpillar employee historical exercise behavior. These patterns are also affected by the vesting conditions of the award. Changes in the future exercise behavior of employees or in the vesting period of the award could result in a change in the expected term. An increase in the expected term would result in an increase to our expense.
- The weighted-average dividend yield is based on Caterpillar's historical dividend yields. As holders of stock options and SARs do not receive dividend payments, this could result in employees retaining the award for a longer period of time if dividend yields decrease or exercising the award sooner if dividend yields increase. A decrease in the dividend yield would result in an increase in our expense.
- The risk-free interest rate is based on the U.S. Treasury yield curve in effect at time of grant. As the risk-free interest rate increases, the expected term increases, resulting in an increase in our expense.

The fair value of our RSUs and PRSUs is determined by reducing the stock price on the date of grant by the present value of the estimated dividends to be paid during the vesting period. The estimated dividends are based on Caterpillar's quarterly dividend per share at the time of grant. A decrease in the dividend per share would result in an increase in our expense.

Stock-based compensation expense is recognized based on the grant date fair value. Forfeitures are accounted for in the period they occur as a reduction to expense. Stock-based compensation expense for PRSUs is based on the probable number of shares expected to vest. Changes in the expected probability of achieving performance targets in future periods may result in an increase or decrease in our expense.

OTHER MATTERS

Environmental and Legal Matters

The Company is regulated by federal, state and international environmental laws governing our use, transport and disposal of substances and control of emissions. In addition to governing our manufacturing and other operations, these laws often impact the development of our products, including, but not limited to, required compliance with air emissions standards applicable to internal combustion engines. We have made, and will continue to make, significant research and development and capital expenditures to comply with these emissions standards.

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We are engaged in remedial activities at a number of locations, often with other companies, pursuant to federal and state laws. When it is probable we will pay remedial costs at a site, and those costs can be reasonably estimated, the investigation, remediation, and operating and maintenance costs are accrued against our earnings. Costs are accrued based on consideration of currently available data and information with respect to each individual site, including available technologies, current applicable laws and regulations, and prior remediation experience. Where no amount within a range of estimates is more likely, we accrue the minimum. Where multiple potentially responsible parties are involved, we consider our proportionate share of the probable costs. In formulating the estimate of probable costs, we do not consider amounts expected to be recovered from insurance companies or others. We reassess these accrued amounts on a quarterly basis. The amount recorded for environmental remediation is not material and is included in Accrued expenses. We believe there is no more than a remote chance that a material amount for remedial activities at any individual site, or at all the sites in the aggregate, will be required.

On January 7, 2015, the Company received a grand jury subpoena from the U.S. District Court for the Central District of Illinois. The subpoena requests documents and information from the Company relating to, among other things, financial information concerning U.S. and non-U.S. Caterpillar subsidiaries (including undistributed profits of non-U.S. subsidiaries and the movement of cash among U.S. and non-U.S. subsidiaries). The Company has received additional subpoenas relating to this investigation requesting additional documents and information relating to, among other things, the purchase and resale of replacement parts by Caterpillar Inc. and non-U.S. Caterpillar subsidiaries, dividend distributions of certain non-U.S. Caterpillar subsidiaries, and Caterpillar SARM and related structures. On March 2-3, 2017, agents with the Department of Commerce, the Federal Deposit Insurance Corporation and the Internal Revenue Service executed search and seizure warrants at three facilities of the Company in the Peoria, Illinois area, including its corporate headquarters. The warrants identify, and agents seized, documents and information related to, among other things, the export of products from the United States, the movement of products between the United States and Switzerland, the relationship between Caterpillar Inc. and Caterpillar SARM, and sales outside the United States. It is the Company's understanding that the warrants, which concern both tax and export activities, are related to the ongoing grand jury investigation. The Company is continuing to cooperate with this investigation. The Company is unable to predict the outcome or reasonably estimate any potential loss; however, we currently believe that this matter will not have a material adverse effect on the Company's consolidated results of operations, financial position or liquidity.

Beginning on September 10, 2014, the SEC issued to Caterpillar subpoenas seeking information concerning the Company's accounting for the goodwill relating to its acquisition of Bucyrus International Inc. in 2011 and related matters. On February 17, 2017, the Company was notified by the SEC that it concluded its investigation and that it did not intend to recommend an enforcement action against Caterpillar in these matters.

On March 20, 2014, Brazil's Administrative Council for Economic Defense (CADE) published a Technical Opinion which named 18 companies and over 100 individuals as defendants, including two subsidiaries of Caterpillar Inc., MGE - Equipamentos e Serviços Ferroviários Ltda. (MGE) and Caterpillar Brasil Ltda. The publication of the Technical Opinion opened CADE's official administrative investigation into allegations that the defendants participated in anticompetitive bid activity for the construction and maintenance of metro and train networks in Brazil. While companies cannot be held criminally liable for anticompetitive conduct in Brazil, criminal charges have been brought against two current employees of MGE and one former employee of MGE involving the same conduct alleged by CADE. The Company has responded to all requests for information from the authorities. The Company is unable to predict the outcome or reasonably estimate the potential loss; however, we currently believe that this matter will not have a material adverse effect on the Company's consolidated results of operations, financial position or liquidity.

On October 24, 2013, Progress Rail received a grand jury subpoena from the U.S. District Court for the Central District of California. The subpoena requests documents and information from Progress Rail, United Industries Corporation, a wholly-owned subsidiary of Progress Rail, and Caterpillar Inc. relating to allegations that Progress Rail conducted improper or unnecessary railcar inspections and repairs and improperly disposed of parts, equipment, tools and other items. In connection with this subpoena, Progress Rail was informed by the U.S. Attorney for the Central District of California that it is a target of a criminal investigation into potential violations of environmental laws and alleged improper business practices. The Company is cooperating with the authorities and is currently in discussions regarding a potential resolution of the matter. Although the Company believes a loss is probable, we currently believe that this matter will not have a material adverse effect on the Company's consolidated results of operations, financial position or liquidity.

In addition, we are involved in other unresolved legal actions that arise in the normal course of business. The most prevalent of these unresolved actions involve disputes related to product design, manufacture and performance liability (including claimed asbestos and welding fumes exposure), contracts, employment issues, environmental matters, intellectual property rights, and securities laws. The aggregate range of reasonably possible losses in excess of accrued liabilities, if any, associated with these unresolved legal actions is not material. In some cases, we cannot reasonably estimate a range of loss because there is insufficient information regarding the matter. However, we believe there is no more than a remote chance that any liability arising from these

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matters would be material. Although it is not possible to predict with certainty the outcome of these unresolved legal actions, we believe that these actions will not individually or in the aggregate have a material adverse effect on our consolidated results of operations, financial position or liquidity.

Order Backlog

The dollar amount of backlog believed to be firm was approximately \$14.8 billion at March 31, 2017 and \$12.1 billion at December 31, 2016. This represents about a \$2.7 billion increase from the end of 2016. The increase was across all segments, but primarily in Energy & Transportation and Construction Industries. Compared with the first quarter of 2016, the order backlog increased \$1.7 billion. The increase was across all segments, and primarily in Construction Industries. Of the total backlog at March 31, 2017, approximately \$3.3 billion was not expected to be filled in the following twelve months.

NON-GAAP FINANCIAL MEASURES

The following definitions are provided for the non-GAAP financial measures used in this report. These non-GAAP financial measures have no standardized meaning prescribed by U.S. GAAP and therefore are unlikely to be comparable to the calculation of similar measures for other companies. Management does not intend for these items to be considered in isolation or as a substitute for the related GAAP measures.

We have incurred restructuring costs during the three month period ending March 31, 2017 and 2016. We believe it is important to separately quantify the profit-per-share impact of restructuring costs in order for our results to be meaningful to our readers as these costs are incurred in the current year to generate longer-term benefits. Reconciliation of profit per share excluding restructuring costs to the most directly comparable GAAP measure, profit per share - diluted are as follows:

	Three Months Ended March 31	
	2017	2016
Profit per share - diluted	\$ 0.32	\$ 0.46
Per share restructuring costs ¹	0.96	0.18
Profit per share excluding restructuring costs	\$ 1.28	\$ 0.64

¹ At estimated annual tax rate based on full-year outlook for per share restructuring costs at statutory tax rates. First-quarter 2017 at estimated annual tax rate of 22 percent plus a \$15 million increase to prior year taxes related to non-U.S. restructuring costs. First-quarter 2017 also includes a favorable interim adjustment of \$0.06 per share resulting from the difference in the estimated annual tax rate for consolidated reporting of 32 percent and the estimated annual tax rate for profit per share excluding restructuring costs and discrete items of 28 percent.

Supplemental Consolidating Data

We are providing supplemental consolidating data for the purpose of additional analysis. The data has been grouped as follows:

Consolidated – Caterpillar Inc. and its subsidiaries.

Machinery, Energy & Transportation – Caterpillar defines Machinery, Energy & Transportation as it is presented in the supplemental data as Caterpillar Inc. and its subsidiaries with Financial Products accounted for on the equity basis. Machinery, Energy & Transportation information relates to the design, manufacturing and marketing of our products. Financial Products' information relates to the financing to customers and dealers for the purchase and lease of Caterpillar and other equipment. The nature of these businesses is different, especially with regard to the financial position and cash flow items. Caterpillar management utilizes this presentation internally to highlight these differences. We also believe this presentation will assist readers in understanding our business.

Financial Products – Our finance and insurance subsidiaries, primarily Cat Financial and Insurance Services.

Consolidating Adjustments – Eliminations of transactions between Machinery, Energy & Transportation and Financial Products.

Pages 65 to 70 reconcile Machinery, Energy & Transportation with Financial Products on the equity basis to Caterpillar Inc. consolidated financial information.

Caterpillar Inc.
Supplemental Data for Results of Operations
For the Three Months Ended March 31, 2017
(Unaudited)
(Millions of dollars)

	Supplemental Consolidating Data			
	Consolidated	Machinery, Energy & Transportation ¹	Financial Products	Consolidating Adjustments
Sales and revenues:				
Sales of Machinery, Energy & Transportation	\$ 9,130	\$ 9,130	\$ —	\$ —
Revenues of Financial Products	692	—	777	(85) ²
Total sales and revenues	9,822	9,130	777	(85)
Operating costs:				
Cost of goods sold	6,758	6,758	—	—
Selling, general and administrative expenses	1,045	924	126	(5) ³
Research and development expenses	418	418	—	—
Interest expense of Financial Products	159	—	163	(4) ⁴
Other operating (income) expenses	1,025	728	302	(5) ³
Total operating costs	9,405	8,828	591	(14)
Operating profit	417	302	186	(71)
Interest expense excluding Financial Products	123	144	—	(21) ⁴
Other income (expense)	(5)	(53)	(2)	50 ⁵
Consolidated profit before taxes	289	105	184	—
Provision (benefit) for income taxes	90	34	56	—
Profit of consolidated companies	199	71	128	—
Equity in profit (loss) of unconsolidated affiliated companies	(5)	(5)	—	—
Equity in profit of Financial Products' subsidiaries	—	126	—	(126) ⁶
Profit of consolidated and affiliated companies	194	192	128	(126)
Less: Profit (loss) attributable to noncontrolling interests	2	—	2	—
Profit ⁷	<u>\$ 192</u>	<u>\$ 192</u>	<u>\$ 126</u>	<u>\$ (126)</u>

¹ Represents Caterpillar Inc. and its subsidiaries with Financial Products accounted for on the equity basis.

² Elimination of Financial Products' revenues earned from Machinery, Energy & Transportation.

³ Elimination of net expenses recorded by Machinery, Energy & Transportation paid to Financial Products.

⁴ Elimination of interest expense recorded between Financial Products and Machinery, Energy & Transportation.

⁵ Elimination of discount recorded by Machinery, Energy & Transportation on receivables sold to Financial Products and of interest earned between Machinery, Energy & Transportation and Financial Products.

⁶ Elimination of Financial Products' profit due to equity method of accounting.

⁷ Profit attributable to common shareholders.

Caterpillar Inc.
Supplemental Data for Results of Operations
For the Three Months Ended March 31, 2016
(Unaudited)
(Millions of dollars)

	Supplemental Consolidating Data			
	Consolidated	Machinery, Energy & Transportation ¹	Financial Products	Consolidating Adjustments
Sales and revenues:				
Sales of Machinery, Energy & Transportation	\$ 8,780	\$ 8,780	\$ —	\$ —
Revenues of Financial Products	681	—	759	(78) ²
Total sales and revenues	9,461	8,780	759	(78)
Operating costs:				
Cost of goods sold	6,822	6,822	—	—
Selling, general and administrative expenses	1,088	955	139	(6) ³
Research and development expenses	508	508	—	—
Interest expense of Financial Products	152	—	155	(3) ⁴
Other operating (income) expenses	397	105	298	(6) ³
Total operating costs	8,967	8,390	592	(15)
Operating profit	494	390	167	(63)
Interest expense excluding Financial Products	129	140	—	(11) ⁴
Other income (expense)	—	(52)	—	52 ⁵
Consolidated profit before taxes	365	198	167	—
Provision (benefit) for income taxes	92	40	52	—
Profit of consolidated companies	273	158	115	—
Equity in profit (loss) of unconsolidated affiliated companies	(1)	(1)	—	—
Equity in profit of Financial Products' subsidiaries	—	114	—	(114) ⁶
Profit of consolidated and affiliated companies	272	271	115	(114)
Less: Profit (loss) attributable to noncontrolling interests	1	—	1	—
Profit ⁷	<u>\$ 271</u>	<u>\$ 271</u>	<u>\$ 114</u>	<u>\$ (114)</u>

¹ Represents Caterpillar Inc. and its subsidiaries with Financial Products accounted for on the equity basis.

² Elimination of Financial Products' revenues earned from Machinery, Energy & Transportation.

³ Elimination of net expenses recorded by Machinery, Energy & Transportation paid to Financial Products.

⁴ Elimination of interest expense recorded between Financial Products and Machinery, Energy & Transportation.

⁵ Elimination of discount recorded by Machinery, Energy & Transportation on receivables sold to Financial Products and of interest earned between Machinery, Energy & Transportation and Financial Products.

⁶ Elimination of Financial Products' profit due to equity method of accounting.

⁷ Profit attributable to common shareholders.

Caterpillar Inc.
Supplemental Data for Financial Position
At March 31, 2017
(Unaudited)
(Millions of dollars)

	Supplemental Consolidating Data			
	Consolidated	Machinery, Energy & Transportation ¹	Financial Products	Consolidating Adjustments
Assets				
Current assets:				
Cash and short-term investments	\$ 9,472	\$ 8,223	\$ 1,249	\$ —
Receivables – trade and other	6,533	3,911	1,849	773 ^{2,3}
Receivables – finance	8,684	—	12,639	(3,955) ³
Prepaid expenses and other current assets	1,777	876	909	(8) ⁴
Inventories	9,082	9,082	—	—
Total current assets	35,548	22,092	16,646	(3,190)
Property, plant and equipment – net	14,727	10,427	4,300	—
Long-term receivables – trade and other	944	181	142	621 ^{2,3}
Long-term receivables – finance	13,426	—	14,077	(651) ³
Investments in Financial Products subsidiaries	—	3,863	—	(3,863) ⁵
Noncurrent deferred and refundable income taxes	2,940	3,766	94	(920) ⁶
Intangible assets	2,287	2,282	5	—
Goodwill	6,051	6,034	17	—
Other assets	1,626	561	1,065	—
Total assets	\$ 77,549	\$ 49,206	\$ 36,346	\$ (8,003)
Liabilities				
Current liabilities:				
Short-term borrowings	\$ 7,821	\$ 436	\$ 7,385	\$ —
Short-term borrowings with consolidated companies	—	1,500	1,593	(3,093) ⁷
Accounts payable	5,302	5,191	200	(89) ⁸
Accrued expenses	3,086	2,807	279	—
Accrued wages, salaries and employee benefits	1,666	1,642	24	—
Customer advances	1,383	1,383	—	—
Other current liabilities	1,641	1,176	473	(8) ^{6,9}
Long-term debt due within one year	6,736	505	6,231	—
Total current liabilities	27,635	14,640	16,185	(3,190)
Long-term debt due after one year	23,725	8,834	14,921	(30) ⁷
Liability for postemployment benefits	9,291	9,291	—	—
Other liabilities	3,238	2,781	1,377	(920) ⁶
Total liabilities	63,889	35,546	32,483	(4,140)
Commitments and contingencies				
Shareholders' equity				
Common stock	5,222	5,222	918	(918) ⁵
Treasury stock	(17,391)	(17,391)	—	—
Profit employed in the business	27,584	27,584	3,711	(3,711) ⁵
Accumulated other comprehensive income (loss)	(1,827)	(1,827)	(893)	893 ⁵
Noncontrolling interests	72	72	127	(127) ⁵
Total shareholders' equity	13,660	13,660	3,863	(3,863)
Total liabilities and shareholders' equity	\$ 77,549	\$ 49,206	\$ 36,346	\$ (8,003)

¹ Represents Caterpillar Inc. and its subsidiaries with Financial Products accounted for on the equity basis.

² Elimination of receivables between Machinery, Energy & Transportation and Financial Products.

³ Reclassification of Machinery, Energy & Transportation's trade receivables purchased by Financial Products and Financial Products' wholesale inventory receivables.

⁴ Elimination of Machinery, Energy & Transportation's insurance premiums that are prepaid to Financial Products.

⁵ Elimination of Financial Products' equity which is accounted for by Machinery, Energy & Transportation on the equity basis.

⁶ Reclassification reflecting required netting of deferred tax assets / liabilities by taxing jurisdiction.

⁷ Elimination of debt between Machinery, Energy & Transportation and Financial Products.

- ⁸ Elimination of payables between Machinery, Energy & Transportation and Financial Products.
- ⁹ Elimination of prepaid insurance in Financial Products' other liabilities.

Caterpillar Inc.
Supplemental Data for Financial Position
At December 31, 2016
(Unaudited)
(Millions of dollars)

	Supplemental Consolidating Data			
	Consolidated	Machinery, Energy & Transportation ¹	Financial Products	Consolidating Adjustments
Assets				
Current assets:				
Cash and short-term investments	\$ 7,168	\$ 5,257	\$ 1,911	\$ —
Receivables – trade and other	5,981	3,910	377	1,694 ^{2,3}
Receivables – finance	8,522	—	11,934	(3,412) ³
Prepaid expenses and other current assets	1,682	764	926	(8) ⁴
Inventories	8,614	8,614	—	—
Total current assets	31,967	18,545	15,148	(1,726)
Property, plant and equipment – net	15,322	10,899	4,423	—
Long-term receivables – trade and other	1,029	177	138	714 ^{2,3}
Long-term receivables – finance	13,556	—	14,300	(744) ³
Investments in Financial Products subsidiaries	—	3,638	—	(3,638) ⁵
Noncurrent deferred and refundable income taxes	2,790	3,648	89	(947) ⁶
Intangible assets	2,349	2,344	5	—
Goodwill	6,020	6,003	17	—
Other assets	1,671	609	1,075	(13) ⁴
Total assets	\$ 74,704	\$ 45,863	\$ 35,195	\$ (6,354)
Liabilities				
Current liabilities:				
Short-term borrowings	\$ 7,303	\$ 209	\$ 7,094	\$ —
Short-term borrowings with consolidated companies	—	—	1,637	(1,637) ⁷
Accounts payable	4,614	4,506	189	(81) ⁸
Accrued expenses	3,003	2,744	259	—
Accrued wages, salaries and employee benefits	1,296	1,268	28	—
Customer advances	1,167	1,167	—	—
Dividends payable	452	452	—	—
Other current liabilities	1,635	1,245	399	(9) ^{6,9}
Long-term debt due within one year	6,662	507	6,155	—
Total current liabilities	26,132	12,098	15,761	(1,727)
Long-term debt due after one year	22,818	8,466	14,382	(30) ⁷
Liability for postemployment benefits	9,357	9,357	—	—
Other liabilities	3,184	2,729	1,414	(959) ^{6,9}
Total liabilities	61,491	32,650	31,557	(2,716)
Commitments and contingencies				
Shareholders' equity				
Common stock	5,277	5,277	918	(918) ⁵
Treasury stock	(17,478)	(17,478)	—	—
Profit employed in the business	27,377	27,377	3,585	(3,585) ⁵
Accumulated other comprehensive income (loss)	(2,039)	(2,039)	(990)	990 ⁵
Noncontrolling interests	76	76	125	(125) ⁵
Total shareholders' equity	13,213	13,213	3,638	(3,638)
Total liabilities and shareholders' equity	\$ 74,704	\$ 45,863	\$ 35,195	\$ (6,354)

¹ Represents Caterpillar Inc. and its subsidiaries with Financial Products accounted for on the equity basis.

² Elimination of receivables between Machinery, Energy & Transportation and Financial Products.

³ Reclassification of Machinery, Energy & Transportation's trade receivables purchased by Financial Products and Financial Products' wholesale inventory receivables.

⁴ Elimination of Machinery, Energy & Transportation's insurance premiums that are prepaid to Financial Products.

⁵ Elimination of Financial Products' equity which is accounted for by Machinery, Energy & Transportation on the equity basis.

- ⁶ Reclassification reflecting required netting of deferred tax assets / liabilities by taxing jurisdiction.
 - ⁷ Elimination of debt between Machinery, Energy & Transportation and Financial Products.
 - ⁸ Elimination of payables between Machinery, Energy & Transportation and Financial Products.
 - ⁹ Elimination of prepaid insurance in Financial Products' other liabilities.
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Caterpillar Inc.
Supplemental Data for Cash Flow
For the Three Months Ended March 31, 2017
(Unaudited)
(Millions of dollars)

	Supplemental Consolidating Data			
	Consolidated	Machinery, Energy & Transportation ¹	Financial Products	Consolidating Adjustments
Cash flow from operating activities:				
Profit of consolidated and affiliated companies	\$ 194	\$ 192	\$ 128	\$ (126) ²
Adjustments for non-cash items:				
Depreciation and amortization	710	491	219	—
Undistributed profit of Financial Products	—	(126)	—	126 ³
Other	301	302	(48)	47 ⁴
Changes in assets and liabilities, net of acquisitions and divestitures:				
Receivables - trade and other	(353)	(8)	52	(397) ^{4,5}
Inventories	(444)	(444)	—	—
Accounts payable	732	734	6	(8) ⁴
Accrued expenses	132	130	2	—
Accrued wages, salaries and employee benefits	360	364	(4)	—
Customer advances	193	193	—	—
Other assets - net	(261)	(196)	(25)	(40) ⁴
Other liabilities - net	(23)	(108)	45	40 ⁴
Net cash provided by (used for) operating activities	<u>1,541</u>	<u>1,524</u>	<u>375</u>	<u>(358)</u>
Cash flow from investing activities:				
Capital expenditures - excluding equipment leased to others	(204)	(203)	(1)	—
Expenditures for equipment leased to others	(305)	(6)	(302)	3 ⁴
Proceeds from disposals of leased assets and property, plant and equipment	234	41	194	(1) ⁴
Additions to finance receivables	(2,122)	—	(2,535)	413 ⁵
Collections of finance receivables	2,272	—	2,788	(516) ⁵
Net intercompany purchased receivables	—	—	(459)	459 ⁵
Proceeds from sale of finance receivables	17	—	17	—
Net intercompany borrowings	—	50	(1,500)	1,450 ⁶
Investments and acquisitions (net of cash acquired)	(18)	(18)	—	—
Proceeds from sale of securities	89	6	83	—
Investments in securities	(65)	(2)	(63)	—
Other - net	(23)	(34)	11	—
Net cash provided by (used for) investing activities	<u>(125)</u>	<u>(166)</u>	<u>(1,767)</u>	<u>1,808</u>
Cash flow from financing activities:				
Dividends paid	(452)	(452)	—	—
Distribution to noncontrolling interests	(6)	(6)	—	—
Common stock issued, including treasury shares reissued	(19)	(19)	—	—
Net intercompany borrowings	—	1,500	(50)	(1,450) ⁶
Proceeds from debt issued (original maturities greater than three months)	2,715	360	2,355	—
Payments on debt (original maturities greater than three months)	(1,977)	(4)	(1,973)	—
Short-term borrowings - net (original maturities three months or less)	618	226	392	—
Net cash provided by (used for) financing activities	<u>879</u>	<u>1,605</u>	<u>724</u>	<u>(1,450)</u>
Effect of exchange rate changes on cash	<u>9</u>	<u>3</u>	<u>6</u>	<u>—</u>
Increase (decrease) in cash and short-term investments	<u>2,304</u>	<u>2,966</u>	<u>(662)</u>	<u>—</u>
Cash and short-term investments at beginning of period	<u>7,168</u>	<u>5,257</u>	<u>1,911</u>	<u>—</u>
Cash and short-term investments at end of period	<u>\$ 9,472</u>	<u>\$ 8,223</u>	<u>\$ 1,249</u>	<u>\$ —</u>

¹ Represents Caterpillar Inc. and its subsidiaries with Financial Products accounted for on the equity basis.

² Elimination of Financial Products' profit after tax due to equity method of accounting.

³ Elimination of non-cash adjustment for the undistributed earnings from Financial Products.

⁴ Elimination of non-cash adjustments and changes in assets and liabilities related to consolidated reporting.

⁵ Reclassification of Financial Products' cash flow activity from investing to operating for receivables that arose from the sale of inventory.

⁶ Elimination of net proceeds and payments to/from Machinery, Energy & Transportation and Financial Products.

Caterpillar Inc.
Supplemental Data for Cash Flow
For the Three Months Ended March 31, 2016
(Unaudited)
(Millions of dollars)

	Supplemental Consolidating Data			
	Consolidated	Machinery, Energy & Transportation ¹	Financial Products	Consolidating Adjustments
Cash flow from operating activities:				
Profit of consolidated and affiliated companies	\$ 272	\$ 271	\$ 115	\$ (114) ²
Adjustments for non-cash items:				
Depreciation and amortization	740	525	215	—
Undistributed profit of Financial Products	—	(107)	—	107 ³
Other	269	204	16	49 ⁴
Changes in assets and liabilities, net of acquisitions and divestitures:				
Receivables - trade and other	14	41	20	(47) ^{4,5}
Inventories	(74)	(74)	—	—
Accounts payable	211	288	2	(79) ⁴
Accrued expenses	33	34	(1)	—
Accrued wages, salaries and employee benefits	(852)	(831)	(21)	—
Customer advances	174	174	—	—
Other assets – net	(145)	(118)	17	(44) ⁴
Other liabilities – net	(152)	(188)	(8)	44 ⁴
Net cash provided by (used for) operating activities	<u>490</u>	<u>219</u>	<u>355</u>	<u>(84)</u>
Cash flow from investing activities:				
Capital expenditures - excluding equipment leased to others	(357)	(356)	(1)	—
Expenditures for equipment leased to others	(383)	(23)	(369)	9 ⁴
Proceeds from disposals of leased assets and property, plant and equipment	173	21	159	(7) ⁴
Additions to finance receivables	(2,014)	—	(2,662)	648 ⁵
Collections of finance receivables	2,047	—	2,849	(802) ⁵
Net intercompany purchased receivables	—	—	(229)	229 ⁵
Proceeds from sale of finance receivables	10	—	10	—
Net intercompany borrowings	—	(927)	(1,000)	1,927 ⁶
Investments and acquisitions (net of cash acquired)	(12)	(12)	—	—
Proceeds from sale of securities	49	4	45	—
Investments in securities	(62)	(5)	(57)	—
Other – net	(23)	(23)	(7)	7 ⁸
Net cash provided by (used for) investing activities	<u>(572)</u>	<u>(1,321)</u>	<u>(1,262)</u>	<u>2,011</u>
Cash flow from financing activities:				
Dividends paid	(448)	(448)	(7)	7 ⁷
Distribution to noncontrolling interests	(1)	(1)	—	—
Common stock issued, including treasury shares reissued	(45)	(45)	7	(7) ⁸
Net intercompany borrowings	—	1,000	927	(1,927) ⁶
Proceeds from debt issued (original maturities greater than three months)	1,211	1	1,210	—
Payments on debt (original maturities greater than three months)	(1,706)	(3)	(1,703)	—
Short-term borrowings – net (original maturities three months or less)	486	4	482	—
Net cash provided by (used for) financing activities	<u>(503)</u>	<u>508</u>	<u>916</u>	<u>(1,927)</u>
Effect of exchange rate changes on cash	11	(2)	13	—
Increase (decrease) in cash and short-term investments	<u>(574)</u>	<u>(596)</u>	<u>22</u>	<u>—</u>
Cash and short-term investments at beginning of period	6,460	5,340	1,120	—
Cash and short-term investments at end of period	<u>\$ 5,886</u>	<u>\$ 4,744</u>	<u>\$ 1,142</u>	<u>\$ —</u>

¹ Represents Caterpillar Inc. and its subsidiaries with Financial Products accounted for on the equity basis.

² Elimination of Financial Products' profit after tax due to equity method of accounting.

³ Elimination of non-cash adjustment for the undistributed earnings from Financial Products.

⁴ Elimination of non-cash adjustments and changes in assets and liabilities related to consolidated reporting.

⁵ Reclassification of Financial Products' cash flow activity from investing to operating for receivables that arose from the sale of inventory.

⁶ Elimination of net proceeds and payments to/from Machinery, Energy & Transportation and Financial Products.

⁷ Elimination of dividend from Financial Products to Machinery, Energy & Transportation.
⁸ Elimination of change in investment and common stock related to Financial Products.

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 or trend descriptions. These statements do not guarantee future performance and speak only as of the date they are made, and we do not undertake to update our forward-looking statements.

Caterpillar’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) global and regional economic conditions and economic conditions in the industries we serve; (ii) commodity price changes, material price increases, fluctuations in demand for our products or significant shortages of material; (iii) government monetary or fiscal policies; (iv) political and economic risks, commercial instability and events beyond our control in the countries in which we operate; (v) our ability to develop, produce and market quality products that meet our customers’ needs; (vi) the impact of the highly competitive environment in which we operate on our sales and pricing; (vii) information technology security threats and computer crime; (viii) additional restructuring costs or a failure to realize anticipated savings or benefits from past or future cost reduction actions; (ix) failure to realize all of the anticipated benefits from initiatives to increase our productivity, efficiency and cash flow and to reduce costs; (x) inventory management decisions and sourcing practices of our dealers and our OEM customers; (xi) a failure to realize, or a delay in realizing, all of the anticipated benefits of our acquisitions, joint ventures or divestitures; (xii) union disputes or other employee relations issues; (xiii) adverse effects of unexpected events including natural disasters; (xiv) disruptions or volatility in global financial markets limiting our sources of liquidity or the liquidity of our customers, dealers and suppliers; (xv) 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; (xvi) our Financial Products segment’s risks associated with the financial services industry; (xvii) changes in interest rates or market liquidity conditions; (xviii) an increase in delinquencies, repossessions or net losses of Cat Financial’s customers; (xix) currency fluctuations; (xx) our or Cat Financial’s compliance with financial and other restrictive covenants in debt agreements; (xxi) increased pension plan funding obligations; (xxii) alleged or actual violations of trade or anti-corruption laws and regulations; (xxiii) international trade policies and their impact on demand for our products and our competitive position; (xxiv) additional tax expense or exposure; (xxv) significant legal proceedings, claims, lawsuits or government investigations; (xxvi) new regulations or changes in financial services regulations; (xxvii) compliance with environmental laws and regulations; and (xxviii) other factors described in more detail in Caterpillar’s Forms 10-Q, 10-K and other filings with the Securities and Exchange Commission.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

The information required by this Item is incorporated by reference from Note 4 – “Derivative financial instruments and risk management” included in Part I, Item 1 and Management’s Discussion and Analysis included in Part I, Item 2 of this Form 10-Q.

Item 4. Controls and Procedures

Evaluation of disclosure controls and procedures

An evaluation was performed under the supervision and with the participation of the company’s management, including the Chief Executive Officer (CEO) and Chief Financial Officer (CFO), of the effectiveness of the design and operation of the company’s disclosure controls and procedures, as that term is defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended, as of the end of the period covered by this quarterly report. Based on that evaluation, the CEO and CFO concluded that the company’s disclosure controls and procedures are effective as of the end of the period covered by this quarterly report.

Changes in internal control over financial reporting

During the first quarter of 2017, there has been no change in the company’s internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the company’s internal control over financial reporting.

PART II. OTHER INFORMATION**Item 1. Legal Proceedings**

The information required by this Item is incorporated by reference from Note 13 – "Environmental and legal matters" included in Part I, Item 1 of this Form 10-Q.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds**Issuer Purchases of Equity Securities**

No shares were repurchased during the first quarter of 2017.

Other Purchases of Equity Securities

Period	Total Number of Shares Purchased ¹	Average Price Paid per Share	Total Number of Shares Purchased Under the Program	Approximate Dollar Value of Shares that may yet be Purchased under the Program
January 1-31, 2017	19,325	\$ 95.22	N/A	N/A
February 1-28, 2017	3,965	\$ 95.98	N/A	N/A
March 1-31, 2017	598,180	\$ 95.31	N/A	N/A
Total	621,470	\$ 95.31		

¹ Represents shares delivered back to issuer for the payment of taxes resulting from the vesting of restricted stock units for employees and Directors.

Non-U.S. Employee Stock Purchase Plans

As of March 31, 2017, we had 27 employee stock purchase plans (the "EIP Plans") that are administered outside the United States for our non-U.S. employees, which had approximately 13,000 active participants in the aggregate. During the first quarter of 2017, approximately 191,000 shares of Caterpillar common stock were purchased by the EIP Plans pursuant to the terms of such plans.

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Item 6. Exhibits

- 11 Computations of Earnings per Share (included in Note 11 of this Form 10-Q filed for the quarter ended March 31, 2017).
- 31.1 Certification of D. James Umpleby III, Chief Executive Officer of Caterpillar Inc., as required pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- 31.2 Certification of Bradley M. Halverson, Group President and Chief Financial Officer of Caterpillar Inc., as required pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- 32 Certification of D. James Umpleby III, Chief Executive Officer of Caterpillar Inc. and Bradley M. Halverson, Group President and Chief Financial Officer of Caterpillar Inc., 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

EXHIBIT INDEX

Exhibit No.	Description
<u>11</u>	Computations of Earnings per Share (included in Note 11 of this Form 10-Q filed for the quarter ended March 31, 2017).
<u>31.1</u>	<u>Certification of D. James Umpleby III, Chief Executive Officer of Caterpillar Inc., as required pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
<u>31.2</u>	<u>Certification of Bradley M. Halverson, Group President and Chief Financial Officer of Caterpillar Inc., as required pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
<u>32</u>	<u>Certification of D. James Umpleby III, Chief Executive Officer of Caterpillar Inc. and Bradley M. Halverson, Group President and Chief Financial Officer of Caterpillar Inc., as required pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>
<u>101.INS</u>	<u>XBRL Instance Document</u>
<u>101.SCH</u>	<u>XBRL Taxonomy Extension Schema Document</u>
<u>101.CAL</u>	<u>XBRL Taxonomy Extension Calculation Linkbase Document</u>
<u>101.DEF</u>	<u>XBRL Taxonomy Extension Definition Linkbase Document</u>
<u>101.LAB</u>	<u>XBRL Taxonomy Extension Label Linkbase Document</u>
<u>101.PRE</u>	<u>XBRL Taxonomy Extension Presentation Linkbase Document</u>

SECTION 302 CERTIFICATION

I, D. James Umpleby, certify that:

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

May 3, 2017 /s/ D. James Umpleby III Chief Executive Officer
(D. James Umpleby III)

SECTION 302 CERTIFICATION

I, Bradley M. Halverson, certify that:

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

May 3, 2017

/s/ Bradley M. Halverson
(Bradley M. Halverson)

Group President and
Chief Financial Officer

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

In connection with the quarterly report of Caterpillar Inc. (the "Company") on Form 10-Q for the period ending March 31, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned hereby certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of our knowledge:

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

May 3, 2017 /s/ D. James Umpleby III Chief Executive Officer
(D. James Umpleby III)

May 3, 2017 /s/ Bradley M. Halverson Group President and
(Bradley M. Halverson) Chief Financial Officer

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

