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 December 31, 2019

OR

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

For the transition period from______ to ______

Commission File number 1-4982

PARKER-HANNIFIN CORPORATION

(Exact name of registrant as specified in its charter)

Ohio	**34-0451060**
(State or other jurisdiction of Incorporation or Organization)	**(I.R.S. Employer Identification No.)**
6035 Parkland Boulevard, Cleveland, Ohio	**44124-4141**
(Address of Principal Executive Offices)	**(Zip Code)**

Registrant's telephone number, including area code: (216) 896-3000

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

Title of Each Class	Trading Symbol	Name of Each Exchange on which Registered
Common Shares, $.50 par value	PH	New York Stock Exchange

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

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

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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:

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 ☒

Number of Common Shares outstanding at December 31, 2019: 128,363,097

PART I - FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

PARKER-HANNIFIN CORPORATION
CONSOLIDATED STATEMENT OF INCOME
(Dollars in thousands, except per share amounts)
(Unaudited)

	Three Months Ended December 31,		Six Months Ended December 31,	
	2019	2018	2019	2018
Net sales	$ 3,497,974	$ 3,472,045	$ 6,832,485	$ 6,951,339
Cost of sales	2,682,765	2,602,339	5,162,506	5,197,162
Selling, general and administrative expenses	491,121	397,259	890,300	791,581
Interest expense	82,891	47,518	152,847	91,857
Other (income), net	(13,549)	(6,225)	(61,070)	(20,138)
Income before income taxes	254,746	431,154	687,902	890,877
Income taxes	50,148	119,241	144,263	203,065
Net income	204,598	311,913	543,639	687,812
Less: Noncontrolling interest in subsidiaries' earnings	124	176	267	364
Net income attributable to common shareholders	$ 204,474	$ 311,737	$ 543,372	$ 687,448
Earnings per share attributable to common shareholders:				
Basic	$ 1.59	$ 2.39	$ 4.23	$ 5.23
Diluted	$ 1.57	$ 2.36	$ 4.17	$ 5.15

See accompanying notes to consolidated financial statements.

PARKER-HANNIFIN CORPORATION
CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME
(Dollars in thousands)
(Unaudited)

	Three Months Ended December 31,		Six Months Ended December 31,	
	2019	**2018**	**2019**	**2018**
Net income	$ 204,598	$ 311,913	$ 543,639	$ 687,812
Less: Noncontrolling interests in subsidiaries' earnings	124	176	267	364
Net income attributable to common shareholders	204,474	311,737	543,372	687,448
Other comprehensive income (loss), net of tax				
Foreign currency translation adjustment and other	151,583	(43,986)	48,862	(79,111)
Retirement benefits plan activity	33,416	24,527	64,442	48,400
Other comprehensive income (loss)	184,999	(19,459)	113,304	(30,711)
Less: Other comprehensive income (loss) for noncontrolling interests	137	55	(12)	(34)
Other comprehensive income (loss) attributable to common shareholders	184,862	(19,514)	113,316	(30,677)
Total comprehensive income attributable to common shareholders	$ 389,336	$ 292,223	$ 656,688	$ 656,771

See accompanying notes to consolidated financial statements.

PARKER-HANNIFIN CORPORATION

CONSOLIDATED BALANCE SHEET
(Dollars in thousands)
(Unaudited)

	December 31, 2019	June 30, 2019
ASSETS		
Current assets:		
Cash and cash equivalents	$ 948,355	$ 3,219,767
Marketable securities and other investments	145,120	150,931
Trade accounts receivable, net	1,973,187	2,131,054
Non-trade and notes receivable	319,126	310,708
Inventories	2,014,260	1,678,132
Prepaid expenses and other	261,103	182,494
Total current assets	5,661,151	7,673,086
Plant and equipment	5,817,798	5,186,730
Less: Accumulated depreciation	3,481,858	3,418,443
Plant and equipment, net	2,335,940	1,768,287
Deferred income taxes	114,032	150,462
Investments and other assets	941,588	747,773
Intangible assets, net	4,036,108	1,783,277
Goodwill	7,955,170	5,453,805
Total assets	$ 21,043,989	$ 17,576,690
LIABILITIES		
Current liabilities:		
Notes payable and long-term debt payable within one year	$ 1,604,318	$ 587,014
Accounts payable, trade	1,311,733	1,413,155
Accrued payrolls and other compensation	372,549	426,285
Accrued domestic and foreign taxes	165,265	167,312
Other accrued liabilities	637,257	558,007
Total current liabilities	4,091,122	3,151,773
Long-term debt	8,141,220	6,520,831
Pensions and other postretirement benefits	1,366,814	1,304,379
Deferred income taxes	569,582	193,066
Other liabilities	532,750	438,489
Total liabilities	14,701,488	11,608,538
EQUITY		
Shareholders' equity:		
Serial preferred stock, $.50 par value; authorized 3,000,000 shares; none issued	—	—
Common stock, $.50 par value; authorized 600,000,000 shares; issued 181,046,128 shares at December 31 and June 30	90,523	90,523
Additional capital	455,862	462,086
Retained earnings	13,094,252	12,777,538
Accumulated other comprehensive (loss)	(1,945,732)	(2,059,048)
Treasury shares, at cost; 52,683,031 shares at December 31 and 52,566,086 shares at June 30	(5,364,730)	(5,309,130)
Total shareholders' equity	6,330,175	5,961,969
Noncontrolling interests	12,326	6,183
Total equity	6,342,501	5,968,152
Total liabilities and equity	$ 21,043,989	$ 17,576,690

See accompanying notes to consolidated financial statements.

PARKER-HANNIFIN CORPORATION

CONSOLIDATED STATEMENT OF CASH FLOWS
(Dollars in thousands)
(Unaudited)

	Six Months Ended December 31, 2019	Six Months Ended December 31, 2018
CASH FLOWS FROM OPERATING ACTIVITIES		
Net income	$ 543,639	$ 687,812
Adjustments to reconcile net income to net cash provided by operations:		
Depreciation	119,741	115,000
Amortization	133,559	107,543
Share incentive plan compensation	73,069	64,615
Deferred income taxes	8,608	47,401
Foreign currency transaction loss	6,569	2,526
(Gain) loss on plant and equipment and intangible assets	(4,478)	3,428
Loss on sale of businesses	—	623
(Gain) loss on marketable securities	(1,969)	5,701
Gain on investments	(1,849)	(3,213)
Changes in assets and liabilities, net of effect of acquisitions:		
Accounts receivable, net	379,536	185,638
Inventories	25,724	(176,094)
Prepaid expenses and other	(50,153)	(40,555)
Other assets	(38,747)	14,214
Accounts payable, trade	(178,013)	(120,253)
Accrued payrolls and other compensation	(117,882)	(104,726)
Accrued domestic and foreign taxes	(7,699)	(14,758)
Other accrued liabilities	(76,616)	18,960
Pensions and other postretirement benefits	32,316	(173,040)
Other liabilities	(19,387)	(79,782)
Net cash provided by operating activities	825,968	541,040
CASH FLOWS FROM INVESTING ACTIVITIES		
Acquisitions (net of cash of $82,192 in 2019 and $690 in 2018)	(5,075,605)	(2,042)
Capital expenditures	(118,593)	(94,426)
Proceeds from sale of plant and equipment	20,993	34,121
Proceeds from sale of businesses	—	19,540
Purchases of marketable securities and other investments	(190,129)	(2,845)
Maturities and sales of marketable securities and other investments	198,872	14,432
Other	9,374	(90)
Net cash used in investing activities	(5,155,088)	(31,310)
CASH FLOWS FROM FINANCING ACTIVITIES		
Proceeds from exercise of stock options	1,923	635
Payments for common shares	(136,815)	(565,970)
Proceeds from notes payable, net	931,546	606,019
Proceeds from long-term borrowings	1,721,181	1
Payments for long-term borrowings	(236,505)	(100,209)
Dividends paid	(227,025)	(200,459)
Net cash provided by (used in) financing activities	2,054,305	(259,983)
Effect of exchange rate changes on cash	3,403	(24,499)
Net (decrease) increase in cash and cash equivalents	(2,271,412)	225,248
Cash and cash equivalents at beginning of year	3,219,767	822,137
Cash and cash equivalents at end of period	$ 948,355	$ 1,047,385

See accompanying notes to consolidated financial statements.

PARKER-HANNIFIN CORPORATION

BUSINESS SEGMENT INFORMATION
(Dollars in thousands)
(Unaudited)

The Company operates in two reportable business segments: Diversified Industrial and Aerospace Systems.

Diversified Industrial - This segment produces a broad range of motion-control and fluid systems and components used in all kinds of manufacturing, packaging, processing, transportation, mobile construction, refrigeration and air conditioning, agricultural, and military machinery and equipment and has a significant portion of international operations. Sales are made directly to major original equipment manufacturers ("OEMs") and through a broad distribution network to smaller OEMs and the aftermarket.

Aerospace Systems - This segment designs and manufactures products and provides aftermarket support for commercial, business jet, military and general aviation aircraft, missile and spacecraft markets. The Aerospace Systems Segment provides a full range of systems and components for hydraulic, pneumatic and fuel applications.

	Three Months Ended December 31,		Six Months Ended December 31,	
	2019	2018	2019	2018
Net sales				
Diversified Industrial:				
North America	$ 1,615,852	$ 1,632,059	$ 3,240,457	$ 3,313,103
International	1,147,084	1,223,679	2,225,934	2,457,445
Aerospace Systems	735,038	616,307	1,366,094	1,180,791
Total net sales	$ 3,497,974	$ 3,472,045	$ 6,832,485	$ 6,951,339
Segment operating income				
Diversified Industrial:				
North America	$ 211,339	$ 257,774	$ 486,531	$ 532,885
International	153,816	189,085	322,389	395,179
Aerospace Systems	121,039	121,463	244,019	231,318
Total segment operating income	486,194	568,322	1,052,939	1,159,382
Corporate general and administrative expenses	35,660	63,890	84,562	114,215
Income before interest expense and other expense	450,534	504,432	968,377	1,045,167
Interest expense	82,891	47,518	152,847	91,857
Other expense	112,897	25,760	127,628	62,433
Income before income taxes	$ 254,746	$ 431,154	$ 687,902	$ 890,877

Dollars in thousands, except per share amounts

As used in this Quarterly Report on Form 10-Q, unless the context otherwise requires, the terms "Company", "Parker", "we" or "us" refer to Parker-Hannifin Corporation and its subsidiaries.

1. Management representation

In the opinion of the management of the Company, the accompanying unaudited consolidated financial statements contain all adjustments (consisting of only normal recurring adjustments) necessary to present fairly the Company's financial position as of December 31, 2019, the results of operations for the three and six months ended December 31, 2019 and 2018 and cash flows for the six months then ended. These financial statements should be read in conjunction with the consolidated financial statements and related notes included in the Company's 2019 Annual Report on Form 10-K. Interim period results are not necessarily indicative of the results to be expected for the full fiscal year.

The Company has evaluated subsequent events that have occurred through the date these financial statements were issued. No subsequent events have occurred that required adjustment to these financial statements.

2. New accounting pronouncements

In June 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2016-13, "Measurement of Credit Losses on Financial Instruments." ASU 2016-13 requires a financial asset (or a group of financial assets) measured at amortized cost to be presented at the net amount expected to be collected. The allowance for credit losses is a valuation account that is deducted from the amortized cost basis of the financial asset(s) to present the net carrying value at the amount expected to be collected on the financial asset. Credit losses relating to available-for-sale debt securities should be recorded through an allowance for credit losses. ASU 2016-13 is effective for fiscal years, and interim periods within those years, beginning after December 15, 2019. Early adoption is permitted. We have not yet determined the effect that ASU 2016-13 will have on our financial statements.

In February 2016, the FASB issued ASU 2016-02, "Leases." ASU 2016-02 requires lessees to put most leases with terms greater than 12 months on their balance sheet by recognizing a liability to make lease payments and an asset representing their right to use the asset during the lease term. We adopted ASU 2016-02 on July 1, 2019 using the optional transition method and have not restated prior periods. We elected to use the package of practical expedients permitted under the transition guidance, which allows the carry forward of historical lease classification of existing leases. Upon adoption, we recorded a right-of-use asset and lease liability of approximately $126 million. The adoption of the standard did not have a material impact on the Consolidated Statement of Income or Cash Flows.

3. Revenue recognition

Revenue is derived primarily from the sale of products in a variety of mobile, industrial and aerospace markets. A majority of the Company's revenues are recognized at a point in time. However, a portion of the Company's revenues are recognized over time.

Diversified Industrial Segment revenues by technology platform:

	Three Months Ended December 31,		Six Months Ended December 31,	
	2019	2018	2019	2018
Motion Systems	$ 752,306	$ 856,357	$ 1,519,120	$ 1,715,930
Flow and Process Control	942,249	1,015,200	1,953,604	2,076,264
Filtration and Engineered Materials	1,068,381	984,181	1,993,667	1,978,354
Total	$ 2,762,936	$ 2,855,738	$ 5,466,391	$ 5,770,548

Aerospace Systems Segment revenues by product platform:

	Three Months Ended December 31,		Six Months Ended December 31,	
	2019	2018	2019	2018
Flight Control Actuation	$ 180,423	$ 189,670	$ 353,682	$ 352,606
Fuel, Inerting and Engine Motion Control	159,474	157,262	311,687	301,308
Hydraulics	110,385	108,893	218,760	211,390
Engine Components	179,605	71,647	273,400	136,033
Airframe and Engine Fluid Conveyance	79,123	68,868	163,802	139,072
Other	26,028	19,967	44,763	40,382
Total	$ 735,038	$ 616,307	$ 1,366,094	$ 1,180,791

Total Company revenues by geographic region based on the Company's selling operation's location:

	Three Months Ended December 31,		Six Months Ended December 31,	
	2019	2018	2019	2018
North America	$ 2,344,338	$ 2,248,806	$ 4,600,089	$ 4,494,897
Europe	652,586	714,550	1,291,724	1,440,860
Asia Pacific	463,840	465,974	861,554	927,614
Latin America	37,210	42,715	79,118	87,968
Total	$ 3,497,974	$ 3,472,045	$ 6,832,485	$ 6,951,339

The majority of revenues from the Aerospace Systems Segment are generated from sales to customers within North America.

Contract balances

Contract assets and contract liabilities are reported on a contract-by-contract basis. Contract assets reflect revenue recognized and performance obligations satisfied in advance of customer billing. Contract liabilities relate to payments received in advance of the satisfaction of performance under the contract. Payments from customers are received based on the terms established in the contract with the customer.

Total contract assets and contract liabilities are as follows:

	December 31, 2019	June 30, 2019
Contract assets, current (included within Prepaid expenses and other)	$ 26,981	$ 22,726
Contract assets, noncurrent (included within Investments and other assets)	1,146	1,301
Total contract assets	28,127	24,027
Contract liabilities, current (included within Other accrued liabilities)	(58,323)	(64,668)
Contract liabilities, noncurrent (included within Other liabilities)	(406)	(421)
Total contract liabilities	(58,729)	(65,089)
Net contract liabilities	$ (30,602)	$ (41,062)

At December 31, 2019, the change in net contract liabilities was primarily due to timing differences between when revenue was recognized and the receipt of advance payments. During the six months ended December 31, 2019, approximately $22 million of revenue was recognized that was included in the contract liabilities at June 30, 2019.

Remaining performance obligations

Our backlog represents written firm orders from a customer to deliver products and, in the case of blanket purchase orders, only includes the portion of the order for which a schedule or release has been agreed to with the customer. We believe our backlog represents our unsatisfied or partially unsatisfied performance obligations. Backlog at December 31, 2019 was $5,503 million, of which approximately 89 percent is expected to be recognized as revenue within the next 12 months and the balance thereafter.

4. Acquisitions

On October 29, 2019, we completed the acquisition of a100 percent equity interest in LORD Corporation ("Lord") for approximately$3,453 million in cash, including the assumption of debt. On September 16, 2019, we completed the acquisition of a 100 percent equity interest in EMFCO Holdings Incorporated, parent company of Exotic Metals Forming Company LLC ("Exotic") for approximately $1,706 million in cash.

Lord is a diversified technology and manufacturing company developing highly reliable adhesives and coatings, as well as vibration and motion control technologies, that significantly reduce risk and improve product performance. Lord's products are used in mission-critical applications in the aerospace, automotive and industrial markets. Lord had annual sales of approximately $1,025 million for its fiscal 2018. For segment reporting purposes, approximately 95 percent of Lord's sales are included in the Diversified Industrial Segment, while the remaining five percent are included in the Aerospace Systems Segment. Lord's unique and proprietary products, solutions and technologies for mission-critical applications are expected to increase the Company's overall engineered materials product and solutions offerings to enable a stronger value proposition for customers.

Exotic designs and manufactures innovative and technically demanding, high temperature, high pressure air and exhaust management solutions for aircraft and engines. Exotic had annual sales of approximately $409 million for its fiscal 2019.
For segment reporting purposes, Exotic is included in the Aerospace Systems Segment. We believe Exotic's products and proprietary manufacturing capabilities are complementary to our portfolio of flight control, fuel and inerting, hydraulics, fluid conveyance and engine components.

Assets acquired and liabilities assumed are recognized at their respective fair values as of the acquisition date. The process of estimating the fair values of certain tangible assets, identifiable intangible assets and assumed liabilities requires the use of judgment in determining the appropriate assumptions and estimates. The following presents the preliminary estimated fair values of Lord and Exotic's assets acquired and liabilities assumed on the respective acquisition dates. These preliminary estimates are based on available information and will be revised during the measurement period, not to exceed 12 months from the acquisition date, as third-party valuations are finalized, additional information becomes available and as additional analysis is performed. Such revisions may have a material impact on our results of operations and financial position within the measurement period. During the current-year quarter, these revisions, which primarily impacted intangible assets, goodwill, and plant and equipment, did not have a material impact on our financial statements.

	Lord		Exotic	
	October 29, 2019		September 16, 2019	
Assets:				
Cash and cash equivalents	$	74,013	$	8,179
Accounts receivable		156,670		81,336
Inventories		251,312		114,661
Prepaid expenses and other		27,624		1,343
Plant and equipment		406,356		178,393
Deferred income taxes		—		2,057
Other assets		34,185		1,226
Intangible assets		1,492,960		873,710
Goodwill		1,978,526		504,485
Total assets acquired		4,421,646		1,765,390
Liabilities:				
Notes payable and long-term debt payable within one year		630		—
Accounts payable, trade		56,186		23,176
Accrued payrolls and other compensation		57,371		8,863
Accrued domestic and foreign taxes		4,498		2,123
Other accrued liabilities		91,101		25,662
Long-term debt		223,313		—
Pensions and other postretirement benefits		115,265		—
Deferred income taxes		383,759		—
Other liabilities		30,106		—
Noncontrolling interests		6,255		—
Total liabilities and noncontrolling interests assumed		968,484		59,824
Net assets acquired	$	3,453,162	$	1,705,566

Goodwill is calculated as the excess of the purchase price over the net assets acquired. With respect to the Lord and Exotic acquisitions, goodwill represents cost synergies and enhancements to our existing technologies. For tax purposes, Lord's goodwill is not deductible and Exotic's goodwill is deductible. Based upon a preliminary acquisition valuation, intangibles acquired as part of the Exotic acquisition include $501,610 of customer-related intangible assets, $281,500 of patents and technology and $90,600 of trademarks, with weighted average estimated useful lives of 18, 20 and 20 years, respectively. Similarly, Lord's acquisition includes $917,640 of customer-related intangible assets, $456,680 of patents and technology and $118,640 of trademarks, with weighted average estimated useful lives of 13, 21 and 20 years, respectively.

Our consolidated financial statements include the results of operations of Lord and Exotic from their respective acquisition dates through December 31, 2019. Net sales attributable to these acquisitions during this period and included in our consolidated financial statements for the three and six months ended December 31, 2019 total $285,905 and $307,188, respectively. Segment operating (loss) attributable to these acquisitions during this period and included in our consolidated financial statements for the three and six months ended December 31, 2019 total $(20,054) and $(19,820), respectively.

Acquisition-related transaction costs totaled $114,672 for fiscal 2020. These costs are included in selling, general and administrative expenses in the Consolidated Statement of Income.

5. Earnings per share

The following table presents a reconciliation of the numerator and denominator of basic and diluted earnings per share for the three and six months ended December 31, 2019 and 2018.

	Three Months Ended December 31,		Six Months Ended December 31,	
	2019	2018	2019	2018
Numerator:				
Net income attributable to common shareholders	$ 204,474	$ 311,737	$ 543,372	$ 687,448
Denominator:				
Basic - weighted average common shares	128,396,933	130,361,273	128,430,463	131,361,464
Increase in weighted average common shares from dilutive effect of equity-based awards	2,098,448	1,949,937	1,723,616	2,088,210
Diluted - weighted average common shares, assuming exercise of equity-based awards	130,495,381	132,311,210	130,154,079	133,449,674
Basic earnings per share	$ 1.59	$ 2.39	$ 4.23	$ 5.23
Diluted earnings per share	$ 1.57	$ 2.36	$ 4.17	$ 5.15

For the three months ended December 31, 2019 and 2018, 2,718 and 1,335,187 common shares subject to equity-based awards, respectively, were excluded from the computation of diluted earnings per share because the effect of their exercise would be anti-dilutive. For the six months ended December 31, 2019 and 2018, 767,692 and 836,099 common shares subject to equity-based awards, respectively, were excluded from the computation of diluted earnings per share because the effect of their exercise would be anti-dilutive.

6. Share repurchase program

The Company has a program to repurchase its common shares. On October 22, 2014, the Board of Directors of the Company approved an increase in the overall number of shares authorized for repurchase under the program so that, beginning on such date, the aggregate number of shares authorized for repurchase was 35 million. There is no limitation on the number of shares that can be repurchased in a fiscal year. There is no expiration date for this program. Repurchases may be funded primarily from operating cash flows and commercial paper borrowings and the shares are initially held as treasury shares. During the three months ended December 31, 2019, we repurchased 260,287 shares at an average price, including commissions, of $192.10 per share. During the six months ended December 31, 2019, we repurchased 555,381 shares at an average price, including commissions, of $180.06 per share.

7. Trade accounts receivable, net

Trade accounts receivable are initially recorded at their net collectible amount and are generally recorded at the time the revenue from the sales transaction is recorded. Receivables are written off to bad debt primarily when, in the judgment of the Company, the receivable is deemed to be uncollectible due to the insolvency of the debtor. Allowance for doubtful accounts was $11,352 and $8,874 at December 31, 2019 and June 30, 2019, respectively.

8. Non-trade and notes receivable

The non-trade and notes receivable caption in the Consolidated Balance Sheet is comprised of the following components:

	December 31, 2019	June 30, 2019
Notes receivable	$ 141,483	$ 147,719
Accounts receivable, other	177,643	162,989
Total	$ 319,126	$ 310,708

9. Inventories

The inventories caption in the Consolidated Balance Sheet is comprised of the following components:

	December 31, 2019	June 30, 2019
Finished products	$ 786,891	$ 663,068
Work in process	948,968	850,778
Raw materials	278,401	164,286
Total	$ 2,014,260	$ 1,678,132

10. Leases

We primarily enter into lease agreements for office space, distribution centers, certain manufacturing facilities and equipment. The majority of our leases are operating leases. Finance leases are immaterial to our financial statements. In addition, leases with an initial term of twelve months or less are not recorded on the Consolidated Balance Sheet. Certain leases contain options that provide us with the ability to extend the lease term. Such options are included in the lease term when it is reasonably certain that the option will be exercised. When accounting for leases, we combine payments for leased assets, related services and other components of a lease. Payments within certain lease agreements are adjusted periodically for changes in an index or rate.

The discount rate implicit within our leases is generally not determinable and therefore we determine the discount rate based on our incremental borrowing rate. The incremental borrowing rate for our leases is determined based on lease term and the currency in which lease payments are made.

The components of lease expense are as follows:

	Three Months Ended December 31, 2019	Six Months Ended December 31, 2019
Operating lease expense	$ 12,879	$ 24,830
Short-term lease cost	2,109	4,434
Variable lease cost	1,685	2,959
Total lease cost	$ 16,673	$ 32,223

Supplemental cash flow information related to operating leases are as follows:

	Three Months Ended December 31, 2019	Six Months Ended December 31, 2019
Cash paid for amounts included in the measurement of operating lease liabilities	$ 12,732	$ 24,582
Right-of-use assets obtained in exchange for operating lease obligations	8,730	25,947

Supplemental balance sheet information related to operating leases is as follows:

	December 31, 2019
Operating lease right-of-use assets (included within Investments and other assets)	$ 155,869
Current operating lease liabilities (included within Other accrued liabilities)	$ 42,661
Long-term operating lease liabilities (included within Other liabilities)	112,442
Total operating lease liabilities	$ 155,103
Weighted average remaining lease term	6.4 years
Weighted average discount rate	2.3%

Maturities of lease liabilities at December 31, 2019 are as follows:

		Operating Leases
2020	$	24,277
2021		40,670
2022		29,237
2023		19,609
2024		12,439
Thereafter		43,544
Total operating lease payments	$	169,776
Less imputed interest		14,673
Total operating lease liabilities	$	155,103

Future minimum rental commitments as of June 30, 2019, under non-cancelable operating leases, which expire at various dates, are as follows: 2020$45,920; 2021-$31,115; 2022-$21,625; 2023-$13,228; 2024-$7,591 and after 2024-$22,723.

11. Business realignment and acquisition integration charges

We incurred business realignment and acquisition integration charges in fiscal2020 and 2019. The business realignment charges primarily consist of severance costs related to actions taken under the Company's simplification initiative aimed at reducing organizational and process complexity as well as plant closures. The prior-year acquisition integration charges relate to the fiscal 2017 acquisition of CLARCOR, Inc. ("Clarcor") and primarily consist of severance costs and expenses related to plant closures and relocations. A majority of the business realignment charges were incurred in North America and Europe. We believe the realignment actions will positively impact future results of operations but will not have a material effect on liquidity and sources and uses of capital.

Business realignment and Clarcor acquisition integration charges presented in the Business Segment Information are as follows:

	Three Months Ended December 31,		Six Months Ended December 31,	
	2019	2018	2019	2018
Diversified Industrial	$ 9,667	$ 7,382	$ 14,392	$ 15,940
Aerospace Systems	52	—	45	—
Corporate general and administrative expenses	117	—	122	—
Other expense	—	220	—	275

Workforce reductions in connection with business realignment and Clarcor acquisition integration charges in the Business Segment Information are as follows:

	Three Months Ended December 31,		Six Months Ended December 31,	
	2019	2018	2019	2018
Diversified Industrial	599	164	818	365
Aerospace Systems	16	—	16	—
Corporate general and administrative expenses	4	—	5	—

The business realignment and Clarcor acquisition integration charges are presented in the Consolidated Statement of Income as follows:

	Three Months Ended December 31,		Six Months Ended December 31,	
	2019	2018	2019	2018
Cost of sales	$ 7,679	$ 3,669	$ 11,024	$ 8,068
Selling, general and administrative expenses	2,157	3,713	3,535	7,872
Other (income), net	—	220	—	275

During the first six months of fiscal 2020, approximately $15 million in payments were made relating to business realignment and Clarcor acquisition integration charges. Remaining payments related to current-year and prior-year business realignment and acquisition integration actions of approximately $11 million, a majority of which are expected to be paid by December 31, 2020, are primarily reflected within the other accrued liabilities caption in the Consolidated Balance Sheet. Additional charges may be recognized in future periods related to the business realignment described above, the timing and amount of which are not known at this time.

We also incurred the following acquisition integration charges related to the Lord and Exotic acquisitions:

	Three Months Ended December 31,	Six Months Ended December 31,
	2019	2019
Diversified Industrial	$ 6,725	$ 10,139
Aerospace Systems	489	1,084

These charges are primarily included in selling, general and administrative expenses within the Consolidated Statement of Income.

12. Equity

Changes in equity for the three months ended December 31, 2019 and 2018 are as follows:

	Common Stock	Additional Capital	Retained Earnings	Accumulated Other Comprehensive (Loss)	Treasury Shares	Noncontrolling Interests	Total Equity
Balance at September 30, 2019	$ 90,523	$ 464,440	$ 13,003,084	$ (2,130,594)	$ (5,330,837)	$ 6,176	$ 6,102,792
Net income			204,474			124	204,598
Other comprehensive income				184,862		137	184,999
Dividends paid ($0.88 per share)			(113,306)			(366)	(113,672)
Stock incentive plan activity		(8,578)			16,107		7,529
Acquisition activity						6,255	6,255
Shares purchased at cost					(50,000)		(50,000)
Balance at December 31, 2019	$ 90,523	$ 455,862	$ 13,094,252	$ (1,945,732)	$ (5,364,730)	$ 12,326	$ 6,342,501

	Common Stock	Additional Capital	Retained Earnings	Accumulated Other Comprehensive (Loss)	Treasury Shares	Noncontrolling Interests	Total Equity
Balance at September 30, 2018	$ 90,523	$ 503,052	$ 11,902,300	$ (1,775,983)	$ (4,618,512)	$ 5,726	$ 6,107,106
Net income			311,737			176	311,913
Other comprehensive income (loss)				(19,514)		55	(19,459)
Dividends paid ($0.76 per share)			(99,589)				(99,589)
Stock incentive plan activity		18,802			2,393		21,195
Shares purchased at cost					(500,000)		(500,000)
Balance at December 31, 2018	$ 90,523	$ 521,854	$ 12,114,448	$ (1,795,497)	$ (5,116,119)	$ 5,957	$ 5,821,166

Changes in equity for the six months ended December 31, 2019 and 2018 are as follows:

	Common Stock	Additional Capital	Retained Earnings	Accumulated Other Comprehensive (Loss)	Treasury Shares	Noncontrolling Interests	Total Equity
Balance at June 30, 2019	$ 90,523	$ 462,086	$ 12,777,538	$ (2,059,048)	$ (5,309,130)	$ 6,183	$ 5,968,152
Net income			543,372			267	543,639
Other comprehensive income (loss)				113,316		(12)	113,304
Dividends paid ($1.76 per share)			(226,658)			(367)	(227,025)
Stock incentive plan activity		(6,224)			44,400		38,176
Acquisition activity						6,255	6,255
Shares purchased at cost					(100,000)		(100,000)
Balance at December 31, 2019	$ 90,523	$ 455,862	$ 13,094,252	$ (1,945,732)	$ (5,364,730)	$ 12,326	$ 6,342,501

	Common Stock	Additional Capital	Retained Earnings	Accumulated Other Comprehensive (Loss)	Treasury Shares	Noncontrolling Interests	Total Equity
Balance at June 30, 2018	$ 90,523	$ 496,592	$ 11,625,975	$ (1,763,086)	$ (4,590,138)	$ 5,627	$ 5,865,493
Impact of adoption of accounting standards			1,483	(1,734)			(251)
Net income			687,448			364	687,812
Other comprehensive (loss)				(30,677)		(34)	(30,711)
Dividends paid ($1.52 per share)			(200,458)				(200,458)
Stock incentive plan activity		25,262			24,019		49,281
Shares purchased at cost					(550,000)		(550,000)
Balance at December 31, 2018	$ 90,523	$ 521,854	$ 12,114,448	$ (1,795,497)	$ (5,116,119)	$ 5,957	$ 5,821,166

Changes in accumulated other comprehensive (loss) in shareholders' equity by component for the six months ended December 31, 2019 and 2018 are as follows:

	Foreign Currency Translation Adjustment and Other	Retirement Benefit Plans	Total
Balance at June 30, 2019	$ (1,011,656)	$ (1,047,392)	$ (2,059,048)
Other comprehensive income before reclassifications	48,874	—	48,874
Amounts reclassified from accumulated other comprehensive (loss)	—	64,442	64,442
Balance at December 31, 2019	$ (962,782)	$ (982,950)	$ (1,945,732)

	Foreign Currency Translation Adjustment and Other	Retirement Benefit Plans	Total
Balance at June 30, 2018	$ (943,477)	$ (819,609)	$ (1,763,086)
Impact of adoption of ASU 2016-01	(1,734)	—	(1,734)
Other comprehensive (loss) before reclassifications	(82,655)	—	(82,655)
Amounts reclassified from accumulated other comprehensive (loss)	3,578	48,400	51,978
Balance at December 31, 2018	$ (1,024,288)	$ (771,209)	$ (1,795,497)

Significant reclassifications out of accumulated other comprehensive (loss) in shareholders' equity for the three and six months ended December 31, 2019 and 2018 are as follows:

Details about Accumulated Other Comprehensive (Loss) Components	Income (Expense) Reclassified from Accumulated Other Comprehensive (Loss)		Consolidated Statement of Income Classification
	Three Months Ended December 31, 2019	Six Months Ended December 31, 2019	
Retirement benefit plans			
Amortization of prior service cost and initial net obligation	$ (1,284)	$ (2,767)	Other (income), net
Recognized actuarial loss	(42,703)	(82,188)	Other (income), net
Total before tax	(43,987)	(84,955)	
Tax benefit	10,571	20,513	
Net of tax	$ (33,416)	$ (64,442)	

Details about Accumulated Other Comprehensive (Loss) Components	Income (Expense) Reclassified from Accumulated Other Comprehensive (Loss)		Consolidated Statement of Income Classification
	Three Months Ended December 31, 2018	Six Months Ended December 31, 2018	
Retirement benefit plans			
Amortization of prior service cost and initial net obligation	$ (1,652)	$ (3,293)	Other (income), net
Recognized actuarial loss	(30,696)	(59,993)	Other (income), net
Total before tax	(32,348)	(63,286)	
Tax benefit	7,821	14,886	
Net of tax	$ (24,527)	$ (48,400)	

13. Goodwill and intangible assets

The changes in the carrying amount of goodwill for the six months ended December 31, 2019 are as follows:

	Diversified Industrial Segment	Aerospace Systems Segment	Total
Balance at June 30, 2019	$ 5,355,165	$ 98,640	$ 5,453,805
Acquisitions	1,978,234	504,777	2,483,011
Foreign currency translation and other	18,354	—	18,354
Balance at December 31, 2019	$ 7,351,753	$ 603,417	$ 7,955,170

The acquisitions line represents the goodwill allocation during the measurement period subsequent to the applicable acquisition date. Refer to Note 4 for further discussion.

Intangible assets are amortized on the straight-line method over their legal or estimated useful lives.The following summarizes the gross carrying value and accumulated amortization for each major category of intangible assets:

	December 31, 2019		June 30, 2019	
	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Patents and technology	$ 992,729	$ 138,740	$ 265,644	$ 130,233
Trademarks	753,804	269,734	542,573	252,388
Customer lists and other	3,874,382	1,176,333	2,435,461	1,077,780
Total	$ 5,620,915	$ 1,584,807	$ 3,243,678	$ 1,460,401

Total intangible amortization expense for the six months ended December 31, 2019 was $128,174. The estimated amortization expense for the five years ending June 30, 2020 through 2024 is $277,637, $314,987, $308,949, $297,923 and $292,311, respectively.

Intangible assets are evaluated for impairment whenever events or circumstances indicate that the undiscounted net cash flows to be generated by their use over their expected useful lives and eventual disposition may be less than their net carrying value. No material intangible asset impairments occurred during the six months ended December 31, 2019.

14. Retirement benefits

Net pension benefit expense recognized included the following components:

	Three Months Ended December 31,		Six Months Ended December 31,	
	2019	2018	2019	2018
Service cost	$ 21,449	$ 17,983	$ 40,998	$ 38,492
Interest cost	35,851	40,551	69,844	80,417
Expected return on plan assets	(66,883)	(62,701)	(130,778)	(125,578)
Amortization of prior service cost	1,309	1,677	2,818	3,325
Amortization of net actuarial loss	42,779	30,692	82,340	59,985
Amortization of initial net obligation	5	4	9	9
Net pension benefit expense	$ 34,510	$ 28,206	$ 65,231	$ 56,650

During the three months ended December 31, 2019 and 2018, we recognized $510 and $631, respectively, in expense related to other postretirement benefits. During the six months ended December 31, 2019 and 2018, we recognized $967 and $1,281, respectively, in expense related to other postretirement benefits. Components of retirement benefits expense, other than service cost, are included in other (income), net in the Consolidated Statement of Income.

15. Debt

In September 2019, the Company entered into and fully drew against a term loan with an aggregate principal amount of $925 million, which will mature in its entirety in September 2023. We used the proceeds to finance a portion of the purchase of the Exotic acquisition. In October 2019, we fully drew against the $800 million term loan, which will mature in its entirety in May 2022. We used the proceeds to finance a portion of the purchase of the Lord acquisition. At December 31, 2019, both term loans had an interest rate of LIBOR plus 112.5 bps. Interest payments are due quarterly.

In September 2019, we also amended and extended our existing multi-currency credit agreement, increasing its capacity to $2,500 million. Commercial paper notes outstanding at December 31, 2019 and June 30, 2019 were $1,518 million and $586 million, respectively. Based on the Company's rating level at December 31, 2019, the most restrictive financial covenant provides that the ratio of debt to debt-shareholders' equity cannot exceed .65 to 1.0. At December 31, 2019, our debt to debt-shareholders' equity ratio was .61 to 1.0. We are in compliance with all covenants set forth in the credit agreement and indentures.

16. Income taxes

The Company and its subsidiaries file income tax returns in the United States and in various foreign jurisdictions. In the normal course of business, the Company is subject to examination by taxing authorities throughout the world. The Company is open to assessment of its federal income tax returns by the U.S. Internal Revenue Service for fiscal years after 2013, and its state and local returns for fiscal years after 2013. The Company is also open to assessment for foreign jurisdictions for fiscal years after 2009. Unrecognized tax benefits reflect the difference between positions taken or expected to be taken on income tax returns and the amounts reflected in the financial statements.

As of December 31, 2019, the Company had gross unrecognized tax benefits of $136,103, all of which, if recognized, would impact the effective tax rate. The accrued interest related to the gross unrecognized tax benefits, excluded from the amounts above, is $26,617. It is reasonably possible that within the next 12 months the amount of gross unrecognized tax benefits could be reduced by up to approximately $100,000 as a result of the revaluation of existing uncertain tax positions arising from developments in the examination process or the closure of tax statutes. Any increase in the amount of gross unrecognized tax benefits within the next 12 months is expected to be insignificant.

17. Financial instruments

Our financial instruments consist primarily of cash and cash equivalents, marketable securities and other investments, accounts receivable and long-term investments as well as obligations under accounts payable, trade, notes payable and long-term debt. Due to their short-term nature, the carrying values for cash and cash equivalents, accounts receivable, accounts payable, trade and notes payable approximate fair value.

Marketable securities and other investments include deposits and equity investments. Deposits are recorded at cost, and equity investments are recorded at fair value. Changes in fair value related to equity investments are recorded in net income.

Gross unrealized gains and losses related to equity investments were not material as of December 31, 2019 and June 30, 2019. There were no facts or circumstances that indicated the unrealized losses were other than temporary.

The carrying value of long-term debt and estimated fair value of long-term debt are as follows:

	December 31, 2019	June 30, 2019
Carrying value of long-term debt	$ 8,302,561	$ 6,596,380
Estimated fair value of long-term debt	8,780,550	7,012,641

The fair value of long-term debt is classified within level 2 of the fair value hierarchy.

We utilize derivative and non-derivative financial instruments, including forward exchange contracts, costless collar contracts, cross-currency swap contracts and certain foreign denominated debt designated as net investment hedges, to manage foreign currency transaction and translation risk. The derivative financial instrument contracts are with major investment grade financial institutions and we do not anticipate any material non-performance by any of the counterparties. We do not hold or issue derivative financial instruments for trading purposes.

The Company’s €700 million aggregate principal amount of Senior Notes due 2025 have been designated as a hedge of the Company’s net investment in certain foreign subsidiaries. The translation of the Senior Notes due 2025 into U.S. dollars is recorded in accumulated other comprehensive (loss) and remains there until the underlying net investment is sold or substantially liquidated.

Derivative financial instruments are recognized on the Consolidated Balance Sheet as either assets or liabilities and are measured at fair value.

The location and fair value of derivative financial instruments reported in the Consolidated Balance Sheet are as follows:

	Balance Sheet Caption	December 31, 2019	June 30, 2019
Net investment hedges			
Cross-currency swap contracts	Other assets	$ 32,485	$ 24,545
Cash flow hedges			
Forward exchange contracts	Non-trade and notes receivable	16,663	13,242
Forward exchange contracts	Other accrued liabilities	1,450	2,578
Costless collar contracts	Non-trade and notes receivable	1,559	457
Costless collar contracts	Other accrued liabilities	2,857	1,934

The cross-currency swap, forward exchange contracts and costless collar contracts are reflected on a gross basis in the Consolidated Balance Sheet. We have not entered into any master netting arrangements.

Gains or losses on derivatives that are not hedges are adjusted to fair value through the cost of sales caption in the Consolidated Statement of Income. Gains or losses on derivatives that are hedges are adjusted to fair value through accumulated other comprehensive (loss) in the Consolidated Balance Sheet until the hedged item is recognized in earnings.

The cross-currency swap contracts have been designated as hedging instruments. The forward exchange and costless collar contracts have not been designated as hedging instruments and are considered to be economic hedges of forecasted transactions.

Gains or losses on derivative financial instruments that were recorded in the Consolidated Statement of Income for the three and six months ended December 31, 2019 and 2018 were not material.

Gains (losses) on derivative and non-derivative financial instruments that were recorded in accumulated other comprehensive (loss) in the Consolidated Balance Sheet are as follows:

	Three Months Ended December 31,		Six Months Ended December 31,	
	2019	2018	2019	2018
Cross-currency swap contracts	$ (3,833)	$ 5,700	$ 6,551	$ 7,619
Foreign denominated debt	(16,600)	7,144	8,324	11,271

No portion of these financial instruments were excluded from the effectiveness testing during the six months ended December 31, 2019 and 2018.

A summary of financial assets and liabilities that were measured at fair value on a recurring basis at December 31, 2019 and June 30, 2019 are as follows:

	Fair Value at December 31, 2019	Quoted Prices In Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Equity securities	$ 9,930	$ 9,930	$ —	$ —
Derivatives	50,707	—	50,707	—
Liabilities:				
Derivatives	4,307	—	4,307	—

	Fair Value at June 30, 2019	Quoted Prices In Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Equity securities	$ 7,533	$ 7,533	$ —	$ —
Derivatives	38,244	—	38,244	—
Investments measured at net asset value	9,728			
Liabilities:				
Derivatives	4,512	—	4,512	—

The fair values of the equity securities are determined using the closing market price reported in the active market in which the fund is traded.

Derivatives consist of forward exchange, costless collar and cross-currency swap contracts, the fair values of which are calculated using market observable inputs including both spot and forward prices for the same underlying currencies. The calculation of the fair value of the cross-currency swap contracts also utilizes a present value cash flow model that has been adjusted to reflect the credit risk of either the Company or the counterparty.

Investments measured at net asset value primarily consist of investments in fixed income mutual funds, which are measured at fair value using the net asset value per share practical expedient. These investments have not been categorized in the fair value hierarchy. We have the ability to liquidate these investments after giving appropriate notice to the issuer.

The primary investment objective for all investments is the preservation of principal and liquidity while earning income.

There are no other financial assets or financial liabilities that are marked to market on a recurring basis.

OVERVIEW

The Company is a leading worldwide diversified manufacturer of motion and control technologies and systems, providing precision engineered solutions for a wide variety of mobile, industrial and aerospace markets.

Our order rates provide a near-term perspective of the Company's outlook particularly when viewed in the context of prior and future order rates. The Company publishes its order rates on a quarterly basis. The lead time between the time an order is received and revenue is realized generally ranges from one day to 12 weeks for mobile and industrial orders and from one day to 18 months for aerospace orders. We believe the leading economic indicators of these markets that have a strong correlation to the Company's future order rates are as follows:

- Purchasing Managers Index ("PMI") on manufacturing activity specific to regions around the world with respect to most mobile and industrial markets;
- Global aircraft miles flown and global revenue passenger miles for commercial aerospace markets and U.S. Department of Defense spending for military aerospace markets; and
- Housing starts with respect to the North American residential air conditioning market and certain mobile construction markets.

A PMI above 50 indicates that the manufacturing activity specific to a region of the world in the mobile and industrial markets is expanding. A PMI below 50 indicates the opposite. Recent PMI levels for some regions around the world were as follows:

	December 31, 2019	June 30, 2019	December 31, 2018
United States	52.4	50.6	54.1
Eurozone countries	46.3	47.6	51.4
China	51.5	49.4	49.7
Brazil	50.2	51.0	52.6

Global aircraft miles flown and available revenue passenger miles each increased by approximately four percent from their comparable fiscal 2019 levels. The Company anticipates that U.S. Department of Defense spending with regard to appropriations and operations and maintenance for the U.S. Government's fiscal year 2020 will be approximately three percent higher than the comparable fiscal 2019 level.

Housing starts in December 2019 were approximately 41 percent and 28 percent higher than housing starts in December 2018 and June 2019, respectively.

We believe many opportunities for profitable growth are available. The Company intends to focus primarily on business opportunities in the areas of energy, water, food, environment, defense, life sciences, infrastructure and transportation. We believe we can meet our strategic objectives by:

- Serving the customer and continuously enhancing its experience with the Company;
- Successfully executing The Win Strategy initiatives relating to engaged people, premier customer experience, profitable growth and financial performance;
- Maintaining a decentralized division and sales company structure;
- Fostering a safety first and entrepreneurial culture;
- Engineering innovative systems and products to provide superior customer value through improved service, efficiency and productivity;
- Delivering products, systems and services that have demonstrable savings to customers and are priced by the value they deliver;
- Acquiring strategic businesses;
- Organizing around targeted regions, technologies and markets;
- Driving efficiency by implementing lean enterprise principles; and
- Creating a culture of empowerment through our values, inclusion and diversity, accountability and teamwork.

Acquisitions will be considered from time to time to the extent there is a strong strategic fit, while at the same time maintaining the Company’s strong financial position. During October 2019, we completed the acquisition of LORD Corporation ("Lord") for approximately $3,453 million in cash, including the assumption of debt. We also completed the acquisition of EMFCO Holdings Incorporated, parent company of Exotic Metals Forming Company LLC ("Exotic") for approximately $1,706 million in cash during September 2019. Refer to Note 4 to the Consolidated Financial Statements for further discussion of the acquisitions.

We continue to assess our existing businesses and may initiate efforts to divest businesses that are not considered to be a good long-term strategic fit for the Company. Future business divestitures could have a negative effect on the Company’s results of operations.

The discussion below is structured to separately discuss the Consolidated Statement of Income, Business Segment Information, Consolidated Balance Sheet and Consolidated Statement of Cash Flows. As used in this Quarterly Report on Form 10-Q, unless the context otherwise requires, the terms "Company", "Parker", "we" or "us" refer to Parker-Hannifin Corporation and its subsidiaries.

CONSOLIDATED STATEMENT OF INCOME

	Three Months Ended December 31,		Six Months Ended December 31,	
(dollars in millions)	**2019**	**2018**	**2019**	**2018**
Net sales	$ 3,498	$ 3,472	$ 6,832	$ 6,951
Gross profit margin	23.3 %	25.0 %	24.4 %	25.2 %
Selling, general and administrative expenses	$ 491	$ 397	$ 890	$ 792
Selling, general and administrative expenses, as a percent of sales	14.0 %	11.4 %	13.0 %	11.4 %
Interest expense	$ 83	$ 48	$ 153	$ 92
Other (income), net	$ (14)	$ (6)	$ (61)	$ (20)
Effective tax rate	19.7 %	27.7 %	21.0 %	22.8 %
Net income	$ 205	$ 312	$ 544	$ 688
Net income, as a percent of sales	5.8 %	9.0 %	8.0 %	9.9 %

Net sales for the current-year quarter remained relatively flat compared to the prior-year quarter and decreased during the first six months of fiscal 2020 compared to the same prior-year period. Lower volume in the Diversified Industrial North American and International businesses, partially offset by higher volume in the Aerospace Systems Segment, was the primary driver for the change in net sales in both periods. The decrease in volume was partially offset by acquisitions made in the last 12 months, which contributed approximately $286 million and $307 million in net sales during the current-year quarter and first six months of fiscal 2020, respectively. The effect of currency rate changes decreased net sales by approximately $15 million in the current-year quarter, which was primarily comprised of a $17 million decrease in the Diversified Industrial International businesses and a $3 million increase in the Diversified Industrial North American businesses. During the first six months of fiscal 2020, the effect of currency rate changes decreased net sales by approximately $67 million ($65 million of which was attributable to the Diversified Industrial International businesses).

Gross profit margin (calculated as net sales minus cost of sales, divided by net sales) decreased in the current-year quarter and thefirst six months of fiscal 2020 primarily due to lower margins in both the Aerospace Systems Segment and Diversified Industrial Segment. Margins decreased in the current-year quarter and the first six months of fiscal 2020 primarily due to lower volume in the Diversified Industrial Segment and acquisition-related expenses of $49 million and $51 million, respectively. Cost of sales for the current-year quarter and prior-year quarter included business realignment and acquisition integration charges of $8 million and $4 million, respectively, and $12 million and $8 million for the first six months of fiscal 2020 and 2019, respectively.

Selling, general and administrative expenses increased during the current-year quarter and the first six months of fiscal 2020 primarily due to acquisition-related transaction costs of $100 million and $115 million in the current-year quarter and first six months of fiscal 2020, respectively. Intangible asset amortization expense related to the acquisitions of Lord and Exotic also increased selling, general and administrative in the current-year quarter and first six months of fiscal 2020. These expenses were partially offset by a net benefit associated with the Company's deferred compensation programs. Favorable market fluctuations related to investments associated with these programs more than offset unfavorable changes in the related liabilities. Selling, general and administrative expenses included business realignment and acquisition integration charges of $9 million and $4 million for the current-year and prior-year quarter, respectively, and $14 million and $8 million for the first six months of fiscal 2020 and 2019, respectively.

Interest expense for the current-year quarter and first six months of fiscal 2020 increased from the comparable prior-year periods primarily due to higher average debt outstanding.

Other (income), net included the following:

(dollars in millions)	Three Months Ended December 31,		Six Months Ended December 31,	
Expense (income)	2019	2018	2019	2018
Income related to equity method investments	$ (21)	$ (23)	$ (44)	$ (46)
Non-service components of retirement benefit cost	14	11	25	19
Loss (gain) on disposal of assets and divestitures	6	5	(4)	5
Interest income	(8)	(4)	(26)	(7)
Other items, net	(5)	5	(12)	9
	$ (14)	$ (6)	$ (61)	$ (20)

Effective tax rate for the current-year quarter and the first six months of fiscal 2020 was lower than the comparable prior-year periods primarily due to an overall increase in discrete tax benefits. The Company expects the fiscal 2020 effective tax rate will be approximately 22.5 percent.

BUSINESS SEGMENT INFORMATION

Diversified Industrial Segment

(dollars in millions)	Three Months Ended December 31, 2019	Three Months Ended December 31, 2018	Six Months Ended December 31, 2019	Six Months Ended December 31, 2018
Net sales				
North America	$ 1,616	$ 1,632	$ 3,240	$ 3,313
International	1,147	1,224	2,226	2,457
Operating income				
North America	211	258	487	533
International	$ 154	$ 189	$ 322	$ 395
Operating margin				
North America	13.1 %	15.8 %	15.0 %	16.1 %
International	13.4 %	15.5 %	14.5 %	16.1 %
Backlog	$ 2,321	$ 2,161	$ 2,321	$ 2,161

The Diversified Industrial Segment operations experienced the following percentage changes in net sales in the current-year period versus the comparable prior-year period:

	Period Ending December 31, 2019 Three Months	Period Ending December 31, 2019 Six Months
Diversified Industrial North America – as reported	(1.0)%	(2.2)%
Acquisitions	7.3 %	3.6 %
Currency	0.2 %	— %
Diversified Industrial North America – without acquisitions and currency	(8.5)%	(5.8)%
Diversified Industrial International – as reported	(6.3)%	(9.4)%
Acquisitions	4.5 %	2.3 %
Currency	(1.4)%	(2.7)%
Diversified Industrial International – without acquisitions and currency	(9.4)%	(9.0)%
Total Diversified Industrial Segment – as reported	(3.2)%	(5.3)%
Acquisitions	6.1 %	3.0 %
Currency	(0.4)%	(1.1)%
Total Diversified Industrial Segment – without acquisitions and currency	(8.9)%	(7.2)%

The above presentation reconciles the percentage changes in net sales of the Diversified Industrial Segment reported in accordance with U.S. GAAP to percentage changes in net sales adjusted to remove the effects of acquisitions made within the last 12 months as well as currency exchange rates (a non-GAAP measure). The effects of acquisitions and currency exchange rates are removed to allow investors and the Company to meaningfully evaluate the percentage changes in net sales on a comparable basis from period to period.

Sales in the current-year quarter and first six months of fiscal 2020 for the Diversified Industrial North American businesses decreased 1.0 percent and 2.2 percent, respectively. The effect of acquisitions increased sales by approximately $119 million in both the current-year quarter and first six months of fiscal 2020. The effect of currency exchange rates did not have a significant impact on sales in the current-year quarter and first six months of fiscal 2020. Excluding the effects of acquisitions and changes in the currency exchange rates, Diversified Industrial North American sales for the current-year quarter and first six months of fiscal 2020 decreased primarily due to lower demand from distributors and end users in the construction equipment, engines, farm and agriculture, cars and light truck, heavy-duty truck, general industrial machinery and refrigeration markets.

Sales in the current-year quarter and first six months of fiscal 2020 for the Diversified Industrial International operations decreased 6.3 percent and 9.4 percent from the prior-year quarter and first six months of fiscal 2019, respectively. The effect of acquisitions increased sales by approximately $56 million in both the current-year quarter and first six months of fiscal 2020.

The effect of currency exchange rates decreased sales by approximately $17 million and $65 million from the prior-year quarter and first six months of fiscal 2019, respectively. Excluding the effects of acquisitions and changes in currency exchange rates, Diversified Industrial International sales for the current-year quarter and first six months of fiscal 2020 decreased primarily due to lower demand from distributors and end users in the mobile and industrial markets. Europe and the Asia Pacific region accounted for approximately 55 percent and 40 percent, respectively, of the decrease in sales during the current-year quarter, while Latin America contributed the remainder of the change. During the first six months of fiscal 2020, the decrease in sales is primarily related to Europe and the Asia Pacific region, which accounted for approximately 65 percent and 30 percent of the decrease, respectively.

Within Europe, the decrease in sales for both the current-year quarter andfirst six months of fiscal 2020 was primarily due to lower demand from distributors and end users in the general industrial machinery, machine tool, construction equipment, heavy-duty truck, material handling and power generation markets.

Within the Asia Pacific region, the decrease in current-year quarter sales andfirst six months of fiscal 2020 was primarily due to lower demand from distributors and end users in the construction equipment, telecommunications and railroad equipment markets. This decrease was partially offset by an increase in end-user demand in the mining, marine, oil and gas and engine markets.

The decrease in sales in Latin America for the current-year quarter andfirst six months of fiscal 2020 was primarily due to lower demand from distributors and end users in the construction equipment market, partially offset by an increase in end-user demand in the oil and gas market.

Diversified Industrial Segment operating margins within the North American businesses decreased in the current-year quarter and first six months of fiscal 2020 primarily due to lower sales volume, acquisition-related expenses, and higher intangible asset amortization expense, partially offset by benefits from simplification, restructuring and acquisition integration activities, favorable product mix and prior-year pricing actions.

Diversified Industrial Segment operating margins within the International businesses decreased in the current-year quarter and first six months of fiscal 2020 primarily due to lower sales volume and acquisition-related expenses. Benefits from simplification, restructuring and acquisition integration activities, and prior-year pricing actions partially offset the decrease in margins.

The following business realignment and acquisition integration charges are included in Diversified Industrial North American and Diversified Industrial International operating income:

	Three Months Ended December 31,		Six Months Ended December 31,	
(dollars in millions)	**2019**	**2018**	**2019**	**2018**
Diversified Industrial North America	$ 8	$ 4	$ 13	$ 9
Diversified Industrial International	8	4	11	7

The business realignment charges primarily consist of severance costs related to actions taken under the Company's simplification initiative implemented by operating units throughout the world as well as plant closures. Current-year acquisition integration charges relate to the Lord acquisition. Prior-year acquisition integration charges relate to the fiscal 2017 acquisition of CLARCOR Inc. ("Clarcor"). Business realignment and acquisition integration charges within the Diversified Industrial International businesses were primarily incurred in Europe. We anticipate that cost savings realized from the workforce reduction measures taken during the first six months of fiscal 2020 will increase operating income by approximately one percent in fiscal 2020 and 2021 for both the Diversified Industrial North American and International businesses. We expect to continue to take the actions necessary to integrate acquisitions and structure appropriately the operations of the Diversified Industrial Segment. These actions are expected to result in approximately $40 million of additional business realignment and acquisition integration charges in the remainder of fiscal 2020.

Diversified Industrial Segment backlog as ofDecember 31, 2019 increased from the prior-year quarter primarily due to the addition of the Lord backlog in the current-year quarter, partially offset by shipments exceeding orders in both the North American and International businesses. Excluding the impact of Lord, the Diversified Industrial North American and International backlog accounted for approximately 75 percent and 25 percent of the change, respectively. Within the International businesses, Europe accounted for approximately 80 percent of the change, while the remaining 20 percent primarily related to the Asia Pacific region.

As of December 31, 2019, Diversified Industrial Segment backlog increased compared to the June 30, 2019 amount of $2,011 million primarily due to the addition of Lord backlog during the current-year quarter. Excluding the impact of Lord, backlog in Diversified Industrial Segment decreased as shipments exceeded orders in the North American businesses, partially offset by orders exceeding shipments in the International businesses. Within the International businesses, the Asia Pacific region and Europe accounted for approximately 60 percent and 30 percent of the increase, respectively, while the remainder related to Latin America.

Backlog consists of written firm orders from a customer to deliver products and, in the case of blanket purchase orders, only includes the portion of the order for which a schedule or release date has been agreed to with the customer. The dollar value of backlog is equal to the amount that is expected to be billed to the customer and reported as a sale.

Aerospace Systems Segment

	Three Months Ended December 31,		Six Months Ended December 31,	
(dollars in millions)	**2019**	**2018**	**2019**	**2018**
Net sales	$ 735	$ 616	$ 1,366	$ 1,181
Operating income	$ 121	$ 121	$ 244	$ 231
Operating margin	16.5 %	19.7 %	17.9 %	19.6 %
Backlog	$ 3,183	$ 2,048	$ 3,183	$ 2,048

The increase in net sales in the Aerospace Systems Segment for the current-year quarter andfirst six months of fiscal 2020 was primarily due to acquisitions, which contributed $111 million and $132 million in net sales during the current-year quarter and first six months of fiscal 2020, respectively. Higher volume in the commercial aftermarket and military original equipment manufacturer ("OEM") businesses, partially offset by lower volume in the military aftermarket and commercial OEM businesses, also contributed to the increase in net sales during the current-year quarter. In the first first six months of fiscal 2020, higher volume in the commercial and military aftermarket and military OEM businesses, partially offset by lower volume in the commercial OEM business, also increased net sales.

Operating margin decreased during the current-year quarter and first six months of fiscal 2020 compared to the prior-year periods primarily due to acquisition-related expenses and higher intangible amortization expense. Acquisition integration charges also decreased margins during the first six months of fiscal 2020. These expenses were partially offset by favorable OEM product mix and higher commercial aftermarket volume during the current-year quarter and higher aftermarket and OEM volume and favorable OEM product mix during the first six months of fiscal 2020.

The increase in backlog from both the prior-year quarter and June 30, 2019 amount of $2,209 million is primarily due to the addition of the Exotic backlog in the first six months of fiscal 2020. Orders exceeding shipments within the commercial and military OEM and commercial and military aftermarket also contributed to the increase in backlog from both the prior-year quarter and June 30, 2019 amounts. Backlog consists of written firm orders from a customer to deliver products and, in the case of blanket purchase orders, only includes the portion of the order for which a schedule or release date has been agreed to with the customer. The dollar value of backlog is equal to the amount that is expected to be billed to the customer and reported as a sale.

Corporate general and administrative expenses

Corporate general and administrative expenses were $36 million in the current-year quarter compared to $64 million in the prior-year quarter and were $85 million for the first six months of fiscal 2020 compared to $114 million for the first six months of fiscal 2019. As a percent of sales, corporate general and administrative expenses were 1.0 percent and 1.8 percent in the current-year and prior-year quarter, respectively. During the first six months of fiscal 2020 and 2019, corporate general and administrative expenses were 1.2 percent and 1.6 percent of sales, respectively. Corporate general and administrative expenses decreased in the current-year quarter and first six months of fiscal 2020 from the respective prior-year periods primarily due to a net benefit associated with the Company's deferred compensation programs. Favorable market fluctuations related to investments associated with these programs more than offset unfavorable changes in the related liabilities.

Other expense (in the Business Segment Information) included the following:

(dollars in millions)	**Three Months Ended December 31,**		**Six Months Ended December 31,**	
Expense (income)	**2019**	**2018**	**2019**	**2018**
Foreign currency transaction	$ 8	$ (1)	$ 7	$ 3
Stock-based compensation	8	8	37	37
Pensions	8	5	17	10
Acquisition expenses	100	—	115	—
Loss (gain) on disposal of assets and divestitures	6	5	(4)	5
Interest income	(8)	(4)	(26)	(7)
Other items, net	(9)	13	(18)	14
	$ 113	$ 26	$ 128	$ 62

CONSOLIDATED BALANCE SHEET

(dollars in millions)	**December 31, 2019**	**June 30, 2019**
Cash	$ 1,093	$ 3,371
Trade accounts receivable, net	1,973	2,131
Inventories	2,014	1,678
Intangible assets, net	4,036	1,783
Goodwill	7,955	5,454
Notes payable and long-term debt payable within one year	1,604	587
Long-term debt	8,141	6,521
Shareholders' equity	6,330	5,962
Working capital	$ 1,570	$ 4,521
Current ratio	1.4	2.4

Cash (comprised of cash and cash equivalents and marketable securities and other investments) includes $1,022 million and $975 million held by the Company's foreign subsidiaries at December 31, 2019 and June 30, 2019, respectively. The Company has determined it will no longer permanently reinvest certain foreign earnings. The distribution of these earnings could result in non-federal U.S. or foreign taxes. All other undistributed foreign earnings remain permanently reinvested.

Trade accounts receivable, net are receivables due from customers for sales of product. Days sales outstanding relating to trade accounts receivable was 52 days at December 31, 2019, and 53 days at June 30, 2019. We believe that our receivables are collectible and appropriate allowances for doubtful accounts have been recorded.

Inventories as of December 31, 2019 increased by $336 million (which includes an increase of $366 million from acquisitions and a decrease of $4 million from the effect of foreign currency translation). After consideration of the effects of the acquisitions and foreign currency translation, inventories decreased primarily due to a decrease in the Diversified Industrial Segment, partially offset by an increase in the Aerospace Systems Segment. Days supply of inventory on hand was 84 days at December 31, 2019, 69 days at June 30, 2019 and 77 days at December 31, 2018.

Intangible assets, net and Goodwill increased from prior year-end primarily due to the current-year acquisitions of Lord and Exotic. Refer to Note 4 to the Consolidated Financial Statements for further discussion.

Notes payable and long-term debt payable within one year increased from prior year-end primarily due to higher commercial paper notes outstanding of which a portion was used to finance the purchase of the Lord and Exotic acquisitions.

Long-term debt increased by $1,620 million primarily due to outstanding term loans related to the acquisition of Lord and Exotic. Refer to Note 15 to the Consolidated Financial Statements for further discussion.

Shareholders' equity activity during the first six months of fiscal 2020 included a decrease of approximately $100 million as a result of share repurchases and an increase of approximately $49 million as a result of foreign currency translation.

CONSOLIDATED STATEMENT OF CASH FLOWS

(dollars in millions)	Six Months Ended December 31, 2019	2018
Cash provided by (used in):		
Operating activities	$ 826	$ 541
Investing activities	(5,155)	(31)
Financing activities	2,054	(260)
Effect of exchange rates	4	(25)
Net (decrease) increase in cash and cash equivalents	$ (2,271)	$ 225

Cash flows provided by operating activities for the first six months of fiscal 2020 was higher than the first six months of fiscal 2019 primarily due to an increase in cash provided by working capital items. We continue to focus on managing our inventory and other working capital requirements.

Cash flows used in investing activities increased primarily due to acquisition activity in the first six months of fiscal 2020. It also includes $119 million and $94 million of capital expenditures in the first six months of fiscal 2020 and 2019, respectively.

Cash flows provided by financing activities for the first six months of fiscal 2020 includes net commercial paper borrowings of $932 million compared to $606 million in the first six months of fiscal 2019. Cash flows from financing activities in the first six months of fiscal 2020 also includes proceeds from the $925 million and $800 million term loans related to the acquisition of Exotic and Lord, respectively. Refer to Note 15 to the Consolidated Financial Statements for further discussion.

Our goal is to maintain a strong investment-grade credit profile. The rating agencies periodically update our credit ratings as events occur. At December 31, 2019, the long-term credit ratings assigned to the Company's senior debt securities by the credit rating agencies engaged by the Company were as follows:

Fitch Ratings	BBB+
Moody's Investor Services, Inc.	Baa1
Standard & Poor's	A-

During September 2019, the Company amended and extended its existing multi-currency credit agreement, increasing its capacity to $2,500 million. As of December 31, 2019, the Company had $982 million available for borrowing under the credit agreement. The credit agreement expires in September 2024; however, the Company has the right to request a one-year extension of the expiration date on an annual basis, which request may result in changes to the current terms and conditions of the credit agreement. Advances from the credit agreement can be used for general corporate purposes, including acquisitions, and for the refinancing of existing indebtedness. The credit agreement requires the payment of an annual facility fee, the amount of which is dependent upon the Company's credit ratings. Although a lowering of the Company's credit ratings would increase the cost of future debt, it would not limit the Company's ability to use the credit agreement nor would it accelerate the repayment of any outstanding borrowings.

As of December 31, 2019, the Company was authorized to sell up to $2,500 million of short-term commercial paper notes. As of December 31, 2019, $1,518 million of commercial paper notes were outstanding, and the largest amount of commercial paper notes outstanding during the current-year quarter was $1,770 million.

The Company's credit agreements and indentures governing certain debt securities contain various covenants, the violation of which would limit or preclude the use of the credit agreements for future borrowings, or might accelerate the maturity of the related outstanding borrowings covered by the indentures. Based on the Company's rating level at December 31, 2019, the most restrictive financial covenant provides that the ratio of debt to debt-shareholders' equity cannot exceed .65 to 1.0. At December 31, 2019, the Company's debt to debt-shareholders' equity ratio was .61 to 1.0. We are in compliance and expect to remain in compliance with all covenants set forth in the credit agreement and indentures.

Forward-Looking Statements

Forward-looking statements contained in this and other written and oral reports are made based on known events and circumstances at the time of release, and as such, are subject in the future to unforeseen uncertainties and risks. All statements regarding future performance, earnings projections, events or developments are forward-looking statements. It is possible that the future performance and earnings projections of the Company, including its individual segments, may differ materially from current expectations, depending on economic conditions within its mobile, industrial and aerospace markets, and the Company's ability to maintain and achieve anticipated benefits associated with announced realignment activities, strategic initiatives to improve operating margins, actions taken to combat the effects of the current economic environment, and growth, innovation and global diversification initiatives. Additionally, the actual impact of changes in tax laws in the United States and foreign jurisdictions and any judicial or regulatory interpretations thereof on future performance and earnings projections may impact the Company's tax calculations. A change in the economic conditions in individual markets may have a particularly volatile effect on segment performance.

Among other factors which may affect future performance are:

- global economic and political factors, including manufacturing activity, air travel trends, currency exchange rates and monetary policy, trade policy and tariffs, difficulties entering new markets and general economic conditions such as inflation, deflation, interest rates and credit availability, as well as uncertainties associated with the timing and conditions surrounding the return to service of the Boeing 737 MAX and the recent outbreak of coronavirus in China;
- our ability to identify acceptable strategic acquisition targets; uncertainties surrounding timing, successful completion or integration of acquisitions and similar transactions, including the integrations of Clarcor, Lord and EMFCO Holdings Incorporated, parent company of Exotic; and our ability to successfully divest businesses planned for divestiture and realize the anticipated benefits of such divestitures;
- our ability to effectively manage expanded operations from the acquisitions of Clarcor, Lord and Exotic;
- the determination to undertake business realignment activities and the expected costs thereof and, if undertaken, the ability to complete such activities and realize the anticipated cost savings from such activities;
- increased cybersecurity threats and sophisticated computer crime;
- business relationships with and purchases by or from major customers, suppliers or distributors, including delays or cancellations in shipments;
- the development of new products and technologies requiring substantial investment;
- availability, limitations or cost increases of raw materials, component products and/or commodities that cannot be recovered in product pricing;
- disputes regarding contract terms or significant changes in financial condition, changes in contract cost and revenue estimates for new development programs, and changes in product mix;
- uncertainties surrounding the ultimate resolution of outstanding legal and regulatory proceedings, including the outcome of any appeals;
- additional liabilities relating to changes in tax rates or exposure to additional income tax liabilities;
- potential product liability risks;
- our ability to enter into, own, renew and maintain intellectual property and know-how;
- our leverage and future debt service obligations;
- potential impairment of goodwill;
- compliance costs associated with environmental laws and climate change regulations;
- our ability to manage costs related to insurance and employee retirement and health care benefits;
- compliance with federal rules, regulations, audits and investigations associated with being a provider of products to the United States government; and
- our ability to implement successfully the Company's capital allocation initiatives, including timing, price and execution of share repurchases.

The Company makes these statements as of the date of this disclosure and undertakes no obligation to update them unless otherwise required by law.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The Company manages foreign currency transaction and translation risk by utilizing derivative and non-derivative financial instruments, including forward exchange contracts, costless collar contracts, cross-currency swap contracts and certain foreign denominated debt designated as net investment hedges. The derivative financial instrument contracts are with major investment grade financial institutions and we do not anticipate any material non-performance by any of the counterparties. We do not hold or issue derivative financial instruments for trading purposes.

Derivative financial instruments are recognized on the Consolidated Balance Sheet as either assets or liabilities and are measured at fair value. Further information on the fair value of these contracts is provided in Note 17 to the Consolidated Financial Statements. Gains or losses on derivatives that are not hedges are adjusted to fair value through the Consolidated Statement of Income. Gains or losses on derivatives that are hedges are adjusted to fair value through accumulated other comprehensive (loss) in the Consolidated Balance Sheet until the hedged item is recognized in earnings. The translation of the foreign denominated debt that has been designated as a net investment hedge is recorded in accumulated other comprehensive (loss) and remains there until the underlying net investment is sold or substantially liquidated.

The Company's debt portfolio contains variable rate debt, inherently exposing the Company to interest rate risk. Our objective is to maintain a 60/40 mix between fixed rate and variable rate debt thereby limiting our exposure to changes in near-term interest rates.

ITEM 4. CONTROLS AND PROCEDURES

The Company carried out an evaluation, under the supervision and with the participation of the Company's management, including the Company's principal executive officer and principal financial officer, of the effectiveness of the Company's disclosure controls and procedures as of December 31, 2019. Based on this evaluation, the Company's principal executive officer and principal financial officer concluded that, as of December 31, 2019, the Company's disclosure controls and procedures were effective.

The Company acquired Exotic during September 2019 and Lord during October 2019. We are currently integrating the processes and internal controls of Exotic and Lord. Except for the Exotic and Lord acquisitions, there was no change in the Company's internal control over financial reporting during the quarter ended December 31, 2019 that materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

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

(a) ***Unregistered Sales of Equity Securities.*** Not applicable.

(b) ***Use of Proceeds.*** Not applicable.

(c) ***Issuer Purchases of Equity Securities.***

Period	(a) Total Number of Shares Purchased	(b) Average Price Paid Per Share	(c) Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (1)	(d) Maximum Number (or Approximate Dollar Value) of Shares that May Yet Be Purchased Under the Plans or Programs (1)
October 1, 2019 through October 31, 2019	100,400	$ 179.41	100,400	10,451,326
November 1, 2019 through November 30, 2019	79,400	$ 196.18	79,400	10,371,926
December 1, 2019 through December 31, 2019	80,487	$ 203.83	80,487	10,291,439
Total:	260,287		260,287	

(1) On October 22, 2014, the Company publicly announced that the Board of Directors increased the overall maximum number of shares authorized for repurchase under the Company's share repurchase program, first announced on August 16, 1990, so that, beginning on October 22, 2014, the maximum aggregate number of shares authorized for repurchase was 35 million shares. There is no limitation on the amount of shares that can be repurchased in a fiscal year. There is no expiration date for this program.

ITEM 6. Exhibits.

The following documents are furnished as exhibits and are numbered pursuant to Item 601 of Regulation S-K:

Exhibit No.	Description of Exhibit
10.1	Amendment Two to the Parker-Hannifin Corporation Amended and Restated Executive Deferral Plan (effective September 2, 2015), dated and effective as of October 14, 2019.*
10.2	Parker-Hannifin Corporation Amended and Restated 2016 Omnibus Stock Incentive Plan, incorporated by reference to Exhibit 10.1 to Registrant's Report on Form 8-K filed with the SEC on October 28, 2019. (Commission File No. 1-4982).
31(a)	Certification of the Principal Executive Officer Pursuant to 17 CFR 240.13a-14(a), as Adopted Pursuant to §302 of the Sarbanes-Oxley Act of 2002.*
31(b)	Certification of the Principal Financial Officer Pursuant to 17 CFR 240.13a-14(a), as Adopted Pursuant to §302 of the Sarbanes-Oxley Act of 2002.*
32	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to §906 of the Sarbanes-Oxley Act of 2002*
101.INS	Inline XBRL Instance 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 with applicable taxonomy extension information contained in Exhibits 101).

* Submitted electronically herewith.

Attached as Exhibit 101 to this report are the following formatted in Inline XBRL (Extensible Business Reporting Language): (i) Consolidated Statement of Income for the three months ended December 31, 2019 and 2018, (ii) Consolidated Statement of Income for the six months ended December 31, 2019 and 2018, (iii) Consolidated Statement of Comprehensive Income for the three months ended December 31, 2019 and 2018, (iv) Consolidated Statement of Comprehensive Income for the six months ended December 31, 2019 and 2018, (v) Consolidated Balance Sheet at December 31, 2019 and June 30, 2019, (vi) Consolidated Statement of Cash Flows for the six months ended December 31, 2019 and 2018, and (vii) Notes to Consolidated Financial Statements for the six months ended December 31, 2019.

SIGNATURE

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.

PARKER-HANNIFIN CORPORATION
(Registrant)

/s/ Catherine A. Suever

Catherine A. Suever
Executive Vice President - Finance & Administration and
Chief Financial Officer

Date: February 5, 2020

Exhibit 10.1

AMENDMENT TWO TO THE
PARKER-HANNIFIN CORPORATION
AMENDED AND RESTATED
EXECUTIVE DEFERRAL PLAN

(as amended and restated effective September 2, 2015)[1]

WHEREAS, Parker-Hannifin Corporation (the "Company") sponsors the Parker-Hannifin Amended and Restated Executive Deferral Plan (the "Plan"), as most recently amended and restated effective September 2, 2015; and

WHEREAS, the Company has previously amended the Plan to impose restrictions on hardship distributions with respect to retention awards for certain former Clarcor, Inc. employees, effective March 1 , 2017; and

WHEREAS, the Company adopted a cash bonus plan known as the Annual Cash Incentive Plan (the "ACIP"), effective July 1, 2019; and

WHEREAS, the Human Resource and Compensation Committee of the Company's Board of Directors intends to allow bonuses payable under the ACIP to be deferred under the Executive Deferral Plan and to facilitate the deferral of such bonuses earned during the Company's fiscal year beginning July 1, 2019; and

WHEREAS, pursuant to Section 15.3 of the Plan, the Company has reserved the right to amend the Plan; and

WHEREAS, the Company now desires to amend the Plan to allow for deferrals of bonuses payable under the ACIP, including such bonuses earned during the Company's fiscal year beginning July 1, 2019, and to correct a scrivener's error whereby "Eligible Executives" were referred to as "Eligible Employees."

1 Note: Amendment One incorrectly identified the plan' s most recent amendment and restatement date as September 2, 2016.

Exhibit 10.1

NOW, THEREFORE, the Plan is hereby amended effective October 14, 2019, as follows:

AMENDMENT

1. The Preamble of the Plan is hereby amended by the replacement of the term "Eligible Employees" with the term "Eligible Executives" wherever it appears.

2. Section 1.8 of the Plan is hereby amended by the addition of a new subsection (c) to read as follows:

"(c) For Plan Years beginning on and after January 1, 2019, amounts payable to the Participant by the Company in August of each such Plan Year under the Company's Annual Cash Incentive Plan (ACIP) (except to the extent determined by the Compensation Committee to be extraordinary)."

3. Section 3.1(a) of the Plan is hereby amended by the addition of a new sentence at the end of such subsection to read as follows:

“Notwithstanding the foregoing, on or before December 31, 2019, a Participant may elect to defer a percentage (up to a maximum specified dollar amount) of Bonuses earned under the ACIP by such Participant during the Company's fiscal year beginning July 1, 2019 and paid by the Company in August 2020.”

* * *

EXECUTED at Cleveland, Ohio, on the 14 day of October, 2019.

PARKER-HANNIFIN CORPORATION

By: /s/ Joseph R. Leonti
Title: VP, General Counsel and Secretary

By: /s/ Mark J. Hart
Title: EVP, HR & External Affairs

Exhibit 31(a)

CERTIFICATIONS

I, Thomas L. Williams, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Parker-Hannifin Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the 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: February 5, 2020

/s/ Thomas L. Williams

Thomas L. Williams
Chief Executive Officer

Exhibit 31(b)

CERTIFICATIONS

I, Catherine A. Suever, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Parker-Hannifin Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the 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: February 5, 2020

/s/ Catherine A. Suever

Catherine A. Suever
Executive Vice President - Finance &
Administration and Chief Financial Officer

Exhibit 32

Certification Pursuant to
18 U.S.C. Section 1350,
As Adopted Pursuant to
§ 906 of the Sarbanes-Oxley Act of 2002

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 filing of the Quarterly Report on Form 10-Q of Parker-Hannifin Corporation (the “Company”) for the quarterly period ended December 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), each of the undersigned officers of the Company certifies, that, to 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 as of the dates and for the periods expressed in the Report.

Dated: February 5, 2020

/s/ Thomas L. Williams
Name: Thomas L. Williams
Title: Chief Executive Officer

/s/ Catherine A. Suever
Name: Catherine A. Suever
Title: Executive Vice President - Finance & Administration and Chief Financial Officer