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

FORM 10-Q

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

For the Quarterly Period Ended March 31, 2019

Commission File Number 1-4949

CUMMINS INC.
(Exact name of registrant as specified in its charter)

Indiana	**35-0257090**
(State of Incorporation)	(IRS Employer Identification No.)

500 Jackson Street
Box 3005
Columbus, Indiana 47202-3005
(Address of principal executive offices)

Telephone (812) 377-5000
(Registrant's telephone number, including area code)

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

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

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

Large accelerated filer ☒ Accelerated filer ☐ Non-accelerated filer ☐
Smaller reporting company ☐ Emerging growth company ☐

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

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

As of March 31, 2019, there were 157,492,272 shares of common stock outstanding with a par value of $2.50 per share.

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PART I. FINANCIAL INFORMATION

ITEM 1. Condensed Consolidated Financial Statements

CUMMINS INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF NET INCOME
(Unaudited)

	Three months ended	
In millions, except per share amounts	**March 31, 2019**	**April 1, 2018**
NET SALES [a] (Note 3)	**$ 6,004**	$ 5,570
Cost of sales	**4,472**	4,370
GROSS MARGIN	**1,532**	1,200
OPERATING EXPENSES AND INCOME		
Selling, general and administrative expenses	**593**	577
Research, development and engineering expenses	**237**	210
Equity, royalty and interest income from investees (Note 5)	**92**	115
Other operating income (expense), net	**5**	2
OPERATING INCOME	**799**	530
Interest income	**12**	7
Interest expense	**32**	24
Other income, net	**66**	10
INCOME BEFORE INCOME TAXES	**845**	523
Income tax expense	**176**	198
CONSOLIDATED NET INCOME	**669**	325
Less: Net income attributable to noncontrolling interests	**6**	—
NET INCOME ATTRIBUTABLE TO CUMMINS INC.	**$ 663**	$ 325
EARNINGS PER COMMON SHARE ATTRIBUTABLE TO CUMMINS INC.		
Basic	**$ 4.22**	$ 1.97
Diluted	**$ 4.20**	$ 1.96
WEIGHTED AVERAGE COMMON SHARES OUTSTANDING		
Basic	**157.2**	164.9
Dilutive effect of stock compensation awards	**0.5**	0.8
Diluted	**157.7**	165.7

[a] Includes sales to nonconsolidated equity investees of $285 million and $297 million for the three months ended March 31, 2019 and April 1, 2018, respectively.

The accompanying notes are an integral part of the Condensed Consolidated Financial Statements.

CUMMINS INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(Unaudited)

	Three months ended	
In millions	**March 31, 2019**	**April 1, 2018**
CONSOLIDATED NET INCOME	**$ 669**	$ 325
Other comprehensive income (loss), net of tax (Note 13)		
Change in pension and other postretirement defined benefit plans	**(11)**	8
Foreign currency translation adjustments	**84**	84
Unrealized (loss) gain on derivatives	**(1)**	7
Unrealized loss on marketable securities	**(1)**	—
Total other comprehensive (loss) income, net of tax	**71**	99
COMPREHENSIVE INCOME	**740**	424
Less: Comprehensive income (loss) attributable to noncontrolling interests	**9**	(7)
COMPREHENSIVE INCOME ATTRIBUTABLE TO CUMMINS INC.	**$ 731**	$ 431

The accompanying notes are an integral part of the Condensed Consolidated Financial Statements.

CUMMINS INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited)

In millions, except par value	March 31, 2019	December 31, 2018
ASSETS		
Current assets		
Cash and cash equivalents	**$ 1,328**	$ 1,303
Marketable securities (Note 6)	**246**	222
Total cash, cash equivalents and marketable securities	**1,574**	1,525
Accounts and notes receivable, net		
Trade and other	**3,765**	3,635
Nonconsolidated equity investees	**260**	231
Inventories (Note 7)	**3,893**	3,759
Prepaid expenses and other current assets	**599**	668
Total current assets	**10,091**	9,818
Long-term assets		
Property, plant and equipment	**8,349**	8,319
Accumulated depreciation	**(4,283)**	(4,223)
Property, plant and equipment, net	**4,066**	4,096
Investments and advances related to equity method investees	**1,303**	1,222
Goodwill	**1,125**	1,126
Other intangible assets, net	**895**	909
Pension assets	**939**	929
Other assets	**1,427**	962
Total assets	**$ 19,846**	$ 19,062
LIABILITIES		
Current liabilities		
Accounts payable (principally trade)	**$ 3,018**	$ 2,822
Loans payable (Note 9)	**70**	54
Commercial paper (Note 9)	**709**	780
Accrued compensation, benefits and retirement costs	**364**	679
Current portion of accrued product warranty (Note 10)	**762**	654
Current portion of deferred revenue (Note 3)	**509**	498
Other accrued expenses (Note 11)	**958**	852
Current maturities of long-term debt (Note 9)	**37**	45
Total current liabilities	**6,427**	6,384
Long-term liabilities		
Long-term debt (Note 9)	**1,605**	1,597
Pensions and other postretirement benefits	**520**	532
Accrued product warranty (Note 10)	**682**	740
Deferred revenue (Note 3)	**697**	658
Other liabilities (Note 11)	**1,188**	892
Total liabilities	**$ 11,119**	$ 10,803
Commitments and contingencies (Note 12)		
EQUITY		
Cummins Inc. shareholders' equity		
Common stock, $2.50 par value, 500 shares authorized, 222.4 and 222.4 shares issued	**$ 2,273**	$ 2,271
Retained earnings	**13,401**	12,917
Treasury stock, at cost, 64.9 and 64.4 shares	**(6,111)**	(6,028)
Common stock held by employee benefits trust, at cost, 0.3 and 0.4 shares	**(4)**	(5)
Accumulated other comprehensive loss (Note 13)	**(1,739)**	(1,807)
Total Cummins Inc. shareholders' equity	**7,820**	7,348
Noncontrolling interests	**907**	911
Total equity	**$ 8,727**	$ 8,259
Total liabilities and equity	**$ 19,846**	$ 19,062

The accompanying notes are an integral part of the Condensed Consolidated Financial Statements.

CUMMINS INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

In millions	Three months ended March 31, 2019	Three months ended April 1, 2018
CASH FLOWS FROM OPERATING ACTIVITIES		
Consolidated net income	**$ 669**	$ 325
Adjustments to reconcile consolidated net income to net cash provided by (used in) operating activities		
Depreciation and amortization	**157**	154
Deferred income taxes	**11**	(27)
Equity in income of investees, net of dividends	**(64)**	(95)
Pension contributions (in excess of) under expense, net (Note 4)	**(17)**	13
Other postretirement benefits payments in excess of expense, net (Note 4)	**(12)**	(5)
Stock-based compensation expense	**9**	9
(Gain) loss on corporate owned life insurance	**(37)**	3
Foreign currency remeasurement and transaction exposure	**79**	38
Changes in current assets and liabilities		
Accounts and notes receivable	**(135)**	(217)
Inventories	**(107)**	(259)
Other current assets	**67**	56
Accounts payable	**166**	246
Accrued expenses	**(293)**	(337)
Changes in other liabilities	**64**	27
Other, net	**(145)**	(48)
Net cash provided by (used in) operating activities	**412**	(117)
CASH FLOWS FROM INVESTING ACTIVITIES		
Capital expenditures	**(109)**	(72)
Investments in internal use software	**(20)**	(15)
Investments in and advances to equity investees	**(10)**	(16)
Investments in marketable securities—acquisitions (Note 6)	**(121)**	(67)
Investments in marketable securities—liquidations (Note 6)	**103**	82
Cash flows from derivatives not designated as hedges	**55**	27
Other, net	**31**	25
Net cash used in investing activities	**(71)**	(36)
CASH FLOWS FROM FINANCING ACTIVITIES		
Net (payments) borrowings of commercial paper (Note 9)	**(71)**	295
Payments on borrowings and finance lease obligations	**(10)**	(16)
Distributions to noncontrolling interests	**(13)**	(11)
Dividend payments on common stock	**(179)**	(178)
Repurchases of common stock	**(100)**	(163)
Other, net	**26**	21
Net cash used in financing activities	**(347)**	(52)
EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS	**31**	43
Net increase (decrease) in cash and cash equivalents	**25**	(162)
Cash and cash equivalents at beginning of year	**1,303**	1,369
CASH AND CASH EQUIVALENTS AT END OF PERIOD	**$ 1,328**	$ 1,207

The accompanying notes are an integral part of the Condensed Consolidated Financial Statements.

CUMMINS INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
(Unaudited)

In millions, except per share amounts	Common Stock	Additional Paid-in Capital	Retained Earnings	Treasury Stock	Common Stock Held in Trust	Accumulated Other Comprehensive Loss	Total Cummins Inc. Shareholders' Equity	Noncontrolling Interests	Total Equity
BALANCE AT DECEMBER 31, 2017	$ 556	$ 1,654	$ 11,464	$ (4,905)	$ (7)	$ (1,503)	$ 7,259	$ 905	$ 8,164
Adoption of new accounting standards (1)			30				30	—	30
Net income			325				325	—	325
Other comprehensive income (loss), net of tax (Note 13)						106	106	(7)	99
Issuance of common stock		3					3	—	3
Employee benefits trust activity		6			1		7	—	7
Repurchases of common stock				(163)			(163)	—	(163)
Cash dividends on common stock, $1.08 per share			(178)				(178)	—	(178)
Distributions to noncontrolling interests							—	(11)	(11)
Stock based awards		(4)		7			3	—	3
Other shareholder transactions		2					2	15	17
BALANCE AT APRIL 1, 2018	$ 556	$ 1,661	$ 11,641	$ (5,061)	$ (6)	$ (1,397)	$ 7,394	$ 902	$ 8,296
BALANCE AT DECEMBER 31, 2018	**$ 556**	**$ 1,715**	**$ 12,917**	**$ (6,028)**	**$ (5)**	**$ (1,807)**	**$ 7,348**	**$ 911**	**$ 8,259**
Net income			**663**				**663**	**6**	**669**
Other comprehensive income, net of tax (Note 13)						**68**	**68**	**3**	**71**
Issuance of common stock		**1**					**1**	—	**1**
Employee benefits trust activity		**13**			**1**		**14**	—	**14**
Repurchases of common stock				**(100)**			**(100)**	—	**(100)**
Cash dividends on common stock, $1.14 per share			**(179)**				**(179)**	—	**(179)**
Distributions to noncontrolling interests							—	**(13)**	**(13)**
Stock based awards		**(11)**		**17**			**6**	—	**6**
Other shareholder transactions		**(1)**					**(1)**	—	**(1)**
BALANCE AT MARCH 31, 2019	**$ 556**	**$ 1,717**	**$ 13,401**	**$ (6,111)**	**$ (4)**	**$ (1,739)**	**$ 7,820**	**$ 907**	**$ 8,727**

(1) Includes $28 million related to adoption of the revenue recognition standard and $2 million related to adoption of the accounting for certain financial instruments standard. See Note 1, "SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - Recently Adopted and Recently Issued Accounting Pronouncements" of the *Notes to the Consolidated Financial Statements* of our 2018 Form 10-K for additional information.

The accompanying notes are an integral part of the Condensed Consolidated Financial Statements.

CUMMINS INC. AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

NOTE 1. NATURE OF OPERATIONS

Cummins Inc. ("Cummins," "we," "our" or "us") was founded in 1919 as Cummins Engine Company, a corporation in Columbus, Indiana, and one of the first diesel engine manufacturers. In 2001, we changed our name to Cummins Inc. We are a global power leader that designs, manufactures, distributes and services diesel and natural gas engines and powertrain-related component products, including filtration, aftertreatment, turbochargers, fuel systems, controls systems, air handling systems, transmissions, electric power generation systems, batteries and electrified power systems. We sell our products to original equipment manufacturers (OEMs), distributors, dealers and other customers worldwide. We serve our customers through a network of approximately 600 wholly-owned and independent distributor locations and over 7,600 dealer locations in more than 190 countries and territories.

NOTE 2. BASIS OF PRESENTATION

Interim Condensed Financial Statements

The unaudited *Condensed Consolidated Financial Statements* reflect all adjustments which, in the opinion of management, are necessary for a fair statement of the results of operations, financial position and cash flows. All such adjustments are of a normal recurring nature. The *Condensed Consolidated Financial Statements* have been prepared in accordance with accounting principles in the United States of America (GAAP) pursuant to the rules and regulations of the Securities and Exchange Commission (SEC) for interim financial information. Certain information and footnote disclosures normally included in annual financial statements prepared in accordance with GAAP have been condensed or omitted as permitted by such rules and regulations.

These interim condensed financial statements should be read in conjunction with the *Consolidated Financial Statements* included in our Annual Report on Form 10-K for the year ended December 31, 2018. Our interim period financial results for the three month periods presented are not necessarily indicative of results to be expected for any other interim period or for the entire year. The year-end *Condensed Consolidated Balance Sheet* data was derived from audited financial statements, but does not include all disclosures required by GAAP.

Reclassifications

Certain amounts for prior year periods have been reclassified to conform to the presentation of the current year.

Use of Estimates in Preparation of Financial Statements

Preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect reported amounts presented and disclosed in our *Condensed Consolidated Financial Statements*. Significant estimates and assumptions in these *Condensed Consolidated Financial Statements* require the exercise of judgment. Due to the inherent uncertainty involved in making estimates, actual results reported in future periods may be different from these estimates.

Reporting Period

Our reporting period usually ends on the Sunday closest to the last day of the quarterly calendar period. The first quarters of 2019 and 2018 ended on March 31 and April 1, respectively. Our fiscal year ends on December 31, regardless of the day of the week on which December 31 falls.

Weighted-Average Diluted Shares Outstanding

The weighted-average diluted common shares outstanding excludes the anti-dilutive effect of certain stock options since such options had an exercise price in excess of the monthly average market value of our common stock. The options excluded from diluted earnings per share were as follows:

	Three months ended	
	March 31, 2019	**April 1, 2018**
Options excluded	**783,576**	6,867

NOTE 3. REVENUE RECOGNITION

Long-term Contracts

Most of our contracts are for a period of less than one year. We have certain long-term maintenance agreements, construction contracts and extended warranty coverage arrangements that span a period in excess of one year. The aggregate amount of the transaction price for long-term maintenance agreements and construction contracts allocated to performance obligations that have not been satisfied as of March 31, 2019, was $705 million. We expect to recognize the related revenue of $205 million over the next 12 months and $500 million over periods up to 10 years. See NOTE 10, "PRODUCT WARRANTY LIABILITY," for additional disclosures on extended warranty coverage arrangements. Our other contracts generally are for a duration of less than one year, include payment terms that correspond to the timing of cost incurred when providing goods and services to our customers or represent sale-based royalties.

Deferred and Unbilled Revenue

The following is a summary of our unbilled and deferred revenue and related activity:

In millions	March 31, 2019	December 31, 2018
Unbilled revenue	**$ 46**	$ 64
Deferred revenue, primarily extended warranty	**1,206**	1,156

Revenue recognized was $109 million and $128 million for the three months ended March 31, 2019 and April 1, 2018, respectively. These amounts relate to year-to-date revenues recognized from amounts included in deferred revenue at the beginning of the year. We did not record any impairment losses on our unbilled revenues during the three months ended March 31, 2019.

Disaggregation of Revenue

Consolidated Revenue

The table below presents our consolidated sales by geographic area. Net sales attributed to geographic areas were based on the location of the customer.

	Three months ended	
In millions	March 31, 2019	April 1, 2018
United States	**$ 3,436**	$ 3,038
China	**573**	550
India	**224**	235
Other international	**1,771**	1,747
Total net sales	**$ 6,004**	$ 5,570

Segment Revenue

Engine segment external sales by market were as follows:

	Three months ended	
In millions	March 31, 2019	April 1, 2018
Heavy-duty truck	**$ 723**	$ 614
Medium-duty truck and bus	**610**	627
Light-duty automotive	**330**	323
Total on-highway	**1,663**	1,564
Off-highway	**321**	249
Total sales	**$ 1,984**	$ 1,813

Distribution segment external sales by region were as follows:

	Three months ended	
In millions	March 31, 2019	April 1, 2018
North America	$ 1,392	$ 1,274
Asia Pacific	220	187
Europe	123	131
China	81	77
Africa and Middle East	55	61
India	47	44
Latin America	40	38
Russia	35	35
Total sales	$ 1,993	$ 1,847

Distribution segment external sales by product line were as follows:

	Three months ended	
In millions	March 31, 2019	April 1, 2018
Parts	$ 841	$ 803
Power generation	401	325
Engines	389	368
Service	362	351
Total sales	$ 1,993	$ 1,847

Components segment external sales by business were as follows:

	Three months ended	
In millions	March 31, 2019	April 1, 2018
Emission solutions	$ 749	$ 684
Filtration	259	257
Turbo technologies	190	197
Automated transmissions	149	117
Electronics and fuel systems	54	58
Total sales	$ 1,401	$ 1,313

Power Systems segment external sales by product line were as follows:

	Three months ended	
In millions	March 31, 2019	April 1, 2018
Power generation	$ 308	$ 310
Industrial	231	201
Generator technologies	84	84
Total sales	$ 623	$ 595

NOTE 4. PENSIONS AND OTHER POSTRETIREMENT BENEFITS

We sponsor funded and unfunded domestic and foreign defined benefit pension and other postretirement benefit plans. Contributions to these plans were as follows:

In millions	Three months ended March 31, 2019	Three months ended April 1, 2018
Defined benefit pension plans		
Voluntary contribution	**$ 26**	$ 3
Mandatory contribution	**7**	6
Defined benefit pension contributions	**$ 33**	$ 9
Other postretirement benefit plans		
Benefit payments, net	**$ 14**	$ 7
Defined contribution pension plans	**$ 39**	$ 40

We anticipate making additional defined benefit pension contributions during the remainder of 2019 of $90 million for our U.S. and U.K. pension plans. Approximately $91 million of the estimated $123 million of pension contributions for the full year are voluntary. These contributions may be made from trusts or company funds either to increase pension assets or to make direct benefit payments to plan participants. We expect our 2019 net periodic pension cost to approximate $64 million.

The components of net periodic pension and other postretirement benefit costs under our plans were as follows:

	Pension					
	U.S. Plans		U.K. Plans		Other Postretirement Benefits	
	Three months ended					
In millions	March 31, 2019	April 1, 2018	March 31, 2019	April 1, 2018	March 31, 2019	April 1, 2018
Service cost	**$ 29**	$ 30	**$ 7**	$ 8	**$ —**	$ —
Interest cost	**27**	25	**11**	11	**2**	2
Expected return on plan assets	**(47)**	(49)	**(18)**	(18)	**—**	—
Recognized net actuarial loss	**4**	8	**3**	7	**—**	—
Net periodic benefit cost	**$ 13**	$ 14	**$ 3**	$ 8	**$ 2**	$ 2

NOTE 5. EQUITY, ROYALTY AND INTEREST INCOME FROM INVESTEES

Equity, royalty and interest income from investees included in our *Condensed Consolidated Statements of Net Income* for the reporting periods was as follows:

	Three months ended	
In millions	March 31, 2019	April 1, 2018
Manufacturing entities		
Beijing Foton Cummins Engine Co., Ltd.	**$ 21**	$ 21
Dongfeng Cummins Engine Company, Ltd.	**14**	17
Chongqing Cummins Engine Company, Ltd.	**12**	17
All other manufacturers	**27**	36
Distribution entities		
Komatsu Cummins Chile, Ltda.	**6**	7
All other distributors	**(1)**	—
Cummins share of net income	**79**	98
Royalty and interest income	**13**	17
Equity, royalty and interest income from investees	**$ 92**	$ 115

NOTE 6. MARKETABLE SECURITIES

A summary of marketable securities, all of which were classified as current, was as follows:

	March 31, 2019			December 31, 2018		
In millions	Cost	Gross unrealized gains/(losses)[1]	Estimated fair value	Cost	Gross unrealized gains/(losses)[1]	Estimated fair value
Equity securities						
Certificates of deposit	**$ 137**	**$ —**	**$ 137**	$ 101	$ —	$ 101
Debt mutual funds	**85**	**1**	**86**	103	1	104
Equity mutual funds	**20**	**2**	**22**	16	—	16
Debt securities	**1**	**—**	**1**	1	—	1
Total marketable securities	**$ 243**	**$ 3**	**$ 246**	$ 221	$ 1	$ 222

(1) Unrealized gains and losses for debt securities are recorded in other comprehensive income while unrealized gains and losses for equity securities are recorded in "Other income, net" in our *Condensed Consolidated Statements of Net Income.*

All debt securities are classified as available-for-sale. All marketable securities presented use a Level 2 fair value measure. The fair value of Level 2 securities is estimated using actively quoted prices for similar instruments from brokers and observable inputs where available, including market transactions and third-party pricing services, or net asset values provided to investors. We do not currently have any Level 3 securities and there were no transfers between Level 2 or 3 during the first three months of 2019 or for the year ended December 31, 2018.

A description of the valuation techniques and inputs used for our Level 2 fair value measures is as follows:

- *Certificates of deposit* — These investments provide us with a contractual rate of return and generally range in maturity from three months to five years. The counterparties to these investments are reputable financial institutions with investment grade credit ratings. Since these instruments are not tradable and must be settled directly by us with the respective financial institution, our fair value measure is the financial institution's month-end statement.

- *Debt mutual funds* — The fair value measure for the vast majority of these investments is the daily net asset value published on a regulated governmental website. Daily quoted prices are available from the issuing brokerage and are used on a test basis to corroborate this Level 2 input.

- *Equity mutual funds* — The fair value measure for these investments is the net asset value published by the issuing brokerage. Daily quoted prices are available from reputable third party pricing services and are used on a test basis to corroborate this Level 2 input measure.

- *Debt securities* — The fair value measure for these securities is broker quotes received from reputable firms. These securities are infrequently traded on a national stock exchange and these values are used on a test basis to corroborate our Level 2 input measure.

The proceeds from sales and maturities of marketable securities were as follows:

	Three months ended	
In millions	March 31, 2019	April 1, 2018
Proceeds from sales of marketable securities	**$ 63**	$ 69
Proceeds from maturities of marketable securities	**40**	13
Investments in marketable securities - liquidations	**$ 103**	$ 82

NOTE 7. INVENTORIES

Inventories are stated at the lower of cost or market. Inventories included the following:

In millions	March 31, 2019	December 31, 2018
Finished products	**$ 2,427**	$ 2,405
Work-in-process and raw materials	**1,598**	1,487
Inventories at FIFO cost	**4,025**	3,892
Excess of FIFO over LIFO	**(132)**	(133)
Total inventories	**$ 3,893**	$ 3,759

NOTE 8. LEASES

Lease Accounting Pronouncement Adoption

In February 2016, the Financial Accounting Standards Board (FASB) amended its standards related to the accounting for leases. Under the new standard, lessees are now required to recognize substantially all leases on the balance sheet as both a right-of-use (ROU) asset and a liability. The standard continues to have two types of leases for income statement recognition purposes: operating leases and finance leases. Operating leases result in the recognition of a single lease expense on a straight-line basis over the lease term, similar to the treatment for operating leases under the old standard. Finance leases result in an accelerated expense similar to the accounting for capital leases under the old standard. The determination of a lease classification as operating or finance will occur in a manner similar to the old standard. The new standard also contains amended guidance regarding the identification of embedded leases in service contracts and the identification of lease and non-lease components of an arrangement.

We adopted the new standard on January 1, 2019, using a modified retrospective approach and as a result did not adjust prior periods. Adoption of the standard resulted in the recording of $450 million of operating lease right-of-use assets and operating lease liabilities, but did not have a material impact on our net income or cash flows. The cumulative effect adjustment of adopting the new standard was not material. We elected the package of practical expedients permitted under the transition guidance within the new standard, which among other things, allowed us to carry forward the historical lease classification and to not re-evaluate existing contracts as to whether or not they contained a lease.

Lease Policies

We determine if an arrangement contains a lease in whole or in part at the inception of the contract. ROU assets represent our right to use an underlying asset for the lease term while lease liabilities represent our obligation to make lease payments arising from the lease. All leases greater than 12 months result in the recognition of a ROU asset and a liability at the lease commencement date based on the present value of the lease payments over the lease term. As most of our leases do not provide the information required to determine the implicit rate, we use our incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments. This rate is determined considering factors such as the lease term, our credit standing and the economic environment of the location of the lease. We use the implicit rate when readily determinable.

Our lease terms include all non-cancelable periods and may include options to extend (or to not terminate) the lease when it is reasonably certain that we will exercise that option. Leases that have a term of 12 months or less at the commencement date are expensed on a straight-line basis over the lease term and do not result in the recognition of an asset or a liability.

Lease expense for operating leases is recognized on a straight-line basis over the lease term. Lease expense for finance leases are generally front-loaded as the finance lease ROU asset is depreciated on a straight-line basis, but interest expense on the liability is recognized utilizing the interest method that results in more expense during the early years of the lease. We have lease agreements with lease and non-lease components, primarily related to real estate, vehicle and Information Technology (IT) leases. For vehicle and real estate leases, we account for the lease and non-lease components as a single lease component. For IT leases, we allocate the payment between the lease and non-lease components based on the relative value of each component.

Leases

Our lease portfolio consists primarily of real estate and equipment leases. Our real estate leases primarily consist of office, distribution, warehousing and manufacturing facilities. These leases typically range in term from 20 to 30 years and may contain renewal options for periods up to 2 years at our discretion. Our equipment lease portfolio consists primarily of vehicles (including service vehicles), forktrucks and IT equipment. These leases typically range in term from two years to three years and may contain renewal options for periods up to one year at our discretion. Our leases generally do not contain variable lease payments other than (1) certain foreign real estate leases which have payments indexed to inflation and (2) certain real estate executory costs (such as taxes, insurance and maintenance) which are paid based on actual expenses incurred by the lessor during the year. Our leases generally do not include residual value guarantees other than our service vehicle fleet which has a residual guarantee based on a percentage of the original cost declining over the lease term.

The components of our lease expense were as follows:

In millions	March 31, 2019
Operating lease cost	$ 50
Finance lease cost	
Amortization of right-of-use asset	5
Interest expense	2
Short-term lease cost	1
Variable lease cost	1
Total lease cost	$ 59

Supplemental balance sheet information related to leases:

In millions	March 31, 2019	Balance Sheet Location
Assets		
Operating lease assets	$ 416	Other assets
Finance lease assets[1]	130	Property, plant and equipment, net
Total lease assets	$ 546	
Liabilities		
Current		
Operating	$ 125	Other accrued expenses
Finance	10	Current maturities of long-term debt
Long-term		
Operating	302	Other liabilities
Finance	112	Long-term debt
Total lease liabilities	$ 549	

(1) Finance lease assets are recorded net of accumulated amortization of $111 million at March 31, 2019.

Supplemental cash flow and other information related to leases:

In millions	Three months ended March 31, 2019
Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash flows from operating leases	$ 36
Operating cash flows from finance leases	2
Financing cash flows from finance leases	4
Right-of-use assets obtained in exchange for lease obligations:	
Operating leases	18
Finance leases	1

Additional information related to leases:

	March 31, 2019
Weighted average remaining lease term (in years)	
Operating leases	4.8
Finance leases	14.4
Weighted average discount rate	
Operating leases	3.3%
Finance leases	4.3%

Following is a summary of the future minimum lease payments due under finance and operating leases with terms of more than one year at March 31, 2019, together with the net present value of the minimum payments due under finance leases:

In millions	Finance Leases	Operating Leases
2019	$ 17	$ 101
2020	19	111
2021	15	84
2022	15	61
2023	13	41
After 2023	140	84
Total minimum lease payments	$ 219	$ 482
Interest	(98)	(55)
Present value of net minimum lease payments	$ 121	$ 427

Following is a summary of the future minimum lease payments due under capital and operating leases with terms of more than one year at December 31, 2018, together with the net present value of the minimum payments due under capital leases under the previous lease standard:

In millions	Capital Leases	Operating Leases
2019	$ 30	$ 138
2020	21	109
2021	16	81
2022	14	60
2023	13	39
After 2023	144	81
Total minimum lease payments	$ 238	$ 508
Interest	(106)	
Present value of net minimum lease payments	$ 132	

NOTE 9. DEBT

Loans Payable and Commercial Paper

Loans payable, commercial paper and the related weighted-average interest rates were as follows:

In millions	March 31, 2019	December 31, 2018
Loans payable [(1)]	**$ 70**	$ 54
Commercial paper [(2)]	**709**	780

[(1)] Loans payable consist primarily of notes payable to various domestic and international financial institutions and it is not practicable to aggregate these notes and calculate a quarterly weighted-average interest rate.
[(2)] The weighted-average interest rate, inclusive of all brokerage fees, was 2.60 percent and 2.59 percent at March 31, 2019 and December 31, 2018, respectively.

We can issue up to $3.5 billion of unsecured, short-term promissory notes ("commercial paper") pursuant to our board authorized commercial paper programs. The programs facilitate the private placement of unsecured short-term debt through third party brokers. We intend to use the net proceeds from the commercial paper borrowings for general corporate purposes.

Revolving Credit Facilities

We have access to committed credit facilities that total $3.5 billion, including a $1.5 billion 364-day facility that expires August 21, 2019 and a $2.0 billion five-year facility that expires on August 22, 2023. We intend to maintain credit facilities of a similar aggregate amount by renewing or replacing these facilities before expiration. These revolving credit facilities are maintained primarily to provide backup liquidity for our commercial paper borrowings and for general corporate purposes.

At March 31, 2019, the $709 million of outstanding commercial paper effectively reduced the $3.5 billion of revolving credit capacity to $2.8 billion and $187 million available for borrowings under our international and other domestic credit facilities.

Long-term Debt

A summary of long-term debt was as follows:

In millions	Interest Rate	March 31, 2019	December 31, 2018
Long-term debt			
Senior notes, due 2023	3.65%	**$ 500**	$ 500
Debentures, due 2027	6.75%	**58**	58
Debentures, due 2028	7.125%	**250**	250
Senior notes, due 2043	4.875%	**500**	500
Debentures, due 2098[1]	5.65%	**165**	165
Other debt		**69**	64
Unamortized discount		**(51)**	(52)
Fair value adjustments due to hedge on indebtedness		**30**	25
Finance leases		**121**	132
Total long-term debt		**1,642**	1,642
Less: Current maturities of long-term debt		**37**	45
Long-term debt		**$ 1,605**	$ 1,597

[1] The effective interest rate on this debt is 7.48%.

Principal payments required on long-term debt during the next five years are as follows:

In millions	2019	2020	2021	2022	2023
Principal payments	$ 33	$ 18	$ 41	$ 9	$ 506

Fair Value of Debt

Based on borrowing rates currently available to us for bank loans with similar terms and average maturities, considering our risk premium, the fair values and carrying values of total debt, including current maturities, were as follows:

In millions	March 31, 2019	December 31, 2018
Fair value of total debt [1]	**$ 2,688**	$ 2,679
Carrying values of total debt	**2,421**	2,476

[1] The fair value of debt is derived from Level 2 inputs.

Shelf Registration

As a well-known seasoned issuer, we filed an automatic shelf registration for an undetermined amount of debt and equity securities with the SEC on February 13, 2019. Under this shelf registration we may offer, from time to time, debt securities, common stock, preferred and preference stock, depositary shares, warrants, stock purchase contracts and stock purchase units.

NOTE 10. PRODUCT WARRANTY LIABILITY

A tabular reconciliation of the product warranty liability, including the deferred revenue related to our extended warranty coverage and accrued product campaigns was as follows:

In millions	March 31, 2019	April 1, 2018
Balance, beginning of year	**$ 2,208**	$ 1,687
Provision for base warranties issued	**129**	108
Deferred revenue on extended warranty contracts sold	**90**	63
Provision for product campaigns issued	**90**	197
Payments made during period	**(150)**	(99)
Amortization of deferred revenue on extended warranty contracts	**(59)**	(58)
Changes in estimates for pre-existing product warranties	**(23)**	10
Foreign currency translation and other	**3**	6
Balance, end of period	**$ 2,288**	$ 1,914

We recognized supplier recoveries of $58 million and $3 million for the three months ended March 31, 2019 and April 1, 2018, respectively.

Warranty related deferred revenues and the long-term portion of the warranty liabilities on our *Condensed Consolidated Balance Sheets* were as follows:

In millions	March 31, 2019	December 31, 2018	Balance Sheet Location
Deferred revenue related to extended coverage programs			
Current portion	**$ 224**	$ 227	Current portion of deferred revenue
Long-term portion	**620**	587	Deferred revenue
Total	**$ 844**	$ 814	
Product warranty			
Current portion	**$ 762**	$ 654	Current portion of accrued product warranty
Long-term portion	**682**	740	Accrued product warranty
Total	**$ 1,444**	$ 1,394	
Total warranty accrual	**$ 2,288**	$ 2,208	

Engine System Campaign Accrual

During 2017, the California Air Resources Board (CARB) and the U.S. Environmental Protection Agency (EPA) selected certain of our pre-2013 model year engine systems for additional emissions testing. Some of these engine systems failed CARB and EPA tests as a result of degradation of an aftertreatment component.

In the first quarter of 2018, we concluded based upon additional emission testing performed, and further discussions with the EPA and CARB that the field campaigns should be expanded to include a larger population of our engine systems that are subject to the aftertreatment component degradation, including our model years 2010 through 2015. As a result, we recorded an additional charge of $187 million or $0.87 per share, to cost of sales in our *Condensed Consolidated Statements of Net Income* ($94 million recorded in the Components segment and $93 million in the Engine segment).

In the second quarter of 2018, we reached agreement with the CARB and EPA regarding our plans to address the affected populations. In finalizing our plans, we increased the number of systems to be addressed through hardware replacement compared to our assumptions resulting in an additional charge of $181 million, or $0.85 per share, to cost of sales in our *Condensed Consolidated Statements of Net Income* ($91 million recorded in the Engine segment and $90 million in the Components segment).

The campaigns launched in the third quarter of 2018 and will be completed in phases across the affected population with a projection to be substantially complete by December 31, 2020. The total engine system campaign accrual, excluding the supplier recovery, was $410 million at March 31, 2019 with a remaining unpaid balance of $346 million.

NOTE 11. OTHER ACCRUED EXPENSES AND OTHER LIABILITIES

Other accrued expenses included the following:

In millions	March 31, 2019	December 31, 2018
Marketing accruals	$ **196**	$ 199
Other taxes payable	**172**	196
Income taxes payable	**130**	97
Current portion of operating lease liabilities	**125**	—
Other	**335**	360
Other accrued expenses	$ **958**	$ 852

Other liabilities included the following:

In millions	March 31, 2019	December 31, 2018
Operating lease liabilities	$ **302**	$ —
Income taxes payable	**293**	293
Deferred income taxes	**275**	263
Accrued compensation	**155**	173
Other long-term liabilities	**163**	163
Other liabilities	$ **1,188**	$ 892

NOTE 12. COMMITMENTS AND CONTINGENCIES

We are subject to numerous lawsuits and claims arising out of the ordinary course of our business, including actions related to product liability; personal injury; the use and performance of our products; warranty matters; product recalls; patent, trademark or other intellectual property infringement; contractual liability; the conduct of our business; tax reporting in foreign jurisdictions; distributor termination; workplace safety; and environmental matters. We also have been identified as a potentially responsible party at multiple waste disposal sites under U.S. federal and related state environmental statutes and regulations and may have joint and several liability for any investigation and remediation costs incurred with respect to such sites. We have denied liability with respect to many of these lawsuits, claims and proceedings and are vigorously defending such lawsuits, claims and proceedings. We carry various forms of commercial, property and casualty, product liability and other forms of insurance; however, such insurance may not be applicable or adequate to cover the costs associated with a judgment against us with respect to these lawsuits, claims and proceedings. We do not believe that these lawsuits are material individually or in the aggregate. While we believe we have also established adequate accruals pursuant to GAAP for our expected future liability with respect to pending lawsuits, claims and proceedings, where the nature and extent of any such liability can be reasonably estimated based upon then presently available information, there can be no assurance that the final resolution of any existing or future lawsuits, claims or proceedings will not have a material adverse effect on our business, results of operations, financial condition or cash flows.

We conduct significant business operations in Brazil that are subject to the Brazilian federal, state and local labor, social security, tax and customs laws. While we believe we comply with such laws, they are complex, subject to varying interpretations and we are often engaged in litigation regarding the application of these laws to particular circumstances.

Guarantees and Commitments

Periodically, we enter into guarantee arrangements, including guarantees of non-U.S. distributor financings, residual value guarantees on equipment under operating leases and other miscellaneous guarantees of joint ventures or third-party obligations. At March 31, 2019, the maximum potential loss related to these guarantees was $52 million.

We have arrangements with certain suppliers that require us to purchase minimum volumes or be subject to monetary penalties. At March 31, 2019, if we were to stop purchasing from each of these suppliers, the aggregate amount of the penalty would be approximately $61 million. Most of these arrangements enable us to secure supplies of critical components. We do not currently anticipate paying any penalties under these contracts.

We enter into physical forward contracts with suppliers of platinum and palladium to purchase certain volumes of the commodities at contractually stated prices for various periods, which generally fall within two years. At March 31, 2019, the total commitments under these contracts were $36 million. These arrangements enable us to fix the prices of these commodities, which otherwise are subject to market volatility.

We have guarantees with certain customers that require us to satisfactorily honor contractual or regulatory obligations, or compensate for monetary losses related to nonperformance. These performance bonds and other performance-related guarantees were $115 million at March 31, 2019.

Indemnifications

Periodically, we enter into various contractual arrangements where we agree to indemnify a third-party against certain types of losses. Common types of indemnities include:

- product liability and license, patent or trademark indemnifications;
- asset sale agreements where we agree to indemnify the purchaser against future environmental exposures related to the asset sold; and
- any contractual agreement where we agree to indemnify the counterparty for losses suffered as a result of a misrepresentation in the contract.

We regularly evaluate the probability of having to incur costs associated with these indemnities and accrue for expected losses that are probable. Because the indemnifications are not related to specified known liabilities and due to their uncertain nature, we are unable to estimate the maximum amount of the potential loss associated with these indemnifications.

NOTE 13. ACCUMULATED OTHER COMPREHENSIVE LOSS

Following are the changes in accumulated other comprehensive income (loss) by component for the three months ended:

In millions	Change in pensions and other postretirement defined benefit plans	Foreign currency translation adjustment	Unrealized gain (loss) on marketable securities	Unrealized gain (loss) on derivatives	Total attributable to Cummins Inc.	Noncontrolling interests	Total
	Three months ended						
Balance at December 31, 2017	$ (689)	$ (812)	$ 1	$ (3)	$ (1,503)		
Other comprehensive income before reclassifications							
Before tax amount	(8)	125	—	11	128	$ (7)	$ 121
Tax benefit (expense)	2	(33)	—	(4)	(35)	—	(35)
After tax amount	(6)	92	—	7	93	(7)	86
Amounts reclassified from accumulated other comprehensive loss[1]	14	—	(1)	—	13	—	13
Net current period other comprehensive income (loss)	8	92	(1)	7	106	$ (7)	$ 99
Balance at April 1, 2018	$ (681)	$ (720)	$ —	$ 4	$ (1,397)		
Balance at December 31, 2018	**$ (671)**	**$ (1,138)**	**$ —**	**$ 2**	**$ (1,807)**		
Other comprehensive income before reclassifications							
Before tax amount	**(23)**	**80**	**(1)**	**3**	**59**	**$ 3**	**$ 62**
Tax benefit (expense)	**5**	**1**	**—**	**(1)**	**5**	**—**	**5**
After tax amount	**(18)**	**81**	**(1)**	**2**	**64**	**3**	**67**
Amounts reclassified from accumulated other comprehensive loss[1]	**7**	**—**	**—**	**(3)**	**4**	**—**	**4**
Net current period other comprehensive income (loss)	**(11)**	**81**	**(1)**	**(1)**	**68**	**$ 3**	**$ 71**
Balance at March 31, 2019	**$ (682)**	**$ (1,057)**	**$ (1)**	**$ 1**	**$ (1,739)**		

[1] Amounts are net of tax. Reclassifications out of accumulated other comprehensive income (loss) and the related tax effects are immaterial for separate disclosure.

NOTE 14. OPERATING SEGMENTS

Operating segments under GAAP are defined as components of an enterprise about which separate financial information is available that is evaluated regularly by the Chief Operating Decision Maker (CODM), or decision-making group, in deciding how to allocate resources and in assessing performance. Our CODM is the President and Chief Operating Officer.

Our reportable operating segments consist of Engine, Distribution, Components, Power Systems and Electrified Power. This reporting structure is organized according to the products and markets each segment serves. The Engine segment produces engines (15 liters and less in size) and associated parts for sale to customers in on-highway and various off-highway markets. Our engines are used in trucks of all sizes, buses and recreational vehicles, as well as in various industrial applications, including construction, agriculture, power generation systems and other off-highway applications. The Distribution segment includes wholly-owned and partially-owned distributorships engaged in wholesaling engines, generator sets and service parts, as well as performing service and repair activities on our products and maintaining relationships with various OEMs throughout the world. The Components segment sells filtration products, aftertreatment systems, turbochargers, electronics, fuel systems and transmissions. The Power Systems segment is an integrated power provider, which designs, manufactures and sells engines (16 liters and larger) for industrial applications (including mining, oil and gas, marine and rail), standby and prime power generator sets, alternators and other power components. The Electrified Power segment designs, manufactures, sells and supports electrified power systems ranging from fully electric to hybrid solutions along with innovative components and subsystems to serve all our markets as they adopt electrification, meeting the needs of our OEM partners and end customers.

We use EBITDA (defined as earnings before interest expense, income taxes, noncontrolling interests, depreciation and amortization) as the primary basis for the CODM to evaluate the performance of each of our reportable operating segments. Segment amounts exclude certain expenses not specifically identifiable to segments.

The accounting policies of our operating segments are the same as those applied in our *Condensed Consolidated Financial Statements.* We prepared the financial results of our operating segments on a basis that is consistent with the manner in which we internally disaggregate financial information to assist in making internal operating decisions. We allocate certain common costs and expenses, primarily corporate functions, among segments differently than we would for stand-alone financial information prepared in accordance with GAAP. These include certain costs and expenses of shared services, such as information technology, human resources, legal, finance and supply chain management. We do not allocate changes in cash surrender value of corporate owned life insurance to individual segments. EBITDA may not be consistent with measures used by other companies.

Summarized financial information regarding our reportable operating segments for the three months ended is shown in the table below:

In millions	Engine	Distribution	Components	Power Systems	Electrified Power	Total Segments	Intersegment Eliminations [1]	Total
Three months ended March 31, 2019								
External sales	**$ 1,984**	**$ 1,993**	**$ 1,401**	**$ 623**	**$ 3**	**$ 6,004**	**$ —**	**$ 6,004**
Intersegment sales	**669**	**8**	**460**	**454**	**—**	**1,591**	**(1,591)**	**—**
Total sales	**2,653**	**2,001**	**1,861**	**1,077**	**3**	**7,595**	**(1,591)**	**6,004**
Research, development and engineering expenses	**78**	**7**	**75**	**56**	**21**	**237**	**—**	**237**
Equity, royalty and interest income from investees	**56**	**11**	**10**	**15**	**—**	**92**	**—**	**92**
Interest income	**4**	**4**	**2**	**2**	**—**	**12**	**—**	**12**
Segment EBITDA	**438**	**171**	**325**	**138**	**(29)**	**1,043**	**(10)**	**1,033**
Depreciation and amortization [2]	**50**	**29**	**46**	**29**	**2**	**156**	**—**	**156**
Three months ended April 1, 2018								
External sales	$ 1,813	$ 1,847	$ 1,313	$ 595	$ 2	$ 5,570	$ —	$ 5,570
Intersegment sales	633	6	440	479	—	1,558	(1,558)	—
Total sales	2,446	1,853	1,753	1,074	2	7,128	(1,558)	5,570
Research, development and engineering expenses	79	5	62	57	7	210	—	210
Equity, royalty and interest income from investees	67	13	16	19	—	115	—	115
Interest income	2	2	1	2	—	7	—	7
Segment EBITDA	286	123	227	142	(10)	768	(68)	700
Depreciation and amortization [2]	49	27	46	30	1	153	—	153

[1] Includes intersegment sales, intersegment profit in inventory eliminations and unallocated corporate expenses. There were no significant unallocated corporate expenses for the three months ended March 31, 2019 and April 1, 2018.

[2] Depreciation and amortization, as shown on a segment basis, excludes the amortization of debt discount and deferred costs included in the *Condensed Consolidated Statements of Net Income* as "Interest expense." The amortization of debt discount and deferred costs was $1 million and $1 million for the three month periods ended March 31, 2019 and April 1, 2018. A portion of depreciation expense is included in "Research, development and engineering expenses."

A reconciliation of our segment information to the corresponding amounts in the *Condensed Consolidated Statements of Net Income* is shown in the table below:

	Three months ended	
In millions	**March 31, 2019**	**April 1, 2018**
Total EBITDA	**$ 1,033**	$ 700
Less:		
Depreciation and amortization	**156**	153
Interest expense	**32**	24
Income before income taxes	**$ 845**	$ 523

NOTE 15. RECENTLY ADOPTED AND RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS

Accounting Pronouncements Recently Adopted

On January 1, 2019, we adopted the new lease standard in accordance with GAAP. See NOTE 8, "LEASES," for detailed information about the adoption of this standard.

On January 1, 2019, we adopted the new FASB standard related to accounting for derivatives and hedging. The new standard allows the initial hedge effectiveness assessment to be performed by the end of the first quarter in which the hedge is designated rather than concurrently with entering into the hedge transaction. The changes also expand the use of a periodic qualitative hedge effectiveness assessment in lieu of an ongoing quantitative assessment performed throughout the life of the hedge. The revision removes the requirement to record ineffectiveness on cash flow hedges through the income statement when a hedge is considered highly effective, instead deferring all related hedge gains and losses in other comprehensive income until the hedged item impacts earnings. The modifications permit hedging the contractually-specified price of a component of a commodity purchase and revises certain disclosure requirements. We adopted the new standard on a modified retrospective basis for existing cash flow hedges and prospectively for disclosures. The amendments did not have a material effect on our *Condensed Consolidated Financial Statements* and no transition adjustment was required upon adoption. The adoption of this standard did not materially change our policies for existing hedges.

Accounting Pronouncements Issued But Not Yet Effective

In August 2018, the FASB issued a new standard that aligns the accounting for implementation costs incurred in a cloud computing arrangement accounted for as a service contract with the model currently used for internal use software costs. Under the new standard, costs that meet certain criteria will be required to be capitalized on the balance sheet and subsequently amortized over the term of the hosting arrangement. The standard is effective for us beginning on January 1, 2020, with early adoption permitted. The standard allows for either prospective or retrospective transition. We are still evaluating the impact of this standard on our financial statements.

In June 2016, the FASB amended its standards related to accounting for credit losses on financial instruments. This amendment introduces new guidance for accounting for credit losses on instruments including trade receivables and held-to-maturity debt securities. The new rules are effective for annual and interim periods beginning after December 15, 2019. Early adoption is permitted for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. We do not expect adoption of this standard to have a material impact on our *Consolidated Financial Statements.*

NOTE 16. SUBSEQUENT EVENT

On April 29, 2019, we announced that we are conducting a formal review of our emissions certification process and compliance with emissions standards for our pick-up truck applications, following conversations with the EPA and CARB regarding certification for our engines in model year 2019 RAM 2500 and 3500 trucks. This review is being conducted with external advisors to ensure the certification process for our pick-up truck applications, which includes engines for the RAM 2500 and 3500 vehicles, is consistent with our internal policies, engineering standards and applicable laws. In addition, we announced that we have voluntarily disclosed our formal review to our regulators and other agencies and will work cooperatively to ensure a complete and thorough review. Due to the preliminary nature of our formal review and the presence of many unknown facts and circumstances, we cannot predict the outcome and we cannot provide assurance that the matter will not have a materially adverse impact on our results of operations, financial condition and cash flows.

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

Cummins Inc. and its consolidated subsidiaries are hereinafter sometimes referred to as "Cummins," "we," "our" or "us."

CAUTIONARY STATEMENTS REGARDING FORWARD-LOOKING INFORMATION

Certain parts of this quarterly report contain forward-looking statements intended to qualify for the safe harbors from liability established by the Private Securities Litigation Reform Act of 1995. Forward-looking statements include those that are based on current expectations, estimates and projections about the industries in which we operate and management's beliefs and assumptions. Forward-looking statements are generally accompanied by words such as "anticipates," "expects," "forecasts," "intends," "plans," "believes," "seeks," "estimates," "could," "should" or words of similar meaning. These statements are not guarantees of future performance and involve certain risks, uncertainties and assumptions, which we refer to as "future factors," which are difficult to predict. Therefore, actual outcomes and results may differ materially from what is expressed or forecasted in such forward-looking statements. Some future factors that could cause our results to differ materially from the results discussed in such forward-looking statements are discussed below and shareholders, potential investors and other readers are urged to consider these future factors carefully in evaluating forward-looking statements. Readers are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date hereof. Future factors that could affect the outcome of forward-looking statements include the following:

- any adverse results of our internal review into our emissions certification process and compliance with emissions standards;
- a sustained slowdown or significant downturn in our markets;
- changes in the engine outsourcing practices of significant customers;
- the development of new technologies that reduce demand for our current products and services;
- increased scrutiny from regulatory agencies, as well as unpredictability in the adoption, implementation and enforcement of emissions standards around the world;
- product recalls;
- policy changes in international trade;
- the United Kingdom's (U.K.) decision to end its membership in the European Union;
- lower than expected acceptance of new or existing products or services;
- a slowdown in infrastructure development and/or depressed commodity prices;
- supply shortages and supplier financial risk, particularly from any of our single-sourced suppliers;
- exposure to potential security breaches or other disruptions to our information technology systems and data security;
- a major customer experiencing financial distress;
- the actions of, and income from, joint ventures and other investees that we do not directly control;
- our plan to reposition our portfolio of product offerings through exploration of strategic acquisitions and divestitures and related uncertainties of entering such transactions;
- failure to realize expected results from our investment in Eaton Cummins Automated Transmission Technologies joint venture;
- competitor activity;
- increasing competition, including increased global competition among our customers in emerging markets;
- foreign currency exchange rate changes;
- variability in material and commodity costs;
- political, economic and other risks from operations in numerous countries;
- changes in taxation;
- global legal and ethical compliance costs and risks;
- aligning our capacity and production with our demand;

- product liability claims;
- increasingly stringent environmental laws and regulations;
- future bans or limitations on the use of diesel-powered products;
- the price and availability of energy;
- the performance of our pension plan assets and volatility of discount rates;
- labor relations;
- changes in accounting standards;
- our sales mix of products;
- protection and validity of our patent and other intellectual property rights;
- the outcome of pending and future litigation and governmental proceedings;
- continued availability of financing, financial instruments and financial resources in the amounts, at the times and on the terms required to support our future business; and
- other risk factors described in our 2018 Form 10-K, Part I, Item 1A. under the caption "Risk Factors."

Shareholders, potential investors and other readers are urged to consider these factors carefully in evaluating the forward-looking statements and are cautioned not to place undue reliance on such forward-looking statements. The forward-looking statements made herein are made only as of the date of this quarterly report and we undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise.

ORGANIZATION OF INFORMATION

The following Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) was prepared to provide the reader with a view and perspective of our business through the eyes of management and should be read in conjunction with our Management's Discussion and Analysis of Financial Condition and Results of Operations section of our 2018 Form 10-K. Our MD&A is presented in the following sections:

- **EXECUTIVE SUMMARY AND FINANCIAL HIGHLIGHTS**
- **OUTLOOK**
- **RESULTS OF OPERATIONS**
- **OPERATING SEGMENT RESULTS**
- **LIQUIDITY AND CAPITAL RESOURCES**
- **APPLICATION OF CRITICAL ACCOUNTING ESTIMATES**
- **RECENTLY ADOPTED AND RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS**

EXECUTIVE SUMMARY AND FINANCIAL HIGHLIGHTS

We are a global power leader that designs, manufactures, distributes and services diesel and natural gas engines and powertrain-related component products, including filtration, aftertreatment, turbochargers, fuel systems, controls systems, air handling systems, transmissions, electric power generation systems, batteries and electrified power systems. We sell our products to original equipment manufacturers (OEMs), distributors, dealers and other customers worldwide. We have long-standing relationships with many of the leading manufacturers in the markets we serve, including PACCAR Inc, Navistar International Corporation, Daimler Trucks North America and Fiat Chrysler Automobiles (Chrysler). We serve our customers through a network of approximately 600 wholly-owned and independent distributor locations and over 7,600 dealer locations in more than 190 countries and territories.

Our reportable operating segments consist of Engine, Distribution, Components, Power Systems and Electrified Power. This reporting structure is organized according to the products and markets each segment serves. The Engine segment produces engines (15 liters and less in size) and associated parts for sale to customers in on-highway and various off-highway markets. Our engines are used in trucks of all sizes, buses and recreational vehicles, as well as in various industrial applications, including construction, agriculture, power generation systems and other off-highway applications. The Distribution segment includes wholly-owned and partially-owned distributorships engaged in wholesaling engines, generator sets and service parts, as well as performing service and repair activities on our products and maintaining relationships with various OEMs throughout the world. The Components segment sells filtration products, aftertreatment systems, turbochargers, electronics, fuel systems and transmissions. The Power Systems segment is an integrated power provider, which designs, manufactures and sells engines (16 liters and larger) for industrial applications (including mining, oil and gas, marine and rail), standby and prime power generator sets, alternators and other power components. The Electrified Power segment designs, manufactures, sells and supports electrified power systems ranging from fully electric to hybrid solutions along with innovative components and subsystems to serve all our markets as they adopt electrification, meeting the needs of our OEM partners and end customers.

Our financial performance depends, in large part, on varying conditions in the markets we serve, particularly the on-highway, construction and general industrial markets. Demand in these markets tends to fluctuate in response to overall economic conditions. Our sales may also be impacted by OEM inventory levels, production schedules and stoppages. Economic downturns in markets we serve generally result in reduced sales of our products and can result in price reductions in certain products and/or markets. As a worldwide business, our operations are also affected by currency, political, economic and regulatory matters, including adoption and enforcement of environmental and emissions standards, in the countries we serve. As part of our growth strategy, we invest in businesses in certain countries that carry high levels of these risks such as China, Brazil, India, Mexico, Russia and countries in the Middle East and Africa. At the same time, our geographic diversity and broad product and service offerings have helped limit the impact from a drop in demand in any one industry or customer or the economy of any single country on our consolidated results.

Worldwide revenues increased 8 percent in the three months ended March 31, 2019, as compared to the same period in 2018, with all operating segments reporting higher sales. Net sales in the United States (U.S.) and Canada improved by 13 percent primarily due to increased demand in the North American on-highway markets (primarily in the heavy-duty and medium-duty truck markets) and in all of our distribution product lines. International demand (excludes the U.S. and Canada) improved net sales by 1 percent, with increased sales in Asia Pacific and China partially offset by lower demand in Russia and India. The increase in international sales was primarily due to increased demand in our distribution business in Asia Pacific and increased demand in construction markets in China, partially offset by unfavorable foreign currency impacts of 5 percent of international sales (primarily the Chinese renminbi, Euro, Indian rupee, Brazilian real, Australian dollar and British pound), decreased light commercial vehicle demand in Russia and lower truck demand in India, which negatively impacted our emission solutions and turbo technologies businesses.

The following table contains sales and EBITDA (defined as earnings before interest expense, income taxes, noncontrolling interests, depreciation and amortization) by operating segment for the three months ended March 31, 2019 and April 1, 2018. See the section titled "OPERATING SEGMENT RESULTS" for a more detailed discussion of net sales and EBITDA by operating segment including the reconciliation of segment EBITDA to net income attributable to Cummins, Inc.

Operating Segments	Three months ended							
	March 31, 2019			April 1, 2018			Percent change 2019 vs. 2018	
In millions	Sales	Percent of Total	EBITDA	Sales	Percent of Total	EBITDA	Sales	EBITDA
Engine	**$ 2,653**	**44 %**	**$ 438**	$ 2,446	44 %	$ 286	8%	53 %
Distribution	**2,001**	**33 %**	**171**	1,853	33 %	123	8%	39 %
Components	**1,861**	**31 %**	**325**	1,753	32 %	227	6%	43 %
Power Systems	**1,077**	**18 %**	**138**	1,074	19 %	142	—%	(3)%
Electrified Power	**3**	**— %**	**(29)**	2	— %	(10)	50%	NM
Intersegment eliminations	**(1,591)**	**(26)%**	**(10)**	(1,558)	(28)%	(68)	2%	(85)%
Total	**$ 6,004**	**100 %**	**$ 1,033**	$ 5,570	100 %	$ 700	8%	48 %

"NM" - not meaningful information

Net income attributable to Cummins was $663 million, or $4.20 per diluted share, on sales of $6.0 billion for the three months ended March 31, 2019, versus the comparable prior year period net income attributable to Cummins of $325 million, or $1.96 per diluted share, on sales of $5.6 billion. The increases in net income and earnings per diluted share were driven by higher net sales, increased gross margin, a lower effective tax rate due to the absence of $78 million of unfavorable discrete tax items recognized in the first quarter of 2018 primarily related to Tax Legislation and an increase in the value of corporate owned life insurance, partially offset by higher research, development and engineering expenses, lower equity, royalty and interest income from investees, unfavorable foreign currency fluctuations (primarily the Australian dollar, Brazilian real, Canadian dollar and Chinese renminbi) and increased selling, general and administrative expenses. The increases in gross margin and gross margin percentage were primarily due to lower warranty costs (due to absence of the $187 million engine system campaign accrual recorded in the first quarter of 2018), higher volumes and increased pricing, partially offset by unfavorable foreign currency impacts (primarily the Australian dollar, Brazilian real and Canadian dollar). See Note 10, "PRODUCT WARRANTY LIABILITY," to the *Condensed Consolidated Financial Statements* for additional information on the engine system campaign.

We generated $412 million of cash from operations for the three months ended, compared to using $117 million for the comparable period in 2018. Refer to the section titled "Cash Flows" in the "LIQUIDITY AND CAPITAL RESOURCES" section for a discussion of items impacting cash flows.

In October 2018, our Board of Directors authorized the acquisition of up to $2 billion of additional common stock. During the first three months of 2019, we repurchased $100 million, or 0.7 million shares of common stock.

As a well-known seasoned issuer, we filed an automatic shelf registration for an undetermined amount of debt and equity securities with the Securities and Exchange Commission (SEC) on February 13, 2019.

Our debt to capital ratio (total capital defined as debt plus equity) at March 31, 2019, was 21.7 percent, compared to 23.1 percent at December 31, 2018. The decrease was primarily due to significant net income and lower outstanding commercial paper. At March 31, 2019, we had $1.6 billion in cash and marketable securities on hand and access to our $3.5 billion credit facilities, if necessary, to meet currently anticipated investment and funding needs.

We expect our effective tax rate for the full year of 2019 to approximate 21.5 percent, excluding any discrete tax items.

Our global pension plans, including our unfunded and non-qualified plans, were 115 percent funded at December 31, 2018. Our U.S. plan, which represents approximately 54 percent of the worldwide pension obligation, was 131 percent funded and our U.K. plan was 115 percent funded. We anticipate making additional defined benefit pension contributions during the remainder of 2019 of $90 million for our U.S. and U.K. pension plans. Approximately $91 million of the estimated $123 million of U.S. and U.K. pension contributions for the full year are voluntary. We expect our 2019 net periodic pension cost to approximate $64 million.

On April 29, 2019, we issued a press release announcing that we are conducting a formal review of our emissions certification process and compliance with emissions standards for pick-up truck applications with our regulators and other agencies, following conversations with the United States Environmental Protection Agency and the California Air Resources Board regarding certification for our engines in the model year 2019 RAM 2500 and 3500 trucks. See Note 16, "SUBSEQUENT EVENT," to the *Condensed Consolidated Financial Statements* for additional information.

OUTLOOK

Our outlook reflects the following positive trends and challenges to our business that we expect could impact our revenue and earnings potential for the remainder of 2019.

Positive Trends

- We anticipate North American medium-duty truck and heavy-duty truck demand will remain strong.
- We expect demand for pick-up trucks in North America will remain strong.
- We anticipate power generation markets will remain strong, with increased demand in global data center markets.
- We expect construction markets will remain strong in North America and Europe.
- We expect demand in mining markets to remain strong.

Challenges

- Market demand in truck and construction markets in China is expected to decline.
- Uncertainty in the U.K. surrounding its ability to negotiate favorable terms in its withdrawal from the European Union could have material negative impacts on our European operations in the near and long-term.
- We are experiencing cost increases primarily as a result of U.S. trade tariffs.
- Prolonged trade disputes could negatively impact demand and trigger additional costs.
- We anticipate demand in oil and gas markets in North America will decline.
- Marine markets are expected to remain weak.

In summary, we expect demand to remain strong in many of our most important markets.

RESULTS OF OPERATIONS

In millions, except per share amounts	Three months ended March 31, 2019	Three months ended April 1, 2018	Favorable/(Unfavorable) Amount	Favorable/(Unfavorable) Percent
NET SALES	**$ 6,004**	$ 5,570	$ 434	8 %
Cost of sales	**4,472**	4,370	(102)	(2)%
GROSS MARGIN	**1,532**	1,200	332	28 %
OPERATING EXPENSES AND INCOME				
Selling, general and administrative expenses	**593**	577	(16)	(3)%
Research, development and engineering expenses	**237**	210	(27)	(13)%
Equity, royalty and interest income from investees	**92**	115	(23)	(20)%
Other operating income (expense), net	**5**	2	3	NM
OPERATING INCOME	**799**	530	269	51 %
Interest income	**12**	7	5	71 %
Interest expense	**32**	24	(8)	(33)%
Other income, net	**66**	10	56	NM
INCOME BEFORE INCOME TAXES	**845**	523	322	62 %
Income tax expense	**176**	198	22	11 %
CONSOLIDATED NET INCOME	**669**	325	344	NM
Less: Net income attributable to noncontrolling interests	**6**	—	(6)	NM
NET INCOME ATTRIBUTABLE TO CUMMINS INC.	**$ 663**	$ 325	$ 338	NM
Diluted Earnings Per Common Share Attributable to Cummins Inc.	**$ 4.20**	$ 1.96	$ 2.24	NM

"NM" - not meaningful information

Percent of sales	Three months ended March 31, 2019	Three months ended April 1, 2018	Favorable/(Unfavorable) Percentage Points
Gross margin	**25.5%**	21.5%	4.0
Selling, general and administrative expenses	**9.9%**	10.4%	0.5
Research, development and engineering expenses	**3.9%**	3.8%	(0.1)

Net Sales

Net sales for the three months ended March 31, 2019, increased by $434 million versus the comparable period in 2018. The primary drivers were as follows:

- Engine segment sales increased 8 percent, primarily due to higher volumes in most North American heavy-duty and medium-duty truck markets and improved demand in global construction markets.
- Distribution segment sales increased 8 percent, primarily due to higher demand in most geographic regions, especially in North America, and increased demand in all product lines.
- Components segment sales increased 6 percent, primarily due to higher sales in the emission solutions business from improved demand in North American truck markets and increased sales in the automated transmissions business due to higher volumes in the North American heavy-duty truck market.

These increases were partially offset by unfavorable foreign currency fluctuations of 2 percent of total sales, primarily in the Chinese renminbi, Euro, Indian rupee, Brazilian real, Australian dollar and British pound.

Sales to international markets (excluding the U.S. and Canada), based on location of customers, for the three months ended March 31, 2019, were 39 percent of total net sales compared with 42 percent of total net sales for the comparable period in 2018. A more detailed discussion of sales by segment is presented in the “OPERATING SEGMENT RESULTS” section.

Cost of Sales

The types of expenses included in cost of sales are the following: raw material consumption, including direct and indirect materials; salaries, wages and benefits; depreciation on production equipment and facilities and amortization of technology intangibles; estimated costs of warranty programs and campaigns; production utilities; production-related purchasing; warehousing, including receiving and inspection; engineering support costs; repairs and maintenance; production and warehousing facility property insurance; rent for production facilities and other production overhead.

Gross Margin

Gross margin increased $332 million for the three months ended March 31, 2019, versus the comparable period in 2018 and increased 4.0 points as a percentage of sales. The increases in gross margin and gross margin percentage were primarily due to lower warranty costs (due to absence of the $187 million engine system campaign accrual recorded in the first quarter of 2018), higher volumes and increased pricing, partially offset by unfavorable foreign currency impacts (primarily the Australian dollar, Brazilian real and Canadian dollar). See Note 10, "PRODUCT WARRANTY LIABILITY," to the *Condensed Consolidated Financial Statements* for additional information.

The provision for base warranties issued as a percent of sales for the three months ended March 31, 2019, was 2.1 percent compared to 2.0 percent for the comparable period in 2018. A detailed discussion of gross margin by segment is presented in the “OPERATING SEGMENT RESULTS” section.

Selling, General and Administrative Expenses

Selling, general and administrative expenses increased $16 million for the three months ended March 31, 2019, versus the comparable period in 2018, primarily due to higher compensation expense. Overall, selling, general and administrative expenses, as a percentage of sales, decreased to 9.9 percent in the three months ended March 31, 2019, from 10.4 percent in the comparable period in 2018.

Research, Development and Engineering Expenses

Research, development and engineering expenses increased $27 million for the three months ended March 31, 2019, versus the comparable period in 2018, primarily due to increased compensation expense driven by headcount growth, including increased staffing for the Electrified Power segment, and decreased expense recovery. Overall, research, development and engineering expenses as a percentage of sales increased to 3.9 percent in the three months ended March 31, 2019, from 3.8 percent in the comparable period in 2018.

Equity, Royalty and Interest Income from Investees

Equity, royalty and interest income from investees decreased $23 million for the three months ended March 31, 2019, versus the comparable period in 2018, primarily due to lower earnings at Tata Cummins Ltd., Chongqing Cummins Engine Company, Ltd., Dongfeng Cummins Emission Solutions Co., Ltd. and Dongfeng Cummins Engine Company, Ltd.

Other Operating Income (Expense), Net

Other operating income (expense), net was as follows:

	Three months ended	
In millions	**March 31, 2019**	**April 1, 2018**
Royalty income, net	**$ 6**	$ 7
Gain on sale of assets, net	**5**	—
Amortization of intangible assets	**(5)**	(5)
Other, net	**(1)**	—
Total other operating income (expense), net	**$ 5**	$ 2

Interest Income

Interest income for the three months ended March 31, 2019, increased $5 million versus the comparable period in 2018, primarily due to higher interest rates on cash and marketable securities balances.

Interest Expense

Interest expense for the three months ended March 31, 2019, increased $8 million versus the comparable period in 2018, primarily due to an increase in short-term borrowings and higher interest rates.

Other Income, Net

Other income, net was as follows:

	Three months ended	
In millions	March 31, 2019	April 1, 2018
Change in cash surrender value of corporate owned life insurance	**$ 37**	$ (4)
Non-service pension and other postretirement benefits credit	**18**	15
Gain on marketable securities, net	**4**	—
Rental income	**2**	2
Dividend income	**1**	2
Bank charges	**(3)**	(3)
Foreign currency loss, net	**(6)**	(11)
Other, net	**13**	9
Total other income, net	**$ 66**	$ 10

Income Tax Expense

Our effective tax rate for 2019 is expected to approximate 21.5 percent, excluding any discrete items that may arise.

Our effective tax rate for the three months ended March 31, 2019, was 20.8 percent and contained immaterial discrete items.

Our effective tax rate for the three months ended April 1, 2018, was 37.9 percent and contained $78 million, or $0.47 per share, of unfavorable discrete tax items, primarily related to a Tax Legislation adjustment of $74 million. This included $39 million associated with changes related to the Tax Legislation measurement period adjustment and $35 million associated with the one-time recognition of deferred tax charges at historical tax rates on intercompany profit in inventory.

Noncontrolling Interests

Noncontrolling interests eliminate the income or loss attributable to non-Cummins ownership interests in our consolidated entities. Noncontrolling interests in income of consolidated subsidiaries for the three months ended March 31, 2019, increased $6 million versus the comparable period in 2018, primarily due to increased earnings at Cummins India, Ltd.

Net Income Attributable to Cummins Inc. and Diluted Earnings Per Common Share Attributable to Cummins Inc.

Net income and diluted earnings per common share attributable to Cummins Inc. for the three months ended March 31, 2019, increased $338 million and $2.24 per diluted share, respectively, versus the comparable period in 2018, primarily due to higher net sales, increased gross margin, a lower effective tax rate due to the absence of $78 million of unfavorable discrete tax items recognized in the first quarter of 2018 primarily related to Tax Legislation and an increase in the value of corporate owned life insurance, partially offset by higher research, development and engineering expenses, lower equity, royalty and interest income from investees, unfavorable foreign currency fluctuations (primarily the Australian dollar, Brazilian real, Canadian dollar and Chinese renminbi) and increased selling, general and administrative expenses.

Comprehensive Income - Foreign Currency Translation Adjustment

The foreign currency translation adjustment was a net gain of $84 million for the three months ended March 31, 2019, compared to a net gain of $84 million for the three months ended April 1, 2018, and was driven by the following:

	Three months ended			
	March 31, 2019		April 1, 2018	
In millions	Translation adjustment	Primary currency driver vs. U.S. dollar	Translation adjustment	Primary currency driver vs. U.S. dollar
Wholly-owned subsidiaries	**$ 74**	British pound, Chinese renminbi	$ 70	British pound, Chinese renminbi offset by Indian rupee
Equity method investments	**7**	Chinese renminbi offset by British pound	22	Chinese renminbi
Consolidated subsidiaries with a noncontrolling interest	**3**	Indian rupee	(8)	Indian rupee
Total	**$ 84**		$ 84	

OPERATING SEGMENT RESULTS

Our reportable operating segments consist of the Engine, Distribution, Components, Power Systems and Electrified Power segments. This reporting structure is organized according to the products and markets each segment serves. We use segment EBITDA as a primary basis for the Chief Operating Decision Maker to evaluate the performance of each of our reportable operating segments. Segment amounts exclude certain expenses not specifically identifiable to segments. See Note 14, "OPERATING SEGMENTS," to the *Condensed Consolidated Financial Statements* for additional information.

Following is a discussion of results for each of our operating segments.

Engine Segment Results

Financial data for the Engine segment was as follows:

	Three months ended		Favorable/ (Unfavorable)	
In millions	March 31, 2019	April 1, 2018	Amount	Percent
External sales	**$ 1,984**	$ 1,813	$ 171	9 %
Intersegment sales	**669**	633	36	6 %
Total sales	**2,653**	2,446	207	8 %
Research, development and engineering expenses	**78**	79	1	1 %
Equity, royalty and interest income from investees	**56**	67	(11)	(16)%
Interest income	**4**	2	2	100 %
Segment EBITDA	**438**	286	152	53 %
			Percentage Points	
Segment EBITDA as a percentage of total sales	**16.5%**	11.7%		4.8

Sales for our Engine segment by market were as follows:

	Three months ended		Favorable/ (Unfavorable)	
In millions	March 31, 2019	April 1, 2018	Amount	Percent
Heavy-duty truck	**$ 979**	$ 815	$ 164	20 %
Medium-duty truck and bus	**721**	692	29	4 %
Light-duty automotive	**382**	402	(20)	(5)%
Total on-highway	**2,082**	1,909	173	9 %
Off-highway	**571**	537	34	6 %
Total sales	**$ 2,653**	$ 2,446	$ 207	8 %
			Percentage Points	
On-highway sales as percentage of total sales	**78%**	78%		—

Unit shipments by engine classification (including unit shipments to Power Systems and off-highway engine units included in their respective classification) were as follows:

	Three months ended		Favorable/ (Unfavorable)	
	March 31, 2019	April 1, 2018	Amount	Percent
Heavy-duty	**33,900**	26,600	7,300	27 %
Medium-duty	**79,000**	74,000	5,000	7 %
Light-duty	**56,400**	61,900	(5,500)	(9)%
Total unit shipments	**169,300**	162,500	6,800	4 %

Sales

Engine segment sales for the three months ended March 31, 2019, increased $207 million versus the comparable period in 2018. The following were the primary drivers by market:

- Heavy-duty truck sales increased $164 million, primarily due to higher volumes in the North American heavy-duty truck market with increased shipments of 31 percent.
- Off-highway sales increased $34 million, primarily due to improved demand in global construction markets with increased international unit shipments of 10 percent, mainly in China, and increased unit shipments of 27 percent in North America.
- Medium-duty truck and bus sales increased $29 million, primarily due to higher volumes in the North American medium-duty truck market with increased engine shipments of 17 percent.

These increases were partially offset by unfavorable foreign currency fluctuations, primarily in the Brazilian real and Chinese renminbi.

Segment EBITDA

Engine segment EBITDA for the three months ended March 31, 2019, increased $152 million versus the comparable period in 2018, primarily due to higher gross margin, partially offset by increased selling, general and administrative expenses and decreased equity, royalty and interest income from investees. The increase in gross margin was primarily due to the absence of a $93 million engine system campaign accrual recorded in the first quarter of 2018, improved pricing and higher volumes, partially offset by increased manufacturing expenses. The increase in selling, general and administrative expenses was primarily due to higher compensation expense. The decrease in equity, royalty and interest income from investees was primarily due to lower earnings at Tata Cummins, Ltd. and Dongfeng Cummins Engine Co.

Distribution Segment Results

Financial data for the Distribution segment was as follows:

	Three months ended		Favorable/ (Unfavorable)	
In millions	March 31, 2019	April 1, 2018	Amount	Percent
External sales	**$ 1,993**	$ 1,847	$ 146	8 %
Intersegment sales	**8**	6	2	33 %
Total sales	**2,001**	1,853	148	8 %
Research, development and engineering expenses	**7**	5	(2)	(40)%
Equity, royalty and interest income from investees	**11**	13	(2)	(15)%
Interest income	**4**	2	2	100 %
Segment EBITDA	**171**	123	48	39 %
			Percentage Points	
Segment EBITDA as a percentage of total sales	**8.5%**	6.6%	1.9	

Sales for our Distribution segment by region were as follows:

In millions	Three months ended March 31, 2019	Three months ended April 1, 2018	Favorable/ (Unfavorable) Amount	Favorable/ (Unfavorable) Percent
North America	**$ 1,399**	$ 1,276	$ 123	10 %
Asia Pacific	**220**	189	31	16 %
Europe	**123**	132	(9)	(7)%
China	**82**	78	4	5 %
Africa and Middle East	**55**	60	(5)	(8)%
India	**47**	45	2	4 %
Latin America	**40**	38	2	5 %
Russia	**35**	35	—	— %
Total sales	**$ 2,001**	$ 1,853	$ 148	8 %

Sales for our Distribution segment by product line were as follows:

In millions	Three months ended March 31, 2019	Three months ended April 1, 2018	Favorable/ (Unfavorable) Amount	Favorable/ (Unfavorable) Percent
Parts	**$ 844**	$ 808	$ 36	4%
Power generation	**403**	326	77	24%
Engines	**391**	367	24	7%
Service	**363**	352	11	3%
Total sales	**$ 2,001**	$ 1,853	$ 148	8%

Sales

Distribution segment sales for the three months ended March 31, 2019, increased $148 million versus the comparable period in 2018. The following were the primary drivers by region:

- North American sales increased $123 million, representing 83 percent of the total change in Distribution segment sales, primarily due to increased demand in the power generation data centers and engines product lines.
- Asia Pacific sales increased $31 million, primarily due to higher volumes in whole goods.

These increases were partially offset by unfavorable foreign currency fluctuations, primarily in the Australian dollar, Canadian dollar, Euro, Indian rupee and Chinese renminbi.

Segment EBITDA

Distribution segment EBITDA for the three months ended March 31, 2019, increased $48 million versus the comparable period in 2018, primarily due to higher gross margin, partially offset by unfavorable foreign currency fluctuations (primarily in the Australian dollar, South African rand, Argentine peso and Canadian dollar). The increase in gross margin was primarily due to higher volumes and improved pricing, partially offset by increased compensation expense and unfavorable foreign currency fluctuations (primarily in the Australian dollar, Canadian dollar and South African rand).

Components Segment Results

Financial data for the Components segment was as follows:

In millions	Three months ended March 31, 2019	Three months ended April 1, 2018	Favorable/(Unfavorable) Amount	Favorable/(Unfavorable) Percent
External sales	**$ 1,401**	$ 1,313	$ 88	7 %
Intersegment sales	**460**	440	20	5 %
Total sales	**1,861**	1,753	108	6 %
Research, development and engineering expenses	**75**	62	(13)	(21)%
Equity, royalty and interest income from investees	**10**	16	(6)	(38)%
Interest income	**2**	1	1	100 %
Segment EBITDA	**325**	227	98	43 %
			Percentage Points	
Segment EBITDA as a percentage of total sales	**17.5%**	12.9%	4.6	

Sales for our Components segment by business were as follows:

In millions	Three months ended March 31, 2019	Three months ended April 1, 2018	Favorable/(Unfavorable) Amount	Favorable/(Unfavorable) Percent
Emission solutions	**$ 854**	$ 775	$ 79	10 %
Turbo technologies	**335**	340	(5)	(1)%
Filtration	**325**	320	5	2 %
Electronics and fuel systems	**198**	201	(3)	(1)%
Automated transmissions	**149**	117	32	27 %
Total sales	**$ 1,861**	$ 1,753	$ 108	6 %

Sales

Components segment sales for the three months ended March 31, 2019, increased $108 million versus the comparable period in 2018. The following were the primary drivers by business:

- Emission solutions sales increased $79 million, primarily due to stronger demand for trucks in North America, partially offset by weaker market demand for trucks in China and India.
- Automated transmissions delivered higher sales of $32 million, primarily due to increased heavy-duty truck demand in North America.

These increases were partially offset by unfavorable foreign currency fluctuations, primarily in the Chinese renminbi, Euro and Indian rupee.

Segment EBITDA

Components segment EBITDA for the three months ended March 31, 2019, increased $98 million versus the comparable period in 2018, as higher gross margin was partially offset by increased research, development and engineering expenses, lower equity, royalty and interest income from investees and unfavorable foreign currency fluctuations, primarily in the Chinese renminbi and Brazilian real. The increase in gross margin was primarily due to the absence of a $94 million engine system campaign accrual recorded in the first quarter of 2018, lower material costs and increased volumes, partially offset by lower pricing and unfavorable foreign currency fluctuations primarily in the Chinese renminbi and Brazilian real. The increase in research, development and engineering expenses was primarily due to lower expense recovery and additional spending in the automated transmissions business. The decrease in equity, royalty and interest income from investees was primarily due to lower earnings at Dongfeng Cummins Emission Solutions Co., Ltd and Shanghai Fleetguard Filter Co.

Power Systems Segment Results

Financial data for the Power Systems segment was as follows:

In millions	Three months ended March 31, 2019	Three months ended April 1, 2018	Favorable/(Unfavorable) Amount	Favorable/(Unfavorable) Percent
External sales	**$ 623**	$ 595	$ 28	5 %
Intersegment sales	**454**	479	(25)	(5)%
Total sales	**1,077**	1,074	3	— %
Research, development and engineering expenses	**56**	57	1	2 %
Equity, royalty and interest income from investees	**15**	19	(4)	(21)%
Interest income	**2**	2	—	— %
Segment EBITDA	**138**	142	(4)	(3)%
			Percentage Points	
Segment EBITDA as a percentage of total sales	**12.8%**	13.2%	(0.4)	

Sales for our Power Systems segment by product line were as follows:

In millions	Three months ended March 31, 2019	Three months ended April 1, 2018	Favorable/(Unfavorable) Amount	Favorable/(Unfavorable) Percent
Power generation	**$ 567**	$ 571	$ (4)	(1)%
Industrial	**420**	414	6	1 %
Generator technologies	**90**	89	1	1 %
Total sales	**$ 1,077**	$ 1,074	$ 3	— %

Sales

Power Systems segment sales for the three months ended March 31, 2019, were relatively flat versus the comparable period in 2018, primarily due to increased industrial sales of $6 million due to higher demand in certain international markets, especially oil and gas markets in China, partially offset by lower demand in North American oil and gas markets.

Sales increases were partially offset by the following:

- Unfavorable foreign currency fluctuations primarily in the Indian rupee, British pound and Chinese renminbi.
- Power generation sales decreased $4 million, primarily due to lower demand in most international markets, partially offset by stronger demand in North America.

Segment EBITDA

Power Systems segment EBITDA for the three months ended March 31, 2019, decreased $4 million versus the comparable period in 2018, primarily due to lower gross margin and decreased equity, royalty and interest income from investees, partially offset by a gain on sale of assets and favorable foreign currency fluctuations (primarily in the Indian rupee and British pound). The decrease in gross margin was primarily due to decreased volumes and unfavorable mix, partially offset by favorable foreign currency fluctuations (primarily in the British pound and Indian rupee) and improved pricing. The decrease in equity, royalty and interest income from investees was primarily due to lower earnings at Chongqing Cummins Engine Co.

Electrified Power Segment Results

The Electrified Power segment is currently in the development phase with a primary focus on research and development activities around fully electric and hybrid powertrain solutions. Financial data for the Electrified Power segment was as follows:

In millions	Three months ended			Favorable/ (Unfavorable)			
	March 31, 2019		April 1, 2018		Amount		Percent
Total sales	**$**	**3**	$	2	$	1	50 %
Research, development and engineering expenses		**21**		7		(14)	NM
Segment EBITDA		**(29)**		(10)		(19)	NM

"NM" - not meaningful information

Reconciliation of Segment EBITDA to Net Income Attributable to Cummins Inc.

The table below reconciles the segment information to the corresponding amounts in the *Condensed Consolidated Statements of Net Income:*

In millions	Three months ended			
	March 31, 2019		April 1, 2018	
TOTAL SEGMENT EBITDA	**$**	**1,043**	$	768
Intersegment elimination [1]		**(10)**		(68)
TOTAL EBITDA		**1,033**		700
Less:				
Interest expense		**32**		24
Depreciation and amortization [2]		**156**		153
INCOME BEFORE INCOME TAXES		**845**		523
Less: Income tax expense		**176**		198
CONSOLIDATED NET INCOME		**669**		325
Less: Net income attributable to noncontrolling interest		**6**		—
NET INCOME ATTRIBUTABLE TO CUMMINS INC.	**$**	**663**	$	325

(1) Includes intersegment sales, intersegment profit in inventory eliminations and unallocated corporate expenses. There were no significant unallocated corporate expenses

(2) Depreciation and amortization, as shown on a segment basis, excludes the amortization of debt discount and deferred costs included in the *Condensed Consolidated Statements of Net Income* as "Interest expense." The amortization of debt discount and deferred costs was $1 million and $1 million for the three month periods ended March 31, 2019 and April 1, 2018, respectively.

LIQUIDITY AND CAPITAL RESOURCES

Key Working Capital and Balance Sheet Data

We fund our working capital with cash from operations and short-term borrowings, including commercial paper, when necessary. Various assets and liabilities, including short-term debt, can fluctuate significantly from month to month depending on short-term liquidity needs. As a result, working capital is a prime focus of management attention. Working capital and balance sheet measures are provided in the following table:

Dollars in millions		March 31, 2019		December 31, 2018
Working capital [1]	**$**	**3,664**	$	3,434
Current ratio		**1.57**		1.54
Accounts and notes receivable, net	**$**	**4,025**	$	3,866
Days' sales in receivables		**60**		57
Inventories	**$**	**3,893**	$	3,759
Inventory turnover		**4.5**		4.9
Accounts payable (principally trade)	**$**	**3,018**	$	2,822
Days' payable outstanding		**60**		56
Total debt	**$**	**2,421**	$	2,476
Total debt as a percent of total capital		**21.7%**		23.1%

[1] Working capital includes cash and cash equivalents.

Cash Flows

Cash and cash equivalents were impacted as follows:

	Three months ended					
In millions		March 31, 2019		April 1, 2018		Change
Net cash provided by (used in) operating activities	**$**	**412**	$	(117)	$	529
Net cash used in investing activities		**(71)**		(36)		(35)
Net cash used in financing activities		**(347)**		(52)		(295)
Effect of exchange rate changes on cash and cash equivalents		**31**		43		(12)
Net increase (decrease) in cash and cash equivalents	**$**	**25**	$	(162)	$	187

Net cash provided by operating activities increased $529 million for the three months ended March 31, 2019, versus the comparable period in 2018, primarily due to higher earnings of $344 million and lower working capital requirements of $209 million. During the first three months of 2019, the lower working capital requirements resulted in a cash outflow of $302 million compared to a cash outflow of $511 million in the comparable period in 2018.

Net cash used in investing activities increased $35 million for the three months ended March 31, 2019, versus the comparable period in 2018, primarily due to increased capital expenditures of $37 million and higher net investments in marketable securities of $33 million, partially offset by higher cash flow from derivatives not designated as hedges of $28 million.

Net cash used in financing activities increased $295 million for the three months ended March 31, 2019, versus the comparable period in 2018, primarily due to lower net borrowings of commercial paper of $366 million, partially offset by lower repurchases of common stock of $63 million.

The effect of exchange rate changes on cash and cash equivalents for the three months ended March 31, 2019, versus the comparable period in 2018, decreased $12 million primarily due to unfavorable fluctuations in the British pound of $9 million.

Sources of Liquidity

We generate significant ongoing cash flow. Cash provided by operations is our principal source of liquidity with $412 million provided in the three months ended March 31, 2019. Our sources of liquidity included:

	March 31, 2019			
In millions	**Total**	**U.S.**	**International**	**Primary location of international balances**
Cash and cash equivalents	$ 1,328	$ 304	$ 1,024	U.K., China, Singapore, Mexico, Australia, Belgium, Canada
Marketable securities [(1)]	246	71	175	India
Total	$ 1,574	$ 375	$ 1,199	
Available credit capacity				
Revolving credit facilities [(2)]	$ 2,791			
International and other uncommitted domestic credit facilities	$ 187			

(1) The majority of marketable securities could be liquidated into cash within a few days.

(2) The five-year credit facility for $2.0 billion and the 364-day credit facility for $1.5 billion, maturing August 2023 and August 2019, respectively, are maintained primarily to provide backup liquidity for our commercial paper borrowings and general corporate purposes. At March 31, 2019, we had $709 million of commercial paper outstanding, which effectively reduced the available capacity under our revolving credit facilities to $2.8 billion.

Cash, Cash Equivalents and Marketable Securities

A significant portion of our cash flow is generated outside the U.S. We manage our worldwide cash requirements considering available funds among the many subsidiaries through which we conduct our business and the cost effectiveness with which those funds can be accessed. As a result, we do not anticipate any local liquidity restrictions to preclude us from funding our operating needs with local resources.

Debt Facilities and Other Sources of Liquidity

We have access to committed credit facilities that total $3.5 billion, including a $1.5 billion 364-day facility that expires August 21, 2019 and a $2.0 billion five-year facility that expires on August 22, 2023. We intend to maintain credit facilities of a similar aggregate amount by renewing or replacing these facilities before expiration. These revolving credit facilities are maintained primarily to provide backup liquidity for our commercial paper borrowings and for general corporate purposes.

We can issue up to $3.5 billion of unsecured, short-term promissory notes ("commercial paper") pursuant to our board authorized commercial paper programs. The programs facilitate the private placement of unsecured short-term debt through third party brokers. We intend to use the net proceeds from the commercial paper borrowings for general corporate purposes. The total combined borrowing capacity under the revolving credit facility and commercial program should not exceed $3.5 billion. See Note 9, "DEBT," to our *Condensed Consolidated Financial Statements* for additional information.

As a well-known seasoned issuer, we filed an automatic shelf registration for an undetermined amount of debt and equity securities with the SEC on February 13, 2019. Under this shelf registration we may offer, from time to time, debt securities, common stock, preferred and preference stock, depositary shares, warrants, stock purchase contracts and stock purchase units.

Uses of Cash

Stock Repurchases

In October 2018, our Board of Directors authorized the acquisition of up to $2 billion of additional common stock. In the first three months of 2019, we made the following purchases under the 2018 stock repurchase program:

In millions, except per share amounts	**Shares Purchased**	**Average Cost Per Share**	**Total Cost of Repurchases**	**Remaining Authorized Capacity [(1)]**
March 31	0.7	$ 137.80	$ 100	$ 1,806

(1) The remaining authorized capacity under these plans was calculated based on the cost to purchase the shares but excludes commission expenses in accordance with the authorized plan.

We intend to repurchase outstanding shares from time to time during 2019 to enhance shareholder value and to offset the dilutive impact of employee stock based compensation plans.

Dividends

We paid dividends of $179 million during the three months ended March 31, 2019.

Capital Expenditures

Capital expenditures, including spending on internal use software, for the three months ended, were $129 million compared to $87 million in the comparable period in 2018. We plan to spend an estimated $650 million to $700 million in 2019 on capital expenditures as we continue with product launches and facility improvements. Approximately 50 percent of our capital expenditures are expected to be invested outside of the U.S. in 2019. In addition, we plan to spend an estimated $65 million to $75 million on internal use software in 2019.

Pensions

Our global pension plans, including our unfunded and non-qualified plans, were 115 percent funded at December 31, 2018. Our U.S. plan, which represents approximately 54 percent of the worldwide pension obligation, was 131 percent funded and our U.K. plan was 115 percent funded. The funded status of our pension plans is dependent upon a variety of variables and assumptions including return on invested assets, market interest rates and levels of voluntary contributions to the plans. In the first three months of 2019, the investment gain on our U.S. pension trust was 5.8 percent while our U.K. pension trust gain was 5.7 percent. Approximately 73 percent of our pension plan assets are held in highly liquid investments such as fixed income and equity securities. The remaining 27 percent of our plan assets are held in less liquid, but market valued investments, including real estate, private equity, venture capital, opportunistic credit and insurance contracts. We anticipate making additional defined benefit pension contributions during the remainder of 2019 of $90 million for our U.S. and U.K. pension plans. Approximately $91 million of the estimated $123 million of U.S. and U.K. pension contributions for the full year are voluntary. These contributions may be made from trusts or company funds either to increase pension assets or to make direct benefit payments to plan participants. We expect our 2019 net periodic pension cost to approximate $64 million.

Current Maturities of Short and Long-Term Debt

We had $709 million of commercial paper outstanding at March 31, 2019, that matures in less than one year. The maturity schedule of our existing long-term debt does not require significant cash outflows until 2023. Required annual principal payments range from $9 million to $506 million over the next five years (including the remainder of 2019). See Note 9, "DEBT," to the *Condensed Consolidated Financial Statements* for additional information.

Credit Ratings

Our ratings and outlook from each of the credit rating agencies as of the date of filing are shown in the table below.

	Long-Term	Short-Term	
Credit Rating Agency [(1)]	Senior Debt Rating	Debt Rating	Outlook
Standard and Poor’s Rating Services	A+	A1	Stable
Moody’s Investors Service, Inc.	A2	P1	Stable

(1) Credit ratings are not recommendations to buy, are subject to change and each rating should be evaluated independently of any other rating. In addition, we undertake no obligation to update disclosures concerning our credit ratings, whether as a result of new information, future events or otherwise.

Management's Assessment of Liquidity

Our financial condition and liquidity remain strong. Our solid balance sheet and credit ratings enable us to have ready access to credit and the capital markets. We assess our liquidity in terms of our ability to generate adequate cash to fund our operating, investing and financing activities. We believe our operating cash flow and liquidity provide us with the financial flexibility needed to fund working capital, common stock repurchases, acquisitions, capital expenditures, dividend payments, projected pension obligations and debt service obligations. We continue to generate cash from operations in the U.S. and maintain access to our revolving credit facilities and commercial paper program as noted above.

APPLICATION OF CRITICAL ACCOUNTING ESTIMATES

A summary of our significant accounting policies is included in Note 1, "SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES," of the *Notes to the Consolidated Financial Statements* of our 2018 Form 10-K, which discusses accounting policies that we have selected from acceptable alternatives.

Our *Condensed Consolidated Financial Statements* are prepared in accordance with generally accepted accounting principles that often require management to make judgments, estimates and assumptions regarding uncertainties that affect the reported amounts presented and disclosed in the financial statements. Management reviews these estimates and assumptions based on historical experience, changes in business conditions and other relevant factors they believe to be reasonable under the circumstances. In any given reporting period, our actual results may differ from the estimates and assumptions used in preparing our *Condensed Consolidated Financial Statements.*

Critical accounting estimates are defined as follows: the estimate requires management to make assumptions about matters that were highly uncertain at the time the estimate was made; different estimates reasonably could have been used; or if changes in the estimate are reasonably likely to occur from period to period and the change would have a material impact on our financial condition or results of operations. Our senior management has discussed the development and selection of our accounting policies, related accounting estimates and the disclosures set forth below with the Audit Committee of our Board of Directors. Our critical accounting estimates disclosed in the Form 10-K address the estimation of liabilities for warranty programs, accounting for income taxes, pension benefits and goodwill impairment.

A discussion of our critical accounting estimates may be found in the "Management's Discussion and Analysis" section of our 2018 Form 10-K under the caption "APPLICATION OF CRITICAL ACCOUNTING ESTIMATES." Within the context of these critical accounting estimates, we are not currently aware of any reasonably likely events or circumstances that would result in different policies or estimates being reported in the first three months of 2019.

RECENTLY ADOPTED AND RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS

See Note 15, "RECENTLY ADOPTED AND RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS," in the *Notes to Condensed Consolidated Financial Statements* for additional information.

ITEM 3. Quantitative and Qualitative Disclosures About Market Risk

A discussion of quantitative and qualitative disclosures about market risk may be found in Item 7A of our 2018 Form 10-K. There have been no material changes in this information since the filing of our 2018 Form 10-K.

ITEM 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

As of the end of the period covered by this Quarterly Report on Form 10-Q, we carried out an evaluation under the supervision and with the participation of our management, including our Chief Executive Officer (CEO) and Chief Financial Officer (CFO), of the effectiveness of the design and operation of our disclosure controls and procedures as defined in Exchange Act Rules 13a-15(e) and 15d-15(e). Based upon that evaluation, our CEO and our CFO concluded that our disclosure controls and procedures were effective to ensure that the information required to be disclosed by us in the reports that we file or submit under the Securities Exchange Act of 1934 is (1) recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and (2) accumulated and communicated to management, including our CEO and CFO, to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

There has been no change in our internal control over financial reporting during the quarter ended March 31, 2019, that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. Legal Proceedings

We are subject to numerous lawsuits and claims arising out of the ordinary course of our business, including actions related to product liability; personal injury; the use and performance of our products; warranty matters; product recalls; patent, trademark or other intellectual property infringement; contractual liability; the conduct of our business; tax reporting in foreign jurisdictions; distributor termination; workplace safety; and environmental matters. We also have been identified as a potentially responsible party at multiple waste disposal sites under U.S. federal and related state environmental statutes and regulations and may have joint and several liability for any investigation and remediation costs incurred with respect to such sites. We have denied liability with respect to many of these lawsuits, claims and proceedings and are vigorously defending such lawsuits, claims and proceedings. We carry various forms of commercial, property and casualty, product liability and other forms of insurance; however, such insurance may not be applicable or adequate to cover the costs associated with a judgment against us with respect to these lawsuits, claims and proceedings. We do not believe that these lawsuits are material individually or in the aggregate. While we believe we have also established adequate accruals pursuant to U.S. generally accepted accounting principles for our expected future liability with respect to pending lawsuits, claims and proceedings, where the nature and extent of any such liability can be reasonably estimated based upon then presently available information, there can be no assurance that the final resolution of any existing or future lawsuits, claims or proceedings will not have a material adverse effect on our business, results of operations, financial condition or cash flows.

We conduct significant business operations in Brazil that are subject to the Brazilian federal, state and local labor, social security, tax and customs laws. While we believe we comply with such laws, they are complex, subject to varying interpretations and we are often engaged in litigation regarding the application of these laws to particular circumstances.

On April 29, 2019, we announced that we are conducting a formal review of our emissions certification process and compliance with emissions standards for our pick-up truck applications, following conversations with the U.S. Environmental Protection Agency (EPA) and California Air Resources Board (CARB) regarding certification for our engines in model year 2019 RAM 2500 and 3500 trucks. In addition, we announced that we have voluntarily disclosed our formal review to our regulators and other agencies and will work cooperatively to ensure a complete and thorough review. Due to the preliminary nature of our formal review and the presence of many unknown facts and circumstances, we cannot predict the outcome and we cannot provide assurance that the matter will not have a materially adverse impact on our results of operations, financial condition and cash flows.

ITEM 1A. Risk Factors

In addition to other information set forth in this report, you should consider other risk factors discussed in Part I, “Item 1A. Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2018, which could materially affect our business, financial condition or future results. The risks described in our Annual Report on Form 10-K or the "CAUTIONARY STATEMENTS REGARDING FORWARD-LOOKING INFORMATION" in this Quarterly report are not the only risks we face. In addition, the following risk factor is provided to supplement and update the risk factors previously disclosed in Part I, “Item 1A. Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2018. Additional risks and uncertainties not currently known to us or that we currently judge to be immaterial also may materially adversely affect our business, financial condition or operating results.

We are conducting a formal review of our emissions certification process and compliance with emissions standards with respect to our pick-up truck applications. The results of this formal review or the discovery of any noncompliance issues, could have a materially adverse impact on our results of operations, financial condition and cash flows.

We previously announced that we are conducting a formal review of our emissions certification process and compliance with emissions standards with respect to our pick-up truck applications, following conversations with the EPA and CARB regarding certification of our engines for model year 2019 RAM 2500 and 3500 trucks. While we have voluntarily disclosed our formal review to our regulators and other agencies, we have not been issued any official notice from regulators regarding potential noncompliance issues with these particular engines. We plan to work together closely with the relevant regulators to develop a resolution for these matters and we will implement recommendations for improvement as part of our ongoing commitment to compliance. At this time, we have not yet determined the impact, if any, to other model years or engines or the percentage of the engine populations that could be affected.

Due to the preliminary nature of the formal review and the presence of many unknown facts and circumstances, we are not yet able to estimate the financial impact of these matters. It is possible that the consequences of remediation plans resulting from our formal review could have a materially adverse impact on our results of operations, financial condition and cash flows in the periods in which these emission certification issues are addressed.

ITEM 2. Unregistered Sales of Equity Securities and Use of Proceeds

The following information is provided pursuant to Item 703 of Regulation S-K:

	Issuer Purchases of Equity Securities			
Period	**Total Number of Shares Purchased[1]**	**Average Price Paid per Share**	**Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs**	**Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs[2]**
January 1 - February 3	725,595	$ 137.82	725,595	83,713
February 4 - March 3	15,232	153.49	—	68,167
March 4 - March 31	9,876	158.61	—	58,104
Total	750,703	138.41	725,595	

(1) Shares purchased represent shares under our Key Employee Stock Investment Plan established in 1969 (there is no maximum repurchase limitation in this plan) and our Board of Directors authorized share repurchase program.

(2) These values reflect the sum of shares held in loan status under our Key Employee Stock Investment Plan. The repurchase program authorized by the Board of Directors does not limit the number of shares that may be purchased and was excluded from this column. The dollar value remaining available for future purchases under the 2018 program as of March 31, 2019, was $1.8 billion.

In October 2018, our Board of Directors authorized the acquisition of up to $2 billion of additional common stock. During the three months ended March 31, 2019, we repurchased $100 million of common stock under this authorization.

During the three months ended March 31, 2019, we repurchased 25,108 shares of common stock from employees in connection with the Key Employee Stock Investment Plan which allows certain employees, other than officers, to purchase shares of common stock on an installment basis up to an established credit limit. Loans are issued for five-year terms at a fixed interest rate established at the date of purchase and may be refinanced after their initial five-year period for an additional five-year period. Participants must hold shares for a minimum of six months from date of purchase. If the shares are sold before the loan is paid off, the employee must wait six months before another share purchase may be made. We hold participants' shares as security for the loans and would, in effect, repurchase shares if the participant defaulted in repayment of the loan. There is no maximum amount of shares that we may purchase under this plan.

ITEM 3. Defaults Upon Senior Securities

Not applicable.

ITEM 4. Mine Safety Disclosures

Not applicable.

ITEM 5. Other Information

Not applicable.

ITEM 6. Exhibits

The exhibits listed in the following Exhibit Index are filed as part of this Quarterly Report on Form 10-Q.

CUMMINS INC.
EXHIBIT INDEX

Exhibit No.	Description of Exhibit
3	By-Laws, as amended and restated, effective as of February 12, 2019 (incorporated by reference to Exhibit 3.2 to the Current Report on Form 8-K filed by Cummins Inc. with the Securities and Exchange Commission on February 13, 2019 (File No. 001-04949)).
31(a)	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31(b)	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH	XBRL Taxonomy Extension Schema Document.
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Cummins Inc.

Date: April 30, 2019

By:	/s/ MARK A. SMITH	By:	/s/ CHRISTOPHER C. CLULOW
	Mark A. Smith		Christopher C. Clulow
	Vice President and Chief Financial Officer		*Vice President-Corporate Controller*
	(Principal Financial Officer)		*(Principal Accounting Officer)*