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, 2022

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)

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

Title of each class	Trading symbol(s)	Name of each exchange on which registered
Common stock, $2.50 par value	CMI	New York Stock Exchange

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that 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, 2022, there were 141,097,817 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, 2022	April 4, 2021
NET SALES [(a)] (Note 2)	**$ 6,385**	$ 6,092
Cost of sales (Note 3)	**4,853**	4,606
GROSS MARGIN	**1,532**	1,486
OPERATING EXPENSES AND INCOME		
Selling, general and administrative expenses	**615**	574
Research, development and engineering expenses	**298**	260
Equity, royalty and interest income from investees (Notes 3 and 5)	**96**	166
Other operating expense, net (Note 3)	**111**	8
OPERATING INCOME	**604**	810
Interest expense	**17**	28
Other (expense) income, net	**(9)**	1
INCOME BEFORE INCOME TAXES	**578**	783
Income tax expense (Note 6)	**155**	172
CONSOLIDATED NET INCOME	**423**	611
Less: Net income attributable to noncontrolling interests	**5**	8
NET INCOME ATTRIBUTABLE TO CUMMINS INC.	**$ 418**	$ 603
EARNINGS PER COMMON SHARE ATTRIBUTABLE TO CUMMINS INC.		
Basic	**$ 2.94**	$ 4.10
Diluted	**$ 2.92**	$ 4.07
WEIGHTED-AVERAGE COMMON SHARES OUTSTANDING		
Basic	**142.2**	147.0
Dilutive effect of stock compensation awards	**0.9**	1.3
Diluted	**143.1**	148.3

[(a)] Includes sales to nonconsolidated equity investees of $344 million for the three months ended March 31, 2022, compared with $478 million for the comparable period in 2021.

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

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

In millions	Three months ended March 31, 2022	Three months ended April 4, 2021
CONSOLIDATED NET INCOME	**$ 423**	$ 611
Other comprehensive income (loss), net of tax (Note 13)		
Change in pension and other postretirement defined benefit plans	**16**	29
Foreign currency translation adjustments	**4**	(56)
Unrealized gain on derivatives	**28**	72
Total other comprehensive income, net of tax	**48**	45
COMPREHENSIVE INCOME	**471**	656
Less: Comprehensive (loss) income attributable to noncontrolling interests	**(3)**	8
COMPREHENSIVE INCOME ATTRIBUTABLE TO CUMMINS INC.	**$ 474**	$ 648

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, 2022	December 31, 2021
ASSETS		
Current assets		
Cash and cash equivalents	**$ 2,276**	$ 2,592
Marketable securities (Note 7)	**527**	595
Total cash, cash equivalents and marketable securities	**2,803**	3,187
Accounts and notes receivable, net		
Trade and other	**3,969**	3,565
Nonconsolidated equity investees	**399**	425
Inventories (Note 8)	**4,586**	4,355
Prepaid expenses and other current assets	**839**	777
Total current assets	**12,596**	12,309
Long-term assets		
Property, plant and equipment	**9,333**	9,358
Accumulated depreciation	**(4,952)**	(4,936)
Property, plant and equipment, net	**4,381**	4,422
Investments and advances related to equity method investees	**1,592**	1,538
Goodwill	**1,286**	1,287
Other intangible assets, net	**917**	900
Pension assets (Note 4)	**1,506**	1,488
Other assets (Note 9)	**1,844**	1,766
Total assets	**$ 24,122**	$ 23,710
LIABILITIES		
Current liabilities		
Accounts payable (principally trade)	**$ 3,497**	$ 3,021
Loans payable (Note 10)	**243**	208
Commercial paper (Note 10)	**311**	313
Accrued compensation, benefits and retirement costs	**411**	683
Current portion of accrued product warranty (Note 11)	**798**	755
Current portion of deferred revenue (Note 2)	**883**	855
Other accrued expenses (Note 9)	**1,300**	1,190
Current maturities of long-term debt (Note 10)	**69**	59
Total current liabilities	**7,512**	7,084
Long-term liabilities		
Long-term debt (Note 10)	**3,502**	3,579
Pensions and other postretirement benefits (Note 4)	**593**	604
Accrued product warranty (Note 11)	**709**	684
Deferred revenue (Note 2)	**877**	850
Other liabilities (Note 9)	**1,566**	1,508
Total liabilities	**$ 14,759**	$ 14,309
Commitments and contingencies (Note 12)		
EQUITY		
Cummins Inc. shareholders' equity		
Common stock, $2.50 par value, 500 shares authorized, 222.5 and 222.5 shares issued	**$ 2,411**	$ 2,427
Retained earnings	**16,952**	16,741
Treasury stock, at cost, 81.4 and 80.0 shares	**(9,412)**	(9,123)
Accumulated other comprehensive loss (Note 13)	**(1,515)**	(1,571)
Total Cummins Inc. shareholders' equity	**8,436**	8,474
Noncontrolling interests	**927**	927
Total equity	**$ 9,363**	$ 9,401
Total liabilities and equity	**$ 24,122**	$ 23,710

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, 2022	Three months ended April 4, 2021
CASH FLOWS FROM OPERATING ACTIVITIES		
Consolidated net income	**$ 423**	$ 611
Adjustments to reconcile consolidated net income to net cash provided by operating activities		
Depreciation and amortization	**161**	170
Deferred income taxes	**(66)**	8
Equity in income of investees, net of dividends	**(76)**	(136)
Pension and OPEB expense (Note 4)	**9**	20
Pension contributions and OPEB payments (Note 4)	**(43)**	(51)
Share-based compensation expense	**5**	8
Russian suspension costs (Note 3)	**158**	—
Asset impairments and other charges	**36**	—
Loss on corporate owned life insurance	**37**	32
Foreign currency remeasurement and transaction exposure	**(7)**	1
Changes in current assets and liabilities, net of acquisitions		
Accounts and notes receivable	**(417)**	(374)
Inventories	**(289)**	(336)
Other current assets	**(57)**	(24)
Accounts payable	**484**	465
Accrued expenses	**(251)**	(24)
Changes in other liabilities	**70**	—
Other, net	**(13)**	(31)
Net cash provided by operating activities	**164**	339
CASH FLOWS FROM INVESTING ACTIVITIES		
Capital expenditures	**(104)**	(87)
Investments in internal use software	**(11)**	(11)
Investments in and advances to equity investees	**(32)**	(24)
Acquisition of a business, net of cash acquired (Note 14)	**83**	—
Investments in marketable securities—acquisitions	**(197)**	(143)
Investments in marketable securities—liquidations (Note 7)	**254**	207
Cash flows from derivatives not designated as hedges	**(2)**	14
Other, net	**(1)**	19
Net cash used in investing activities	**(10)**	(25)
CASH FLOWS FROM FINANCING ACTIVITIES		
Net payments of commercial paper	**(2)**	(6)
Payments on borrowings and finance lease obligations	**(24)**	(16)
Net borrowings (payments) under short-term credit agreements	**29**	(102)
Distributions to noncontrolling interests	**(14)**	(13)
Dividend payments on common stock	**(207)**	(197)
Repurchases of common stock	**(311)**	(418)
Proceeds from issuing common stock	**9**	18
Other, net	**23**	(11)
Net cash used in financing activities	**(497)**	(745)
EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS	**27**	(12)
Net decrease in cash and cash equivalents	**(316)**	(443)
Cash and cash equivalents at beginning of year	**2,592**	3,401
CASH AND CASH EQUIVALENTS AT END OF PERIOD	**$ 2,276**	$ 2,958

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)

	Three months ended							
In millions, except per share amounts	**Common Stock**	**Additional Paid-in Capital**	**Retained Earnings**	**Treasury Stock**	**Accumulated Other Comprehensive Loss**	**Total Cummins Inc. Shareholders' Equity**	**Noncontrolling Interests**	**Total Equity**
BALANCE AT DECEMBER 31, 2021	**$ 556**	**$ 1,871**	**$ 16,741**	**$ (9,123)**	**$ (1,571)**	**$ 8,474**	**$ 927**	**$ 9,401**
Net income			**418**			**418**	**5**	**423**
Other comprehensive income (loss), net of tax (Note 13)					**56**	**56**	**(8)**	**48**
Repurchases of common stock				**(311)**		**(311)**	**—**	**(311)**
Cash dividends on common stock, $1.45 per share			**(207)**			**(207)**	**—**	**(207)**
Distributions to noncontrolling interests						**—**	**(14)**	**(14)**
Share-based awards		**(9)**		**18**		**9**	**—**	**9**
Other shareholder transactions		**(7)**		**4**		**(3)**	**17**	**14**
BALANCE AT MARCH 31, 2022	**$ 556**	**$ 1,855**	**$ 16,952**	**$ (9,412)**	**$ (1,515)**	**$ 8,436**	**$ 927**	**$ 9,363**
BALANCE AT DECEMBER 31, 2020	$ 556	$ 1,848	$ 15,419	$ (7,779)	$ (1,982)	$ 8,062	$ 927	$ 8,989
Net income			603			603	8	611
Other comprehensive income, net of tax (Note 13)					45	45	—	45
Repurchases of common stock				(418)		(418)	—	(418)
Cash dividends on common stock, $1.35 per share			(197)			(197)	—	(197)
Distributions to noncontrolling interests						—	(13)	(13)
Share-based awards		(6)		24		18	—	18
Other shareholder transactions		(5)		1		(4)	—	(4)
BALANCE AT APRIL 4, 2021	$ 556	$ 1,837	$ 15,825	$ (8,172)	$ (1,937)	$ 8,109	$ 922	$ 9,031

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 AND BASIS OF PRESENTATION

Overview

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, natural gas, electric and hybrid powertrains and powertrain-related components including filtration, aftertreatment, turbochargers, fuel systems, controls systems, air handling systems, automated transmissions, electric power generation systems, batteries, electrified power systems, hydrogen production and fuel cell products. We sell our products to original equipment manufacturers (OEMs), distributors, dealers and other customers worldwide. We serve our customers through a service network of approximately 500 wholly-owned, joint venture and independent distributor locations and more than 10,000 Cummins certified dealer locations in approximately 190 countries and territories.

Reporting Period

Beginning in 2022, we transitioned to a Gregorian calendar with our reporting period ending on the last day of the quarterly calendar period. In 2021 and prior, our reporting period ended on the Sunday closest to the last day of the quarterly calendar period. The first quarters of 2022 and 2021 ended on March 31 and April 4, respectively. Our fiscal year ends on December 31, regardless of the day of the week on which December 31 falls.

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* were 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 were 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, 2021. 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 required annual disclosures.

Reclassifications

Certain amounts for prior year periods were reclassified to conform to the current year presentation.

Use of Estimates in Preparation of Financial Statements

Preparation of financial statements 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.

Weighted-Average Diluted Shares Outstanding

The weighted-average diluted common shares outstanding exclude the anti-dilutive effect of certain stock options.The options excluded from diluted earnings per share were as follows:

	Three months ended	
	March 31, 2022	April 4, 2021
Options excluded	**20,463**	2,780

NOTE 2. REVENUE FROM CONTRACTS WITH CUSTOMERS

Long-term Contracts

The majority 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 were not satisfied as of March 31, 2022, was $736 million. We expect to recognize the related revenue of $112 million over the next 12 months and $624 million over periods up to 10 years. See Note 11, "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 costs incurred when providing goods and services to our customers or represent sales-based royalties.

Deferred and Unbilled Revenue

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

In millions	March 31, 2022	December 31, 2021
Unbilled revenue	**$ 138**	$ 100
Deferred revenue, primarily extended warranty	**1,760**	1,705

We recognized revenue of $240 million for the three months ended March 31, 2022, compared with $169 million for the comparable period in 2021, that was included in the deferred revenue balance at the beginning of each year. We did not record any impairment losses on our unbilled revenues during the three months ended March 31, 2022 or April 4, 2021.

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, 2022	April 4, 2021
United States	**$ 3,457**	$ 3,060
China	**653**	957
India	**309**	330
Other international	**1,966**	1,745
Total net sales	**$ 6,385**	$ 6,092

Segment Revenue

Engine segment external sales by market were as follows:

	Three months ended	
In millions	March 31, 2022	April 4, 2021
Heavy-duty truck	**$ 684**	$ 613
Medium-duty truck and bus	**591**	483
Light-duty automotive	**487**	474
Total on-highway	**1,762**	1,570
Off-highway	**287**	325
Total sales	**$ 2,049**	$ 1,895

Distribution segment external sales by region were as follows:

	Three months ended	
In millions	March 31, 2022	April 4, 2021
North America	$ 1,371	$ 1,166
Asia Pacific	244	213
Europe	143	163
Russia	136	57
China	82	85
India	48	49
Africa and Middle East	46	54
Latin America	41	40
Total sales	$ 2,111	$ 1,827

Distribution segment external sales by product line were as follows:

	Three months ended	
In millions	March 31, 2022	April 4, 2021
Parts	$ 926	$ 754
Engines	438	333
Power generation	398	416
Service	349	324
Total sales	$ 2,111	$ 1,827

Components segment external sales by business were as follows:

	Three months ended	
In millions	March 31, 2022	April 4, 2021
Emission solutions	$ 808	$ 966
Filtration	308	301
Turbo technologies	197	225
Automated transmissions	134	115
Electronics and fuel systems	70	117
Total sales	$ 1,517	$ 1,724

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

	Three months ended	
In millions	March 31, 2022	April 4, 2021
Power generation	$ 399	$ 351
Industrial	188	179
Generator technologies	96	82
Total sales	$ 683	$ 612

NOTE 3. RUSSIAN OPERATIONS

On March 17, 2022, the Board of Directors (the Board) decided to indefinitely suspend our operations in Russia due to the ongoing conflict in Ukraine. At the time of suspension, our Russian operations included a wholly-owned distributor in Russia, an unconsolidated joint venture and direct sales into Russia from our other business units. As a result of the suspension of operations, we evaluated the recoverability of assets in Russia and assessed other liabilities that may have been incurred. We have experienced and expect to continue to experience, an inability to collect customer receivables and may be the subject of litigation in connection with our suspension of commercial operations in Russia. We will continue to evaluate the situation as conditions evolve and may take additional actions as deemed necessary in future periods. The following summarizes the costs associated with the suspension of our Russian operations in our first quarter results on our *Condensed Consolidated Statements of Net Income*.

In millions	March 31, 2022	Statement of Net Income Location
Inventory write-downs	**$ 59**	Cost of sales
Accounts receivable reserves	**43**	Other operating expense, net
Impairment and other joint venture costs	**31**	Equity, royalty and interest income from investees
Other	**25**	Other operating expense, net
Total	**$ 158**	

NOTE 4. PENSIONS AND OTHER POSTRETIREMENT BENEFITS

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

	Three months ended	
In millions	March 31, 2022	April 4, 2021
Defined benefit pension contributions	**$ 33**	$ 42
OPEB payments, net	**10**	9
Defined contribution pension plans	**36**	35

We anticipate making additional defined benefit pension contributions during the remainder of 2022 of $17 million for our U.S. and U.K. qualified and non-qualified pension plans. 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 2022 annual net periodic pension cost to approximate $31 million.

The components of net periodic pension and OPEB costs under our plans were as follows:

	Pension					
	U.S. Plans		U.K. Plans		OPEB	
	Three months ended					
In millions	March 31, 2022	April 4, 2021	March 31, 2022	April 4, 2021	March 31, 2022	April 4, 2021
Service cost	**$ 34**	$ 35	**$ 8**	$ 8	**$ —**	$ —
Interest cost	**22**	19	**9**	8	**1**	1
Expected return on plan assets	**(52)**	(50)	**(20)**	(21)	**—**	—
Recognized net actuarial loss	**6**	12	**1**	8	**—**	—
Net periodic benefit cost (credit)	**$ 10**	$ 16	**$ (2)**	$ 3	**$ 1**	$ 1

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 period was as follows:

	Three months ended	
In millions	March 31, 2022	April 4, 2021
Manufacturing entities		
Dongfeng Cummins Engine Company, Ltd.	**$ 16**	$ 31
Beijing Foton Cummins Engine Co., Ltd.	**14**	39
Tata Cummins, Ltd.	**9**	6
Chongqing Cummins Engine Company, Ltd.	**9**	10
All other manufacturers	**(10)** [1]	55
Distribution entities		
Komatsu Cummins Chile, Ltda.	**7**	6
All other distributors	**2**	3
Cummins share of net income	**47**	150
Royalty and interest income	**49**	16
Equity, royalty and interest income from investees	**$ 96**	$ 166

[1] Includes a $28 million impairment of our joint venture with KAMAZ and $ 3 million of royalty charges as part of our costs associated with the suspension of our Russian operations. In addition, on February 7, 2022, we purchased Westport Fuel System Inc.'s stake in Cummins Westport Joint Venture. See NOTE 3, "RUSSIAN OPERATIONS" and NOTE 14, "ACQUISITIONS" to our *Condensed Consolidated Financial Statements* for additional information.

NOTE 6. INCOME TAXES

Our effective tax rates for the three months ended March 31, 2022 and April 4, 2021, were 26.8 percent and 22.0 percent, respectively.

The three months ended March 31, 2022, contained unfavorable discrete tax items of $31 million, primarily due to $18 million of unfavorable changes associated with uncertainty in our Russian operations, $9 million of unfavorable changes in tax reserves and $4 million of net unfavorable other discrete tax items.

The three months ended April 4, 2021, contained favorable discrete items of $4 million.

NOTE 7. MARKETABLE SECURITIES

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

	March 31, 2022			December 31, 2021		
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	**$ 284**	**$ —**	**$ 284**	$ 299	$ —	$ 299
Debt mutual funds	**205**	**(2)**	**203**	254	2	256
Equity mutual funds	**31**	**9**	**40**	29	10	39
Debt securities	**—**	**—**	**—**	1	—	1
Total marketable securities	**$ 520**	**$ 7**	**$ 527**	$ 583	$ 12	$ 595

(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 three months ended March 31, 2022, or the year ended December 31, 2021.

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 fromthree 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 measures for the vast majority of these investments are the daily net asset values 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 measure.
- *Equity mutual funds* — The fair value measures for these investments are the net asset values 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 measures for these securities are broker quotes received from reputable firms. These securities are infrequently traded on a national 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, 2022**	**April 4, 2021**
Proceeds from sales of marketable securities	**$ 195**	$ 163
Proceeds from maturities of marketable securities	**59**	44
Investments in marketable securities - liquidations	**$ 254**	$ 207

NOTE 8. INVENTORIES

Inventories are stated at the lower of cost or net realizable value.Inventories included the following:

In millions	March 31, 2022	December 31, 2021
Finished products	$ 2,767	$ 2,538
Work-in-process and raw materials	2,028	2,009
Inventories at FIFO cost	4,795	4,547
Excess of FIFO over LIFO	(209)	(192)
Total inventories	$ 4,586	$ 4,355

NOTE 9. SUPPLEMENTAL BALANCE SHEET DATA

Other assets included the following:

In millions	March 31, 2022	December 31, 2021
Deferred income taxes	$ 494	$ 428
Corporate owned life insurance	455	492
Operating lease assets	440	444
Other	455	402
Other assets	$ 1,844	$ 1,766

Other accrued expenses included the following:

In millions	March 31, 2022	December 31, 2021
Marketing accruals	$ 304	$ 303
Income taxes payable	229	107
Other taxes payable	208	234
Current portion of operating lease liabilities	127	128
Other	432	418
Other accrued expenses	$ 1,300	$ 1,190

Other liabilities included the following:

In millions	March 31, 2022	December 31, 2021
Deferred income taxes	$ 385	$ 403
Operating lease liabilities	326	326
Long-term income taxes	263	263
Accrued compensation	160	177
Mark-to-market valuation on interest rate derivatives	75	19
Other long-term liabilities	357	320
Other liabilities	$ 1,566	$ 1,508

NOTE 10. DEBT

Loans Payable and Commercial Paper

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

In millions	March 31, 2022	December 31, 2021
Loans payable [1]	**$ 243**	$ 208
Commercial paper	**311** [2]	313 [3]

[1] Loans payable consist primarily of notes payable to various domestic and international financial institutions. 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 0.33 percent at March 31, 2022. This included $111 million of borrowings under the Europe program that were at a negative weighted-average interest rate of 0.22 percent and $200 million of borrowings under the U.S. program at a weighted-average interest rate of 0.63 percent.

[3] The weighted-average interest rate, inclusive of all brokerage fees, was negative 0.01 percent at December 31, 2021. This included $113 million of borrowings under the Europe program that were at a negative weighted-average interest rate of 0.39 percent and $200 million of borrowings under the U.S. program at a weighted-average interest rate of 0.21 percent.

We can issue up to $3.5 billion of unsecured, short-term promissory notes (commercial paper) pursuant to the 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 acquisitions and general corporate purposes.

Revolving Credit Facilities

We have access to committed credit facilities totaling $3.5 billion, including the $1.5 billion 364-day facility that expires August 17, 2022 and our $2.0 billion five-year facility that expires on August 18, 2026. We intend to maintain credit facilities at the current or higher aggregate amounts by renewing or replacing these facilities at or before expiration. These revolving credit facilities are maintained primarily to provide backup liquidity for our commercial paper borrowings and general corporate purposes. There were no outstanding borrowings under these facilities at March 31, 2022 and December 31, 2021.

At March 31, 2022, the $311 million of outstanding commercial paper effectively reduced the $3.5 billion of revolving credit capacity to $3.2 billion.

At March 31, 2022, we also had an additional $253 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, 2022	December 31, 2021
Long-term debt			
Senior notes, due 2023	3.65%	**$ 500**	$ 500
Senior notes, due 2025[1]	0.75%	**500**	500
Debentures, due 2027	6.75%	**58**	58
Debentures, due 2028	7.125%	**250**	250
Senior notes, due 2030[1]	1.50%	**850**	850
Senior notes, due 2043	4.875%	**500**	500
Senior notes, due 2050	2.60%	**650**	650
Debentures, due 2098[2]	5.65%	**165**	165
Other debt		**126**	110
Unamortized discount and deferred issuance costs		**(66)**	(68)
Fair value adjustments due to hedge on indebtedness		**(49)**	34
Finance leases		**87**	89
Total long-term debt		**3,571**	3,638
Less: Current maturities of long-term debt		**69**	59
Long-term debt		**$ 3,502**	$ 3,579

[1] In 2021, we entered into a series of interest rate swaps to effectively convert from a fixed rate to floating rate. See "Interest Rate Risk" below for additional information.

[2] The effective interest rate is 7.48 percent.

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

In millions	2022	2023	2024	2025	2026
Principal payments	$ 62	$ 548	$ 32	$ 507	$ 24

Interest Rate Risk

Beginning in the second half of 2021, we entered into a series of interest rate swaps to effectively convert our $500 million senior notes, due in 2025, from a fixed rate of 0.75 percent to a floating rate equal to the three-month LIBOR plus a spread, and we also entered into a series of interest rate swaps to effectively convert $765 million of our $850 million senior notes, due in 2030, from a fixed rate of 1.50 percent to a floating rate equal to the three-month LIBOR plus a spread. The loss on the interest rate swaps was $72 million and the offsetting gain on borrowings was $80 million for the three months ended March 31, 2022.

We have interest rate lock agreements to reduce the variability of the cash flows of the interest payments on a total of $500 million of fixed rate debt forecast to be issued in 2023 to replace our senior notes at maturity. The following table summarizes the gains, net of tax, recognized in other comprehensive income:

In millions	Three months ended	
Type of Swap	March 31, 2022	April 4, 2021
Interest rate locks	**$ 39**	$ 61

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, 2022	December 31, 2021
Fair value of total debt [1]	**$ 4,060**	$ 4,461
Carrying value of total debt	**4,125**	4,159

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

Shelf Registration

As a well-known seasoned issuer, we filed an automatic shelf registration of an undetermined amount of debt and equity with the SEC on February 8, 2022. 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 11. 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:

	Three months ended	
In millions	March 31, 2022	April 4, 2021
Balance, beginning of year	**$ 2,425**	$ 2,307
Provision for base warranties issued	**123**	157
Deferred revenue on extended warranty contracts sold	**70**	65
Provision for product campaigns issued	**42**	3
Payments made during period	**(132)**	(146)
Amortization of deferred revenue on extended warranty contracts	**(73)**	(61)
Changes in estimates for pre-existing product warranties	**(26)**	(44)
Foreign currency translation and other	**94** [1]	(6)
Balance, end of period	**$ 2,523**	$ 2,275

[1] Includes $95 million of product warranty liability related to the acquisition of Cummins Westport Joint Venture. See Note 14, "ACQUISITIONS" to our *Condensed Consolidated Financial Statements* for additional information.

We recognized supplier recoveries of $13 million for the three months ended March 31, 2022, compared with $4 million for the comparable period in 2021.

Warranty related deferred revenues and warranty liabilities on our *Condensed Consolidated Balance Sheets* were as follows:

In millions	March 31, 2022	December 31, 2021	Balance Sheet Location
Deferred revenue related to extended coverage programs			
Current portion	**$ 292**	$ 286	Current portion of deferred revenue
Long-term portion	**724**	700	Deferred revenue
Total	**$ 1,016**	$ 986	
Product warranty			
Current portion	**$ 798**	$ 755	Current portion of accrued product warranty
Long-term portion	**709**	684	Accrued product warranty
Total	**$ 1,507**	$ 1,439	
Total warranty accrual	**$ 2,523**	$ 2,425	

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 second quarter of 2018, we reached agreement with the CARB and EPA regarding our plans to address the affected populations. From the fourth quarter of 2017 through the second quarter of 2018, we recorded charges for the expected costs of field campaigns to repair these engine systems.

The campaigns launched in the third quarter of 2018 are being completed in phases across the affected population. The total engine system campaign charge, excluding supplier recoveries, was $410 million. In the fourth quarter of 2020, we recorded an additional $20 million charge related to this campaign, as a change in estimate, to bring the total campaign, excluding supplier recoveries, to $430 million. At March 31, 2022, the remaining accrual balance was $72 million.

NOTE 12. COMMITMENTS AND CONTINGENCIES

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 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 were conducting a formal internal review of our emissions certification process and compliance with emission standards for our pick-up truck applications, following conversations with the EPA and CARB regarding certification of our engines in model year 2019 RAM 2500 and 3500 trucks. This review is being conducted with external advisors as we strive to ensure the certification and compliance processes for all of our pick-up truck applications are consistent with our internal policies, engineering standards and applicable laws. During conversations with the EPA and CARB about the effectiveness of our pick-up truck applications, the regulators raised concerns that certain aspects of our emissions systems may reduce the effectiveness of our emissions control systems and thereby act as defeat devices. As a result, our internal review focuses, in part, on the regulators' concerns. We are working closely with the regulators to enhance our emissions systems to improve the effectiveness of all of our pick-up truck applications and to fully address the regulators' requirements. Based on discussions with the regulators, we have developed a new calibration for the engines in model year 2019 RAM 2500 and 3500 trucks that has been included in all engines shipped since September 2019. During our ongoing discussions, the regulators turned their attention to other model years and other engines, most notably our pick-up truck applications for RAM 2500 and 3500 trucks for model years 2013 through 2018. In connection with these and other ongoing discussions with the EPA and CARB, we are developing a new software calibration and will recall model years 2013 through 2018 RAM 2500 and 3500 trucks. We accrued $30 million for the recall during the first quarter of 2022, an amount that reflects our current estimate of the cost of the recall.

We will continue to work together closely with the relevant regulators to develop and implement recommendations for improvement and seek to reach further resolutions as part of our ongoing commitment to compliance. Due to the presence of many unknown facts and circumstances, we are not yet able to estimate any further financial impact of these matters. It is possible that the consequences of any remediation plans resulting from our formal review and these regulatory processes could have a material adverse impact on our results of operations and cash flows.

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, 2022, the maximum potential loss related to these guarantees was $39 million.

We have arrangements with certain suppliers that require us to purchase minimum volumes or be subject to monetary penalties. At March 31, 2022, if we were to stop purchasing from each of these suppliers, the aggregate amount of the penalty would be approximately $136 million. These arrangements enable us to secure supplies of critical components and IT services. 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, 2022, the total commitments under these contracts were $64 million. These arrangements enable us to guarantee 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 $104 million at March 31, 2022.

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 derivatives	Total attributable to Cummins Inc.	Noncontrolling interests	Total
Balance at December 31, 2021	**$ (346)**	**$ (1,208)**	**$ (17)**	**$ (1,571)**		
Other comprehensive income before reclassifications						
Before-tax amount	**14**	**11**	**36**	**61**	**$ (8)**	**$ 53**
Tax (expense) income	**(4)**	**1**	**(7)**	**(10)**	**—**	**(10)**
After-tax amount	**10**	**12**	**29**	**51**	**(8)**	**43**
Amounts reclassified from accumulated other comprehensive income[1]	**6**	**—**	**(1)**	**5**	**—**	**5**
Net current period other comprehensive income (loss)	**16**	**12**	**28** [2]	**56**	**$ (8)**	**$ 48**
Balance at March 31, 2022	**$ (330)**	**$ (1,196)**	**$ 11**	**$ (1,515)**		
Balance at December 31, 2020	$ (735)	$ (1,204)	$ (43)	$ (1,982)		
Other comprehensive income before reclassifications						
Before-tax amount	15	(60)	93	48	$ —	$ 48
Tax (expense) benefit	(3)	4	(22)	(21)	—	(21)
After-tax amount	12	(56)	71	27	—	27
Amounts reclassified from accumulated other comprehensive income[1]	17	—	1	18	—	18
Net current period other comprehensive income (loss)	29	(56)	72 [2]	45	$ —	$ 45
Balance at April 4, 2021	$ (706)	$ (1,260)	$ 29	$ (1,937)		

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

[2] Primarily related to interest rate lock activity. See the Interest Rate Risk section in NOTE 10, "DEBT" for additional information.

NOTE 14. ACQUISITIONS

Completed Acquisitions

On February 7, 2022, we purchased Westport Fuel System Inc.'s stake in the Cummins Westport Joint Venture. We will continue to operate the business as the sole owner. The purchase price was $42 million and was allocated primarily to cash, warranty and deferred revenue related to extended coverage contracts. The results of the business were reported in our Engine segment. Pro forma financial information for the acquisition was not presented as the effects are not material to our *Condensed Consolidated Financial Statements.*

Pending Acquisitions

On February 9, 2022, we reached an agreement with Altra Industrial Motion Corp to acquire its Jacobs Vehicle Systems business and closed the transaction in April 2022. Sales of this business were $194 million in 2021. The purchase price was $346 million in cash, subject to typical adjustments related to closing working capital and other amounts and does not contain any contingent consideration. At this time, we have not completed the purchase price allocation, but expect to record approximately $270 million to $300 million of goodwill and intangibles. This acquisition will be reported in our Components segment.

On February 21, 2022, we entered into an Agreement and Plan of Merger (the Merger Agreement) with Meritor, Inc. (Meritor) and Rose NewCo Inc. (Merger Sub) pursuant to which we agreed to acquire Meritor, a global leader of drivetrain, mobility, braking, aftermarket and electric powertrain solutions for commercial vehicle and industrial markets. At closing, Merger Sub will merge into Meritor with Meritor as the surviving entity and becoming our wholly owned subsidiary. This acquisition will be reported in our Components and New Power segments. Pursuant to the terms of the Merger Agreement, we will pay $36.50 in cash per share of Meritor common stock, for a total transaction value of approximately $3.7 billion, including assumed debt and net of acquired cash. We plan to fund this acquisition with a combination of cash, commercial paper and long-term debt.

The Board of Directors of Meritor recommended that Meritor shareholders vote in favor of the transaction at a Special Meeting of Shareholders to be held on May 26, 2022. The transaction is expected to close by the end of 2022 subject to customary closing conditions and receipt of applicable regulatory approvals. The Merger Agreement contains certain customary termination rights, subject to certain limitations, that could result in either us or Meritor having to pay a termination fee to the other party. Should the Merger Agreement be terminated under such specified circumstances, Meritor could be required to pay us approximately a $74 million termination fee, and we could be required to pay Meritor a $160 million termination fee.

NOTE 15. 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 New Power. This reporting structure is organized according to the products and markets each segment serves. The Engine segment produces engines (15 liters and smaller) 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 automated 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 New Power segment designs, manufactures, sells and supports hydrogen production solutions as well as electrified power systems ranging from fully electric to hybrid along with innovative components and subsystems, including battery and fuel cell technologies. The New Power segment is currently in the development phase with a primary focus on research and development activities for our power systems, components and subsystems. We continue to serve all our markets as they adopt electrification and alternative power technologies, meeting the needs of our OEM partners and end customers.

We use segment earnings or losses before interest expense, income taxes, depreciation and amortization and noncontrolling interests (EBITDA) as the primary basis for the CODM to evaluate the performance of each of our reportable operating segments. We believe EBITDA is a useful measure of our operating performance as it assists investors and debt holders in comparing our performance on a consistent basis without regard to financing methods, capital structure, income taxes or depreciation and amortization methods, which can vary significantly depending upon many factors. 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 gains or losses 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	New Power	Total Segments
Three months ended March 31, 2022						
External sales	**$ 2,049**	**$ 2,111**	**$ 1,517**	**$ 683**	**$ 25**	**$ 6,385**
Intersegment sales	**704**	**6**	**471**	**477**	**6**	**1,664**
Total sales	**2,753**	**2,117**	**1,988**	**1,160**	**31**	**8,049**
Research, development and engineering expenses	**109**	**13**	**76**	**64**	**36**	**298**
Equity, royalty and interest income (loss) from investees	**44** (1)	**16**	**28**	**11**	**(3)**	**96**
Interest income	**4**	**2**	**1**	**1**	**—**	**8**
Russian suspension costs(2)	**32** (3)	**100**	**6**	**20**	**—**	**158**
Segment EBITDA	**392**	**110**	**320**	**90**	**(67)**	**845**
Depreciation and amortization(4)	**51**	**28**	**43**	**31**	**7**	**160**
Three months ended April 4, 2021						
External sales	$ 1,895	$ 1,827	$ 1,724	$ 612	$ 34	$ 6,092
Intersegment sales	564	8	428	410	1	1,411
Total sales	2,459	1,835	2,152	1,022	35	7,503
Research, development and engineering expenses	92	13	75	57	23	260
Equity, royalty and interest income from investees	113	17	19	12	5	166
Interest income	3	1	1	1	—	6
Segment EBITDA	354	160	421	126	(51)	1,010
Depreciation and amortization(4)	51	30	48	35	5	169

(1) Includes a $28 million impairment of our joint venture with KAMAZ and $ 3 million of royalty charges as part of our costs associated with the suspension of our Russian operations. See Note 3, "RUSSIAN OPERATIONS" to our *Condensed Consolidated Financial Statements* for additional information.

(2) See Note 3, "RUSSIAN OPERATIONS" to our *Condensed Consolidated Financial Statements* for additional information.

(3) Includes $31 million of Russian suspension costs reflected in the Equity, royalty and interest income (loss) from investees line above.

(4) 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 months ended March 31, 2022 and April 4, 2021, respectively. A portion of depreciation expense is included in Research, development and engineering expenses.

A reconciliation of our total segment sales to total net sales in the *Condensed Consolidated Statements of Net Income* was as follows:

	Three months ended	
In millions	March 31, 2022	April 4, 2021
Total segment sales	**$ 8,049**	$ 7,503
Elimination of intersegment sales	**(1,664)**	(1,411)
Total net sales	**$ 6,385**	$ 6,092

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, 2022	April 4, 2021
TOTAL SEGMENT EBITDA	**$ 845**	$ 1,010
Intersegment eliminations and other [(1)]	**(90)**	(30)
Less:		
Interest expense	**17**	28
Depreciation and amortization	**160**	169
INCOME BEFORE INCOME TAXES	**578**	783
Less: Income tax expense	**155**	172
CONSOLIDATED NET INCOME	**423**	611
Less: Net income attributable to noncontrolling interests	**5**	8
NET INCOME ATTRIBUTABLE TO CUMMINS INC.	**$ 418**	$ 603

[(1)] Intersegment eliminations and other for the three months ended March 31, 2022, included $ 17 million of costs associated with the planned separation of our Filtration business.

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," "may" 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:

GOVERNMENT REGULATION

- any adverse results of our internal review into our emissions certification process and compliance with emission standards;
- increased scrutiny from regulatory agencies, as well as unpredictability in the adoption, implementation and enforcement of emission standards around the world;
- changes in international, national and regional trade laws, regulations and policies;
- any adverse effects of the U.S. government's COVID-19 vaccine mandates;
- changes in taxation;
- global legal and ethical compliance costs and risks;
- increasingly stringent environmental laws and regulations;
- future bans or limitations on the use of diesel-powered products;

BUSINESS CONDITIONS / DISRUPTIONS

- any adverse effects of the conflict between Russia and Ukraine and the global response (including government bans or restrictions on doing business in Russia);
- failure to successfully execute or integrate the acquisition of Meritor, Inc.;
- failure to realize all of the anticipated benefits from our announced acquisition of Meritor, Inc.;
- raw material, transportation and labor price fluctuations and supply shortages;
- aligning our capacity and production with our demand;
- the actions of, and income from, joint ventures and other investees that we do not directly control;
- large truck manufacturers' and original equipment manufacturers' customers discontinuing outsourcing their engine supply needs or experiencing financial distress, bankruptcy or change in control;

PRODUCTS AND TECHNOLOGY

- product recalls;
- variability in material and commodity costs;
- the development of new technologies that reduce demand for our current products and services;
- lower than expected acceptance of new or existing products or services;
- product liability claims;
- our sales mix of products;

GENERAL

- failure to complete, adverse results from or failure to realize the expected benefits of the separation of our filtration business;
- our plan to reposition our portfolio of product offerings through exploration of strategic acquisitions and divestitures and related uncertainties of entering such transactions;
- challenging markets for talent and ability to attract, develop and retain key personnel;
- climate change and global warming;
- exposure to potential security breaches or other disruptions to our information technology environment and data security;
- political, economic and other risks from operations in numerous countries including political, economic and social uncertainty and the evolving globalization of our business;
- competitor activity;
- increasing competition, including increased global competition among our customers in emerging markets;
- labor relations or work stoppages;
- foreign currency exchange rate changes;
- the performance of our pension plan assets and volatility of discount rates;
- the price and availability of energy;
- 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 Part II, Item 1A in this quarterly report and our2021 Form 10-K, Part I, Item 1A, both 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 2021 Form 10-K. Our MD&A is presented in the following sections:

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

EXECUTIVE SUMMARY AND FINANCIAL HIGHLIGHTS

Overview

We are a global power leader that designs, manufactures, distributes and services diesel, natural gas, electric and hybrid powertrains and powertrain-related components including filtration, aftertreatment, turbochargers, fuel systems, controls systems, air handling systems, automated transmissions, electric power generation systems, batteries, electrified power systems, hydrogen production and fuel cell products. 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 Stellantis N.V. We serve our customers through a service network of approximately 500 wholly-owned, joint venture and independent distributor locations and more than 10,000 Cummins certified dealer locations in approximately 190 countries and territories.

Our reportable operating segments consist of Engine, Distribution, Components, Power Systems and New Power. This reporting structure is organized according to the products and markets each segment serves. The Engine segment produces engines (15 liters and smaller) 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 automated 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 New Power segment designs, manufactures, sells and supports hydrogen production solutions as well as electrified power systems ranging from fully electric to hybrid along with innovative components and subsystems, including battery and fuel cell technologies. The New Power segment is currently in the development phase with a primary focus on research and development activities for our power systems, components and subsystems. We continue to serve all our markets as they adopt electrification and alternative power technologies, 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, stoppages and supply chain challenges. 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 geopolitical risks (such as the conflict between Russia and Ukraine), currency, political, economic, public health crises, epidemics or pandemics and regulatory matters, including adoption and enforcement of environmental and emission 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.

Russian Operations

On March 17, 2022, the Board of Directors (the Board) decided to indefinitely suspend our operations in Russia due to the ongoing conflict in Ukraine. At the time of suspension, our Russian operations included a wholly-owned distributor in Russia, an unconsolidated joint venture and direct sales into Russia from our other business units. As a result of the suspension of operations, we evaluated the recoverability of assets in Russia and assessed other liabilities that may have been incurred. We have experienced and expect to continue to experience, an inability to collect customer receivables and may be the subject of litigation in connection with our suspension of commercial operations in Russia. We will continue to evaluate the situation as conditions evolve and may take additional actions as deemed necessary in future periods. The following summarizes the costs associated with the suspension of our Russian operations in our first quarter results on our *Condensed Consolidated Statements of Net Income*.

In millions		March 31, 2022
Inventory write-downs	$	59
Accounts receivable reserves		43
Impairment and other joint venture costs		31
Other		25
Total	$	158

Supply Chain Disruptions

We continue to experience supply chain disruptions and related financial impacts reflected as increased cost of sales. Our industry continues to be unfavorably impacted by supply chain constraints leading to shortages across multiple components categories and limiting our collective ability to meet end-user demand. Our customers are also experiencing other supply chain issues and slowing production. Should the supply chain issues continue for an extended period of time or worsen, the impact on our production and supply chain could have a material adverse effect on our results of operations, financial condition and cash flows. Our Board of Directors (the Board) continues to monitor and evaluate all of these factors and the related impacts on our business and operations, and we are diligently working to minimize the supply chain impacts to our business and to our customers.

First Quarter 2022 Results

A summary of our results is as follows:

	Three months ended			
In millions, except per share amounts		March 31, 2022		April 4, 2021
Net sales	$	6,385	$	6,092
Net income attributable to Cummins Inc.		418		603
Earnings per common share attributable to Cummins Inc.				
Basic	$	2.94	$	4.10
Diluted		2.92		4.07

Worldwide revenues increased 5 percent in the three months ended March 31, 2022, compared to the same period in 2021, due to higher demand in most operating segments and most geographic regions except China. Net sales in the U.S. and Canada improved 12 percent, primarily due to increased demand and favorable pricing in North American on-highway markets, which positively impacted all components businesses, and all distribution product lines. International demand (excludes the U.S. and Canada) declined 3 percent, with lower sales in China, partially offset by higher sales in Asia Pacific, Russia, Latin America and Europe. The decrease in international sales was principally due to lower demand in most components businesses in China, partially offset by higher demand in industrial markets (especially mining), power generation equipment (especially in China) and most distribution product lines in Russia. Unfavorable foreign currency fluctuations impacted international sales by 2 percent (primarily the Euro and Australian dollar). Our industry's sales continue to be unfavorably impacted by supply chain constraints leading to shortages across multiple components categories and limiting our collective ability to meet end-user demand. Our customers are also experiencing other supply chain issues slowing production.

The following table contains sales and EBITDA (defined as earnings or losses before interest expense, income taxes, depreciation and amortization and noncontrolling interests) by operating segment for the three months ended March 31, 2022 and April 4, 2021. See Note 15, "OPERATING SEGMENTS," to the *Condensed Consolidated Financial Statements* for additional information and a reconciliation of our segment information to the corresponding amounts in our *Condensed Consolidated Statements of Net Income*.

Operating Segments	Three months ended							
	March 31, 2022			April 4, 2021			Percent change 2022 vs. 2021	
In millions	Sales	Percent of Total	EBITDA	Sales	Percent of Total	EBITDA	Sales	EBITDA
Engine	**$ 2,753**	**43 %**	**$ 392**	$ 2,459	40 %	$ 354	12 %	11 %
Distribution	**2,117**	**33 %**	**110**	1,835	30 %	160	15 %	(31) %
Components	**1,988**	**31 %**	**320**	2,152	35 %	421	(8)%	(24) %
Power Systems	**1,160**	**18 %**	**90**	1,022	17 %	126	14 %	(29) %
New Power	**31**	**1 %**	**(67)**	35	1 %	(51)	(11)%	(31) %
Intersegment eliminations	**(1,664)**	**(26)%**	**(90)**	(1,411)	(23)%	(30)	18 %	NM
Total	**$ 6,385**	**100 %**	**$ 755** (1)	$ 6,092	100 %	$ 980	5 %	(23) %

"NM" - not meaningful information

(1) EBITDA includes $158 million of costs associated with the suspension of our Russian operations and $17 million of costs associated with the planned separation of our Filtration business.

Net income attributable to Cummins Inc. was $418 million, or $2.92 per diluted share, on sales of $6.4 billion for the three months ended March 31, 2022, versus the comparable prior year period net income attributable to Cummins Inc. of $603 million, or $4.07 per diluted share, on sales of $6.1 billion. The decreases in net income attributable to Cummins Inc. and earnings per diluted share were driven by costs associated with the suspension of our Russian operations, increased consulting expenses driven by acquisitions and the work towards separation of the filtration business, lower equity, royalty and interest income from investees (primarily in China), costs related to asset impairments and other charges and higher unfavorable discrete tax items, partially offset by higher net sales and increased gross margin. See Note 3, "RUSSIAN OPERATIONS" to our *Condensed Consolidated Financial Statements* for additional information. The increase in gross margin was primarily due to favorable pricing, partially offset by higher material costs, losses related to inventory write-downs in our Russian operations and increased freight costs due to supply chain constraints. Diluted earnings per common share for the three months ended March 31, 2022, benefited $0.01 from fewer weighted-average shares outstanding due to the stock repurchase program.

We generated $164 million of cash from operations for the three months ended March 31, 2022, compared to $339 million for the comparable period in 2021. See the section titled "Cash Flows" in the "LIQUIDITY AND CAPITAL RESOURCES" section for a discussion of items impacting cash flows.

Our debt to capital ratio (total capital defined as debt plus equity) at March 31, 2022, was 30.6 percent, compared to 30.7 percent at December 31, 2021. The decrease was primarily due to lower debt balances since December 31, 2021. At March 31, 2022, we had $2.8 billion in cash and marketable securities on hand and access to our $3.5 billion credit facilities, if necessary, to meet currently anticipated working capital, investment and funding needs.

In the first three months of 2022, we purchased $311 million, or 1.6 million shares, of our common stock.

On April 20, 2022, we filed a confidential registration statement announcing our intent to separate the filtration business into a stand-alone company.

On February 21, 2022, we entered into an agreement and plan of merger with Meritor, Inc. (Meritor) and Rose NewCo Inc. pursuant to which we agreed to acquire Meritor, a global leader of drivetrain, mobility, braking, aftermarket and electric powertrain solutions for commercial vehicle and industrial markets. We will pay $36.50 in cash per share of Meritor common stock, for a total transaction value of approximately $3.7 billion, including assumed debt and net of acquired cash.

On February 9, 2022, we reached an agreement with Altra Industrial Motion Corp to acquire its Jacobs Vehicle Systems business and closed the transaction in April 2022 with a purchase price of $346 million.

As a well-known seasoned issuer, we filed an automatic shelf registration of an undetermined amount of debt and equity with the Securities and Exchange Commission (SEC) on February 8, 2022.

On February 7, 2022, we purchased Westport Fuel System Inc.'s stake in the Cummins Westport Joint Venture for $42 million.

In the first three months of 2022, the investment loss on our U.S. pension trust was 2.7 percent while our U.K. pension trust loss was 5.8 percent. We anticipate making additional defined benefit pension contributions during the remainder of 2022 of $17 million for our U.S. and U.K. qualified and non-qualified pension plans. We expect our 2022 annual net periodic pension cost to approximate $31 million.

As of the date of this filing, our credit ratings and outlooks from the credit rating agencies remain unchanged.

RESULTS OF OPERATIONS

In millions, except per share amounts	Three months ended March 31, 2022	Three months ended April 4, 2021	Favorable/(Unfavorable) Amount	Favorable/(Unfavorable) Percent
NET SALES	**$ 6,385**	$ 6,092	$ 293	5 %
Cost of sales	**4,853**	4,606	(247)	(5) %
GROSS MARGIN	**1,532**	1,486	46	3 %
OPERATING EXPENSES AND INCOME				
Selling, general and administrative expenses	**615**	574	(41)	(7) %
Research, development and engineering expenses	**298**	260	(38)	(15) %
Equity, royalty and interest income from investees	**96**	166	(70)	(42) %
Other operating expense, net	**111**	8	(103)	NM
OPERATING INCOME	**604**	810	(206)	(25) %
Interest expense	**17**	28	11	39 %
Other (expense) income, net	**(9)**	1	(10)	NM
INCOME BEFORE INCOME TAXES	**578**	783	(205)	(26) %
Income tax expense	**155**	172	17	10 %
CONSOLIDATED NET INCOME	**423**	611	(188)	(31) %
Less: Net income attributable to noncontrolling interests	**5**	8	3	38 %
NET INCOME ATTRIBUTABLE TO CUMMINS INC.	**$ 418**	$ 603	$ (185)	(31) %
Diluted Earnings Per Common Share Attributable to Cummins Inc.	**$ 2.92**	$ 4.07	$ (1.15)	(28) %

"NM" - not meaningful information

Percent of sales	Three months ended March 31, 2022	Three months ended April 4, 2021	Favorable/(Unfavorable) Percentage Points
Gross margin	**24.0 %**	24.4 %	(0.4)
Selling, general and administrative expenses	**9.6 %**	9.4 %	(0.2)
Research, development and engineering expenses	**4.7 %**	4.3 %	(0.4)

Net Sales

Net sales for the three months ended March 31, 2022, increased by $293 millionversus the comparable period in 2021. The primary drivers were as follows:

- Engine segment sales increased 12 percent due to favorable pricing and increased aftermarket sales in North America.
- Distribution segment sales increased 15 percent principally due to higher demand across all product lines in North America.
- Power Systems segment sales increased 14 percent primarily due to higher demand in global mining markets and power generation markets in China.

These increases were partially offset by the following drivers:

- Components segment sales decreased 8 percent largely due to lower demand in most businesses in China, partially offset by higher demand North America.
- Unfavorable foreign currency fluctuations of 1 percent of total sales, primarily in the Euro and Australian dollar.

Sales to international markets (excluding the U.S. and Canada), based on location of customers, for the three months ended March 31, 2022, were 42 percent of total net sales compared with 46 percent of total net sales for the comparable period in 2021. 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: parts and 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; freight costs; 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 $46 million for the three months ended March 31, 2022 and decreased 0.4 points as a percentage of net sales, versus the comparable period in 2021. The increase in gross margin was primarily due to favorable pricing, partially offset by higher material costs, losses related to inventory write-downs in our Russian operations and increased freight costs due to supply chain constraints. The 0.4 decrease in gross margin as a percentage of net sales was principally due to losses related to higher material costs, inventory write-downs in our Russian operations and increased freight costs due to supply chain constraints which increased at a faster rate than increased sales.

The provision for base warranties issued as a percent of sales for the three months ended March 31, 2022, was 1.9 percent compared to 2.6 percent for the comparable period in 2021.

Selling, General and Administrative Expenses

Selling, general and administrative expenses increased $41 million for the three months ended March 31, 2022, versus the comparable period in 2021, primarily due to higher consulting expenses driven by acquisitions and the work towards separation of the filtration business, partially offset by lower variable compensation expenses. Overall, selling, general and administrative expenses as a percentage of net sales increased to 9.6 percent in the three months ended March 31, 2022, from 9.4 percent in the comparable period in 2021. The increase in selling, general and administrative expenses as a percentage of net sales was mainly due to higher selling, general and administrative expenses which increased at a faster rate than the increase in net sales.

Research, Development and Engineering Expenses

Research, development and engineering expenses increased $38 million for the three months ended March 31, 2022, versus the comparable period in 2021 primarily due to higher spending on prototypes and increased consulting expenses. Overall, research, development and engineering expenses as a percentage of net sales increased to 4.7 percent in the three months ended March 31, 2022, from 4.3 percent in the comparable period in 2021. The increase in research, development and engineering expenses as a percentage of net sales was mainly due to higher research, development and engineering expenses which increased at a faster rate than the increase in net sales. Research activities continue to focus on development of new products to meet future emission standards around the world, improvements in fuel economy performance of diesel and natural gas powered engines and related components as well as development activities around fully electric, hybrid and hydrogen powertrain solutions.

Equity, Royalty and Interest Income from Investees

Equity, royalty and interest income from investees decreased $70 million for the three months ended March 31, 2022, versus the comparable period in 2021, primarily due to the $28 million impairment of our Russian joint venture with KAMAZ, decreased earnings at Beijing Foton Cummins Engine Co., Ltd. and Dongfeng Cummins Engine Co., Ltd. and the February 7, 2022, purchase of Westport Fuel System Inc.'s stake in Cummins Westport Joint Venture. See NOTE 3, "RUSSIAN OPERATIONS" and NOTE 14 "ACQUISITIONS" to our *Condensed Consolidated Financial Statements* for additional information.

Other Operating Expense, Net

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

	Three months ended	
In millions	March 31, 2022	April 4, 2021
Russian suspension costs	$ **(68)** [(1)]	$ —
Asset impairments and other charges	**(36)**	—
Amortization of intangible assets	**(5)**	(6)
Loss on write-off of assets	**(5)**	(4)
Gain on sale of assets, net	**1**	1
Royalty income, net	**2**	2
Other, net	**—**	(1)
Total other operating expenses, net	$ **(111)**	$ (8)

[(1)] See Note 3, "RUSSIAN OPERATIONS" to our *Condensed Consolidated Financial Statements* for additional information.

Interest Expense

Interest expense decreased $11 million for the three months ended March 31, 2022, versus the comparable period in 2021, primarily due to the performance on the fixed to floating swaps placed in 2021 for our 2030 and 2050 debt maturities.

Other (Expense) Income, Net

Other (expense) income, net was as follows:

	Three months ended	
In millions	March 31, 2022	April 4, 2021
Loss on corporate owned life insurance	$ **(37)**	$ (32)
Foreign currency loss, net	**(12)**	(5)
Interest income	**8**	6
Non-service pension and OPEB credit	**33**	24
Other, net	**(1)**	8
Total other (expense) income, net	$ **(9)**	$ 1

Income Tax Expense

Our effective tax rate for 2022 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, 2022, was 26.8 percent and contained unfavorable discrete tax items of $31 million, primarily due to $18 million of unfavorable changes associated with uncertainty in our Russian operations, $9 million of unfavorable changes in tax reserves and $4 million of net unfavorable other discrete tax items.

Our effective tax rate for the three months ended April 4, 2021, was 22.0 percent and contained favorable discrete items of $4 million.

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, 2022, decreased $3 million versus the comparable period in 2021. The decrease for the three months ended March 31, 2022, was primarily due to lower earnings at Cummins India Limited.

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, 2022, decreased $185 million and $1.15 per diluted share versus the comparable period in 2021, primarily due to costs associated with the suspension of our Russian operations, increased consulting expenses driven by acquisitions and the work towards separation of the filtration business, lower equity, royalty and interest income from investees (primarily in China), costs related to asset impairments and other charges and higher unfavorable discrete tax items, partially offset by higher net sales and increased gross margin. See Note 3, "RUSSIAN OPERATIONS" to our *Condensed Consolidated Financial Statements* for additional information. Diluted earnings per common share for the three months ended March 31, 2022, benefited $0.01 from fewer weighted-average shares outstanding due to the stock repurchase program.

Comprehensive Income - Foreign Currency Translation Adjustment

The foreign currency translation adjustment was a net gain of $4 million for the three months ended March 31, 2022, compared to a net loss of $56 million for the three months ended April 4, 2021, driven by the following:

	Three months ended			
	March 31, 2022		April 4, 2021	
In millions	Translation adjustment	Primary currency driver vs. U.S. dollar	Translation adjustment	Primary currency driver vs. U.S. dollar
Wholly-owned subsidiaries	**$ 16**	Brazilian real, partially offset by Indian rupee, British pound, Euro	$ (48)	Brazilian real, British pound, Chinese renminbi
Equity method investments	**(4)**	Indian rupee	(8)	Chinese renminbi
Consolidated subsidiaries with a noncontrolling interest	**(8)**	Indian rupee	—	
Total	**$ 4**		$ (56)	

OPERATING SEGMENT RESULTS

Our reportable operating segments consist of the Engine, Distribution, Components, Power Systems and New 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. We believe EBITDA is a useful measure of our operating performance as it assists investors and debt holders in comparing our performance on a consistent basis without regard to financing methods, capital structure, income taxes or depreciation and amortization methods, which can vary significantly depending upon many factors. Segment amounts exclude certain expenses not specifically identifiable to segments. See Note 15, "OPERATING SEGMENTS," to the *Condensed Consolidated Financial Statements* for additional information and a reconciliation of our segment information to the corresponding amounts in our *Condensed Consolidated Statements of Net Income*.

We continue to experience supply chain disruptions and related financial impacts reflected as increased cost of sales. Our industry continues to be unfavorably impacted by supply chain constraints leading to shortages across multiple components categories and limiting our collective ability to meet end-user demand. Our customers are also experiencing other supply chain issues and slowing production.

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, 2022	April 4, 2021	Amount	Percent
External sales	**$ 2,049**	$ 1,895	$ 154	8 %
Intersegment sales	**704**	564	140	25 %
Total sales	**2,753**	2,459	294	12 %
Research, development and engineering expenses	**109**	92	(17)	(18)%
Equity, royalty and interest income from investees	**44** (1)	113	(69)	(61)%
Interest income	**4**	3	1	33 %
Russian suspension costs	**32** (2)	—	(32)	NM
Segment EBITDA	**392**	354	38	11 %
			Percentage Points	
Segment EBITDA as a percentage of total sales	**14.2 %**	14.4 %	(0.2)	

"NM" - not meaningful information

(1) Includes a $28 million impairment of our joint venture with KAMAZ and $3 million of royalty charges as part of our costs associated with the suspension of our Russian operations. In addition, on February 7, 2022, we purchased Westport Fuel System Inc.'s stake in Cummins Westport Joint Venture. See NOTE 3, "RUSSIAN OPERATIONS" and NOTE 14, "ACQUISITIONS" to our *Condensed Consolidated Financial Statements* for additional information.

(2) Includes $31 million of Russian suspension costs reflected in the Equity, royalty and interest income from investees line above.

Sales for our Engine segment by market were as follows:

	Three months ended		Favorable/ (Unfavorable)	
In millions	March 31, 2022	April 4, 2021	Amount	Percent
Heavy-duty truck	**$ 908**	$ 827	$ 81	10 %
Medium-duty truck and bus	**848**	674	174	26 %
Light-duty automotive	**498**	481	17	4 %
Total on-highway	**2,254**	1,982	272	14 %
Off-highway	**499**	477	22	5 %
Total sales	**$ 2,753**	$ 2,459	$ 294	12 %
			Percentage Points	
On-highway sales as percentage of total sales	**82 %**	81 %	1	

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, 2022	April 4, 2021	Amount	Percent
Heavy-duty	**28,600**	30,700	(2,100)	(7) %
Medium-duty	**72,600**	73,100	(500)	(1) %
Light-duty	**66,500**	68,500	(2,000)	(3) %
Total unit shipments	**167,700**	172,300	(4,600)	(3) %

Sales

Engine segment sales for the three months ended March 31, 2022, increased $294 million versus the comparable period in 2021. The following were the primary drivers by market:

- Medium-duty truck and bus sales increased $174 million mainly due to favorable pricing and higher demand, especially in North America and Brazil.
- Heavy-duty truck sales increased $81 million principally due to favorable pricing in North America, partially offset by lower demand in China.

Segment EBITDA

Engine segment EBITDA for the three months ended March 31, 2022, increased $38 million versus the comparable period in 2021, primarily due to favorable pricing, higher volumes (including aftermarket parts) and favorable mix, partially offset by higher material costs, lower equity, royalty and interest income from investees (principally Beijing Foton Cummins Engine Co., Ltd. and Dongfeng Cummins Engine Co., Ltd.), costs related to asset impairments and other charges and costs associated with the suspension of our Russian operations including a $28 million impairment of our joint venture with KAMAZ. See Note 3, "RUSSIAN OPERATIONS" to our *Condensed Consolidated Financial Statements* for additional information.

Distribution Segment Results

Financial data for the Distribution segment was as follows:

In millions	Three months ended March 31, 2022	April 4, 2021	Favorable/(Unfavorable) Amount	Percent
External sales	**$ 2,111**	$ 1,827	$ 284	16 %
Intersegment sales	**6**	8	(2)	(25)%
Total sales	**2,117**	1,835	282	15 %
Research, development and engineering expenses	**13**	13	—	— %
Equity, royalty and interest income from investees	**16**	17	(1)	(6)%
Interest income	**2**	1	1	100 %
Russian suspension costs[(1)]	**100**	—	(100)	NM
Segment EBITDA	**110**	160	(50)	(31)%
			Percentage Points	
Segment EBITDA as a percentage of total sales	**5.2 %**	8.7 %	(3.5)	

"NM" - not meaningful information

(1) See Note 3, "RUSSIAN OPERATIONS" to our *Condensed Consolidated Financial Statements* for additional information.

Sales for our Distribution segment by region were as follows:

In millions	Three months ended March 31, 2022	April 4, 2021	Favorable/(Unfavorable) Amount	Percent
North America	**$ 1,367**	$ 1,171	$ 196	17 %
Asia Pacific	**246**	214	32	15 %
Europe	**149**	163	(14)	(9)%
Russia	**136**	57	79	NM
China	**83**	87	(4)	(5)%
India	**49**	49	—	— %
Africa and Middle East	**46**	54	(8)	(15)%
Latin America	**41**	40	1	3 %
Total sales	**$ 2,117**	$ 1,835	$ 282	15 %

"NM" - not meaningful information

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

In millions	Three months ended March 31, 2022	April 4, 2021	Favorable/(Unfavorable) Amount	Percent
Parts	**$ 924**	$ 757	$ 167	22 %
Engines	**441**	334	107	32 %
Power generation	**401**	418	(17)	(4) %
Service	**351**	326	25	8 %
Total sales	**$ 2,117**	$ 1,835	$ 282	15 %

Sales

Distribution segment sales for the three months ended March 31, 2022, increased $282 million versus the comparable period in 2021. The following were the primary drivers by region:

- North American sales increased $196 million, representing 70 percent of the total change in Distribution segment sales, mainly due to higher demand for parts and vocational engines.
- Russian sales increased $79 million as a result of increased demand for engines and parts.

These increases were partially offset by unfavorable foreign currency fluctuations, primarily in the Australian dollar and Euro.

Segment EBITDA

Distribution segment EBITDA for the three months ended March 31, 2022, decreased $50 million versus the comparable period in 2021, primarily due to costs associated with the suspension of our Russian operations and unfavorable foreign currency fluctuations (principally in the Russian ruble and Australian dollar), partially offset by higher volumes and favorable pricing. See Note 3, "RUSSIAN OPERATIONS" to our *Condensed Consolidated Financial Statements* for additional information.

Components Segment Results

Financial data for the Components segment was as follows:

	Three months ended		Favorable/ (Unfavorable)	
In millions	March 31, 2022	April 4, 2021	Amount	Percent
External sales	**$ 1,517**	$ 1,724	$ (207)	(12)%
Intersegment sales	**471**	428	43	10 %
Total sales	**1,988**	2,152	(164)	(8)%
Research, development and engineering expenses	**76**	75	(1)	(1)%
Equity, royalty and interest income from investees	**28**	19	9	47 %
Interest income	**1**	1	—	— %
Russian suspension costs[1]	**6**	—	(6)	NM
Segment EBITDA	**320**	421	(101)	(24)%
			Percentage Points	
Segment EBITDA as a percentage of total sales	**16.1 %**	19.6 %		(3.5)

"NM" - not meaningful information

[1] See Note 3, "RUSSIAN OPERATIONS" to our *Condensed Consolidated Financial Statements* for additional information.

Sales for our Components segment by business were as follows:

	Three months ended		Favorable/ (Unfavorable)	
In millions	March 31, 2022	April 4, 2021	Amount	Percent
Emission solutions	**$ 910**	$ 1,035	$ (125)	(12)%
Filtration	**382**	372	10	3 %
Turbo technologies	**346**	367	(21)	(6)%
Electronics and fuel systems	**216**	263	(47)	(18)%
Automated transmissions	**134**	115	19	17 %
Total sales	**$ 1,988**	$ 2,152	$ (164)	(8)%

Sales

Components segment sales for the three months ended March 31, 2022, decreased $164 million versus the comparable period in 2021. The following were the primary drivers by business:

- Emission solutions sales decreased $125 million primarily due to lower demand in China, partially offset by stronger demand in North America.
- Electronics and fuel systems sales decreased by $47 million principally due to weaker demand in China.

These decreases were partially offset by increased sales of $19 million in the automated transmission business mainly due to stronger demand in North America and China.

Segment EBITDA

Components segment EBITDA for the three months ended March 31, 2022, decreased $101 million versus the comparable period in 2021, mainly due to lower volumes and increased material costs.

Power Systems Segment Results

Financial data for the Power Systems segment was as follows:

	Three months ended		Favorable/ (Unfavorable)	
In millions	March 31, 2022	April 4, 2021	Amount	Percent
External sales	**$ 683**	$ 612	$ 71	12 %
Intersegment sales	**477**	410	67	16 %
Total sales	**1,160**	1,022	138	14 %
Research, development and engineering expenses	**64**	57	(7)	(12)%
Equity, royalty and interest income from investees	**11**	12	(1)	(8)%
Interest income	**1**	1	—	— %
Russian suspension costs[(1)]	**20**	—	(20)	NM
Segment EBITDA	**90**	126	(36)	(29)%
			Percentage Points	
Segment EBITDA as a percentage of total sales	**7.8 %**	12.3 %		(4.5)

"NM" - not meaningful information

(1) See Note 3, "RUSSIAN OPERATIONS" to our *Condensed Consolidated Financial Statements* for additional information.

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

	Three months ended		Favorable/ (Unfavorable)	
In millions	March 31, 2022	April 4, 2021	Amount	Percent
Power generation	**$ 664**	$ 611	$ 53	9 %
Industrial	**393**	324	69	21 %
Generator technologies	**103**	87	16	18 %
Total sales	**$ 1,160**	$ 1,022	$ 138	14 %

Sales

Power Systems segment sales for the three months ended March 31, 2022, increased $138 million versus the comparable period in 2021. The following were the primary drivers by product line:

- Industrial sales increased $69 million due to stronger demand in global mining markets and oil and gas markets in China and North America.
- Power generation sales increased $53 million due to higher demand in China, partially offset by weaker demand in North America.

Segment EBITDA

Power Systems segment EBITDA for the three months ended March 31, 2022, decreased $36 million versus the comparable period in 2021, mainly due to costs associated with the suspension of our Russian operations, increased freight costs due to supply chain constraints and higher material costs, partially offset by higher volumes. See Note 3, "RUSSIAN OPERATIONS" to our *Condensed Consolidated Financial Statements* for additional information.

New Power Segment Results

The New Power segment designs, manufactures, sells and supports hydrogen production solutions as well as electrified power systems ranging from fully electric to hybrid along with innovative components and subsystems, including battery and fuel cell technologies. The New Power segment is currently in the development phase with a primary focus on research and development activities for our power systems, components and subsystems. Financial data for the New Power segment was as follows:

	Three months ended		Favorable/ (Unfavorable)	
In millions	March 31, 2022	April 4, 2021	Amount	Percent
External sales	**$ 25**	$ 34	$ (9)	(26) %
Intersegment sales	**6**	1	5	NM
Total sales	**31**	35	(4)	(11) %
Research, development and engineering expenses	**36**	23	(13)	(57) %
Equity, royalty and interest (loss) income from investees	**(3)**	5	(8)	NM
Segment EBITDA	**(67)**	(51)	(16)	(31) %

"NM" - not meaningful information

OUTLOOK

Supply Chain Disruptions

We continue to experience supply chain disruptions and related financial impacts reflected as increased cost of sales. Our industry continues to be unfavorably impacted by supply chain constraints leading to shortages across multiple components categories and limiting our collective ability to meet end-user demand. Our customers are also experiencing other supply chain issues and slowing production. Should the supply chain issues continue for an extended period of time or worsen, the impact on our production and supply chain could have a material adverse effect on our results of operations, financial condition and cash flows. Our Board of Directors (the Board) continues to monitor and evaluate all of these factors and the related impacts on our business and operations, and we are diligently working to minimize the supply chain impacts to our business and to our customers.

Business Outlook

Our outlook reflects the following positive trends and challenges to our business that could impact our revenue and earnings potential for the remainder of 2022.

Positive Trends

- We expect demand for pick-up trucks in North America to remain strong.
- We expect North American medium-duty and heavy-duty truck demand will remain strong.
- We believe market demand for trucks in India will continue the improvement trend from the second half of 2021.
- We anticipate our aftermarket business will continue to improve, driven primarily by increased truck utilization in North America and improved demand in our Power Systems business.
- Our liquidity of $6.0 billion in cash, marketable securities and available credit facilities puts us in a strong position to deal with any uncertainties that may arise in the remainder of 2022.

Challenges

- Supply constraints driven by strong demand in multiple end markets and regions may lead to increased costs, including higher freight and conversion costs.
- Continued increases in material and commodity costs could negatively impact earnings.
- Our industry's sales continue to be unfavorably impacted by supply chain constraints leading to shortages across multiple components categories and limiting our collective ability to meet end-user demand. Our customers are also experiencing other supply chain issues slowing production.
- Resurgence of COVID-19 in China led to lockdowns in several cities that negatively impacted the economy and our end markets. These lockdowns will also contribute to further disruptions in the global supply chain, negatively impacting both our revenues and profitability.
- We expect market demand in truck and construction markets in China to decline from 2021 full year levels.
- The indefinite suspension of our operations in Russia is expected to impact our revenue and profitability. The 2021 sales through our wholly-owned distributor in Russia and direct sales into Russia were 2.7 percent of net sales.
- We expect to incur incremental expenses as a result of the expected completion of the Meritor, Inc. acquisition and its integration into our business.
- Planned separation of our filtration business into a stand-alone company is expected to result in incremental expenses.

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's attention. Working capital and balance sheet measures are provided in the following table:

Dollars in millions	March 31, 2022	December 31, 2021
Working capital [1]	**$ 5,084**	$ 5,225
Current ratio	**1.68**	1.74
Accounts and notes receivable, net	**$ 4,368**	$ 3,990
Days' sales in receivables	**60**	59
Inventories	**$ 4,586**	$ 4,355
Inventory turnover	**4.2**	4.6
Accounts payable (principally trade)	**$ 3,497**	$ 3,021
Days' payable outstanding	**60**	57
Total debt	**$ 4,125**	$ 4,159
Total debt as a percent of total capital	**30.6 %**	30.7 %

[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, 2022	April 4, 2021	Change
Net cash provided by operating activities	**$ 164**	$ 339	$ (175)
Net cash used in investing activities	**(10)**	(25)	15
Net cash used in financing activities	**(497)**	(745)	248
Effect of exchange rate changes on cash and cash equivalents	**27**	(12)	39
Net decrease in cash and cash equivalents	**$ (316)**	$ (443)	$ 127

Net cash provided by operating activities decreased $175 million for the three months ended March 31, 2022, versus the comparable period in 2021, primarily due to higher working capital requirements of $237 million and lower consolidated net income of $188 million, partially offset by Russian suspension costs of $158 million, favorable changes in other liabilities of $70 million and lower equity earnings, net of dividends of $60 million. During the first three months of 2022, the higher working capital requirements resulted in a cash outflow of $530 million compared to a cash outflow of $293 million in the comparable period in 2021, mainly due to higher variable compensation payouts in accrued expenses, partially offset by favorable changes in inventories.

Net cash used in investing activities decreased $15 million for the three months ended March 31, 2022, versus the comparable period in 2021, primarily due to $83 million of cash acquired from the acquisition of Cummins Westport Joint Venture, net of the purchase price, partially offset by higher capital expenditures of $17 million, unfavorable changes in cash flows from derivatives not designated as hedges of $16 million, higher investments in and advances to equity investees of $8 million and lower net liquidations of marketable securities of $7 million.

Net cash used in financing activities decreased $248 million for the three months ended March 31, 2022, versus the comparable period in 2021, primarily due to higher net borrowings under short-term credit agreements of $131 million and lower repurchases of common stock of $107 million.

The effect of exchange rate changes on cash and cash equivalents for the three months ended March 31, 2022, versus the comparable period in 2021, increased $39 million primarily due to favorable fluctuations in the British pound of $36 million.

Sources of Liquidity

We generate significant ongoing cash flow. Cash provided by operations is our principal source of liquidity with $164 million generated in the three months ended March 31, 2022. Our sources of liquidity include:

	March 31, 2022			
In millions	**Total**	**U.S.**	**International**	**Primary location of international balances**
Cash and cash equivalents	$ 2,276	$ 821	$ 1,455	China, Singapore, Belgium, Australia, Mexico, India
Marketable securities [1]	527	106	421	India
Total	$ 2,803	$ 927	$ 1,876	
Available credit capacity				
Revolving credit facilities [2]	$ 3,189			
International and other uncommitted domestic credit facilities	$ 253			

[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 2026 and August 2022, respectively, are maintained primarily to provide backup liquidity for our commercial paper borrowings and general corporate purposes. At March 31, 2022, we had $311 million of commercial paper outstanding, which effectively reduced the available capacity under our revolving credit facilities to $3.2 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.

If we distribute our foreign cash balances to the U.S. or to other foreign subsidiaries, we could be required to accrue and pay withholding taxes, for example, if we repatriated cash from certain foreign subsidiaries whose earnings we asserted are completely or partially permanently reinvested. Foreign earnings for which we assert permanent reinvestment outside the U.S. consist primarily of earnings of our China, India and Netherlands domiciled subsidiaries. At present, we do not foresee a need to repatriate any earnings for which we asserted permanent reinvestment. However, to help fund cash needs of the U.S. or other international subsidiaries as they arise, we repatriate available cash from certain foreign subsidiaries whose earnings are not permanently reinvested when it is cost effective to do so.

Debt Facilities and Other Sources of Liquidity

We have access to committed credit facilities totaling $3.5 billion, including the $1.5 billion 364-day facility that expires August 17, 2022 and our $2.0 billion five-year facility that expires on August 18, 2026. We intend to maintain credit facilities at the current or higher aggregate amounts by renewing or replacing these facilities at or before expiration. These revolving credit facilities are maintained primarily to provide backup liquidity for our commercial paper borrowings and general corporate purposes. There were no outstanding borrowings under these facilities at March 31, 2022.

We can issue up to $3.5 billion of unsecured, short-term promissory notes (commercial paper) pursuant to the Board authorized commercial paper programs. These 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 acquisitions and general corporate purposes. The total combined borrowing capacity under the revolving credit facilities and commercial programs should not exceed $3.5 billion. See Note 10, "DEBT," to our *Condensed Consolidated Financial Statements* for additional information.

At March 31, 2022, we had $311 million of commercial paper outstanding, which effectively reduced the available capacity under our revolving credit facilities to $3.2 billion.

As a well-known seasoned issuer, we filed an automatic shelf registration of an undetermined amount of debt and equity with the SEC on February 8, 2022. 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.

In July 2017, the U.K.'s Financial Conduct Authority, which regulates the London Interbank Offered Rate (LIBOR), announced it intends to phase out LIBOR by the end of 2021. The cessation date for submission and publication of rates for certain tenors of LIBOR has since been extended until mid-2023. Various central bank committees and working groups continue to discuss replacement of benchmark rates, the process for amending existing LIBOR-based contracts and the potential economic impacts of different alternatives. The Alternative Reference Rates Committee has identified the Secured Overnight Financing Rate (SOFR) as its preferred alternative rate for U.S. dollar LIBOR. SOFR is a measure of the cost of borrowing cash overnight, collateralized by U.S. Treasury securities, and is based on directly observable U.S. Treasury-backed repurchase transactions. We have evaluated the potential impact of the replacement of the LIBOR benchmark interest rate including risk management, internal operational readiness and monitoring the Financial Accounting Standards Board standard-setting process to address financial reporting issues that might arise in connection with transition from LIBOR to a new benchmark rate. While we do not believe the change will materially impact us due to our operational and system readiness coupled with relevant contractual fallback language, we continue to evaluate all eventual transition risks. In anticipation of LIBOR's phase out, our most recent revolving credit agreements include a well-documented transition mechanism for selecting a benchmark replacement rate for LIBOR, subject to our agreement. Additionally, with respect to our $1.3 billion in LIBOR-based fixed to variable rate swaps maturing in 2025 and 2030, we reviewed and believe our adherence to the 2020 LIBOR fallback protocol will allow for a smooth transition to the designated replacement rate when that transition occurs.

Supply Chain Financing

We currently have supply chain financing programs with financial intermediaries, which provide certain vendors the option to be paid by financial intermediaries earlier than the due date on the applicable invoice. When a vendor utilizes the program and receives an early payment from a financial intermediary, they take a discount on the invoice. We then pay the financial intermediary the face amount of the invoice on the regularly scheduled due date. The maximum amount that we may have outstanding under the program is $361 million. We do not reimburse vendors for any costs they incur for participation in the program and their participation is completely voluntary. As a result, all amounts owed to the financial intermediaries are presented as "Accounts payable" in our *Condensed Consolidated Balance Sheets.* Amounts due to the financial intermediaries reflected in accounts payable at March 31, 2022, were $295 million.

Uses of Cash

Stock Repurchases

In December 2021, the Board authorized the acquisition of up to $2.0 billion of additional common stock upon completion of the 2019 repurchase plan. In December 2019, the Board authorized the acquisition of up to $2.0 billion of additional common stock upon completion of the 2018 repurchase plan. In the first three months of 2022, we made the following purchases under the 2019 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	1.6	$ 199.27	$ 311	$ 2,281

[(1)] The remaining $281 million authorized capacity under the 2019 plan 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 2022 to enhance shareholder value.

Dividends

We paid dividends of $207 million during the three months ended March 31, 2022.

Capital Expenditures

Capital expenditures, including spending on internal use software, for the three months ended March 31, 2022, were $115 million versus $98 million in the comparable period in 2021. We plan to spend an estimated $850 million to $900 million in 2022 on capital expenditures, excluding internal use software, with over 60 percent of these expenditures expected to be invested in North America. In addition, we plan to spend an estimated $70 million to $80 million on internal use software in 2022.

Current Maturities of Short and Long-Term Debt

We had $311 million of commercial paper outstanding at March 31, 2022, that matures in less than one year. The maturity schedule of our existing long-term debt does not require significant cash outflows until 2023 when our 3.65 percent senior notes and 2025 when our 0.75 percent senior notes are due. Required annual long-term debt principal payments range from $24 million to $548 million over the next five years (including the remainder of 2022). See Note 10, "DEBT," to the *Condensed Consolidated Financial Statements* for additional information.

Pensions

Our global pension plans, including our unfunded and non-qualified plans, were 121 percent funded at December 31, 2021. Our U.S. defined benefit plan, which represented approximately 52 percent of the worldwide pension obligation, was 138 percent funded, and our U.K. defined benefit plan was 127 percent funded at December 31, 2021. 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 2022, the investment loss on our U.S. pension trust was 2.7 percent while our U.K. pension trust loss was 5.8 percent. Approximately 67 percent of our pension plan assets are held in highly liquid investments such as fixed income and equity securities. The remaining 33 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 2022 of $17 million for our U.S. and U.K. qualified and non-qualified pension plans. 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 2022 annual net periodic pension cost to approximate $31 million.

Credit Ratings

Our rating 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 existing cash and marketable securities, operating cash flow and revolving credit facilities provide us with the financial flexibility needed to fund common stock repurchases, dividend payments, targeted capital expenditures, projected pension obligations, acquisitions, working capital and debt service obligations through 2022 and beyond. We continue to generate significant cash from operations and maintain access to our revolving credit facilities and commercial paper programs 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 2021 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 the Board. Our critical accounting estimates disclosed in the Form 10-K address estimating liabilities for warranty programs, assessing goodwill impairment, accounting for income taxes and pension benefits.

A discussion of our critical accounting estimates may be found in the “Management’s Discussion and Analysis” section of our 2021 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 2022.

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 2021 Form 10-K. There have been no material changes in this information since the filing of our 2021 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, 2022, 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

The matters described under "Legal Proceedings" in Note 12, "COMMITMENTS AND CONTINGENCIES," to the *Condensed Consolidated Financial Statements* are incorporated herein by reference.

ITEM 1A. Risk Factors

In addition to other information set forth in this report and the risk factors noted below, 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, 2021, which could materially affect our business, financial condition or future results. Other than noted below, there have been no material changes to our risks described in our 2021 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. 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.

GOVERNMENT REGULATION

We are conducting a formal internal review of our emission certification process and compliance with emission standards with respect to our pick-up truck applications and are working with the EPA and CARB to address their questions about these applications. Due to the continuing nature of our formal internal review and on-going discussions with the EPA and CARB, we cannot predict the final results of this formal review and these regulatory processes, nor whether, or the extent to which, they could have a material adverse impact on our results of operations and cash flows.

We previously announced that we are conducting a formal internal review of our emissions certification process and compliance with emission standards with respect to all of 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. During conversations with the EPA and CARB about the effectiveness of our pick-up truck applications, the regulators raised concerns that certain aspects of our emissions systems may reduce the effectiveness of our emissions control systems and thereby act as defeat devices. As a result, our internal review focuses, in part, on the regulators' concerns. We are working closely with the regulators to enhance our emissions systems to improve the effectiveness of all of our pick-up truck applications and to fully address the regulators' requirements. Based on discussions with the regulators, we have developed a new calibration for the engines in model year 2019 RAM 2500 and 3500 trucks that has been included in all engines shipped since September 2019. During our discussions, the regulators turned their attention to other model years and other engines, most notably our pick-up truck applications for RAM 2500 and 3500 trucks for model years 2013 through 2018. In connection with these and other ongoing discussions with the EPA and CARB, we are developing a new software calibration and will recall model years 2013 through 2018 RAM 2500 and 3500 trucks. We accrued $30 million for the recall during the first quarter of 2022, an amount that reflects our current estimate of the cost of the recall.

We will continue to work together closely with the relevant regulators to develop and implement recommendations for improvement and seek to reach further resolutions as part of our ongoing commitment to compliance. Due to the presence of many unknown facts and circumstances, we are not yet able to estimate any further financial impact of these matters. It is possible that the consequences of any remediation plans resulting from our formal review and these regulatory processes could have a material adverse impact on our results of operations and cash flows.

BUSINESS CONDITIONS / DISRUPTIONS

The ongoing conflict between Russia and Ukraine, and the global response (including government bans or restrictions on doing business in Russia), could have a material adverse impact on our results of operations, financial condition and cash flows.

Given the nature of our business and our global operations, political, economic, and other conditions in foreign countries and regions, including geopolitical risks such as the current conflict between Russia and Ukraine, may adversely affect our results of operations, financial condition and cash flows. We have suspended our commercial operations in Russia indefinitely, which resulted in a $158 million charge in the first quarter of 2022. We may incur additional charges as conditions continue to evolve. In addition, we have experienced, and expect to continue to experience, an inability to collect customer receivables and may be the subject of litigation in connection with our suspension of commercial operations in Russia. The broader consequences of this conflict, which may include further sanctions, embargoes, regional instability, and geopolitical shifts; potential retaliatory action by the Russian government against companies, including possible nationalization of foreign businesses in Russia; increased tensions between the United States and countries in which we operate; and the extent of the conflict's effect on our business and results of operations as well as the global economy, cannot be predicted. To the extent the current conflict between Russia and Ukraine adversely affects our business, it may also have the effect of heightening many other risks disclosed in our Annual Report on Form 10-K for the year ended December 31, 2021, any of which could materially and adversely affect our business and results of operations. Such risks include, but are not limited to, adverse effects on macroeconomic conditions, including inflation, particularly with regard to raw material, transportation and labor price fluctuations; disruptions to our information technology environment, including through cyberattack, ransom attack, or cyber-intrusion; adverse changes in international trade policies and relations; disruptions in global supply chains; and our exposure to foreign currency exchange rate changes.

Failure to successfully execute or integrate the acquisition of Meritor, Inc. (Meritor) could have a material adverse impact on our results of operations, financial condition and cash flows.

The completion of the acquisition of Meritor is subject to a number of conditions including shareholder and regulatory approval as well as other conditions in the merger agreement. Failure to satisfy all of the required conditions could delay the completion of the acquisition for a significant period of time or prevent it from occurring at all. Under certain limited conditions, we and/or Meritor may elect to terminate the merger agreement, which could materially and adversely affect our business and reputation. Furthermore, if completed, the acquisition of Meritor will involve the integration of Meritor's operations with our existing operations, and there are uncertainties inherent in such an integration. We will be required to devote significant management attention and resources to integrating Meritor's operations. A delay in completing the acquisition or integration of Meritor could cause us to fail to realize some or all of the anticipated benefits within a reasonable period of time or at all, which could result in additional transaction costs or in other negative effects associated with uncertainty about the completion of the acquisition.

We may fail to fully realize all of the anticipated benefits, including enhanced revenue, earnings, and cash flow from our announced acquisition of Meritor.

Our ability to fully realize all of the anticipated benefits, including enhanced revenue, earnings, and cash flow, from our announced acquisition of Meritor will depend, in substantial part, on our ability to successfully integrate the products into our segments, launch the Meritor products around the world and achieve our projected market penetration. While we believe we will ultimately achieve these objectives, it is possible that we will be unable to achieve all of these objectives within our anticipated time frame or in the anticipated amounts. If we are not able to successfully complete the integration of the Meritor business or implement our Meritor strategy, we may not fully realize the anticipated benefits, including enhanced revenue, earnings, and cash flows, from this acquisition or such anticipated benefits may take longer to realize than expected.

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	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs (in millions) [(2)]
January 1 - January 31	50,064	$ 218.55	50,064	$ 2,581
February 1 - February 28	—	—	—	2,581
March 1 - March 31	1,510,316	198.63	1,510,316	2,281
Total	1,560,380	199.27	1,560,380	

(1) Shares purchased represent shares under the Board authorized share repurchase program.

(2) Shares repurchased under our Key Employee Stock Investment Plan only occur in the event of a participant default, which cannot be predicted, and were excluded from this column.

In December 2021, the Board authorized the acquisition of up to $2.0 billion of additional common stock upon completion of the 2019 repurchase plan. In December 2019, the Board authorized the acquisition of up to $2.0 billion of additional common stock upon completion of the 2018 repurchase plan. During the three months ended March 31, 2022, we repurchased $311 million of common stock under the 2019 authorization. The dollar value remaining available for future purchases under the 2019 program at March 31, 2022, was $281 million.

Our Key Employee Stock Investment Plan allows certain employees, other than officers, to purchase shares of common stock on an installment basis up to an established credit limit. We hold participants’ shares as security for the loans and would, in effect, repurchase shares only if the participant defaulted in repayment of the loan. Shares associated with participants' sales are sold as open-market transactions via a third-party broker.

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
10(a)	Agreement and Plan of Merger, dated February 21, 2022, by and among Meritor, Inc., Cummins Inc. and Rose NewCo Inc.(incorporated by reference to Exhibit 2.1 to the Current Report on Form 8-K filed by Cummins Inc. with the Securities and Exchange Commission on February 24, 2022 (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*	Inline 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*	Inline XBRL Taxonomy Extension Schema Document.
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

* Filed with this quarterly report on Form 10-Q are the following documents formatted in iXBRL (Inline Extensible Business Reporting Language): (i) the Condensed Consolidated Statements of Net Income for the three months ended March 31, 2022 and April 4, 2021, (ii) the Condensed Consolidated Statements of Comprehensive Income for the three months ended March 31, 2022 and April 4, 2021, (iii) the Condensed Consolidated Balance Sheets at March 31, 2022 and December 31, 2021, (iv) the Condensed Consolidated Statements of Cash Flows for the three months ended March 31, 2022 and April 4, 2021, (v) the Condensed Consolidated Statements of Changes in Equity for the three months ended March 31, 2022 and April 4, 2021 and (vi) Notes to Condensed Consolidated Financial Statements.

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: May 3, 2022

By:	/s/ MARK A. SMITH	By:	/s/ LUTHER E. PETERS
	Mark A. Smith		Luther E. Peters
	Vice President and Chief Financial Officer		*Vice President-Controller*
	(Principal Financial Officer)		*(Principal Accounting Officer)*

EXHIBIT 31(a)

Certification

I, N. Thomas Linebarger, certify that:

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

Date: May 3, 2022

/s/ N. THOMAS LINEBARGER

N. Thomas Linebarger

Chairman and Chief Executive Officer

EXHIBIT 31(b)

Certification

I, Mark A. Smith, certify that:

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

Date: May 3, 2022

/s/ MARK A. SMITH
Mark A. Smith
Vice President and Chief Financial Officer

EXHIBIT 32

Cummins Inc.

CERTIFICATION PURSUANT TO

18 U.S.C. SECTION 1350,

AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Cummins Inc. (the "Company") on Form 10-Q for the period ended March 31, 2022, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned officers of the Company, certify, pursuant to 18 U.S.C. ss. 1350, as adopted pursuant to ss. 906 of the Sarbanes-Oxley Act of 2002, that to the best of such officer's knowledge:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

May 3, 2022	/s/ N. THOMAS LINEBARGER
	N. Thomas Linebarger
	Chairman and Chief Executive Officer
May 3, 2022	/s/ MARK A. SMITH
	Mark A. Smith
	Vice President and Chief Financial Officer