UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM	10-O
I OILIII	+0 Y

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

For the Quarterly Period Ended September 30, 2018

☐ 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 001-03970



(Exact name of registrant as specified in its charter)

Delaware 23-1483991

(State or other jurisdiction of incorporation or organization)

(I.R.S. employer identification number)

350 Poplar Church Road, Camp Hill, Pennsylvania

17011

(Address of principal executive offices)

(Zip Code)

Registrant's telephone number, including area code 717-763-7064

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 o

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

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 ⊠

Non-accelerated filer o (Do not check if a smaller reporting company)

Accelerated filer o

Smaller reporting company o

Emerging growth company o

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. o

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). YES o NO ⊠

Indicate the number of shares outstanding of each of the registrant's classes of common stock, as of the latest practicable date.

outstanding at October 26, 2018

Common stock, par value \$1.25 per share

80,313,239

HARSCO CORPORATION FORM 10-Q INDEX

Page PART I — FINANCIAL INFORMATION Item 1. **Financial Statements** 3 Condensed Consolidated Balance Sheets (Unaudited) 3 Condensed Consolidated Statements of Operations (Unaudited) 4 Condensed Consolidated Statements of Comprehensive Income (Unaudited) 5 Condensed Consolidated Statements of Cash Flows (Unaudited) 6 Condensed Consolidated Statements of Equity (Unaudited) 7 Notes to Condensed Consolidated Financial Statements (Unaudited) 8 Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations <u>34</u> Item 3. Quantitative and Qualitative Disclosures About Market Risk 42 Item 4. **Controls and Procedures** <u>42</u> PART II — OTHER INFORMATION **Legal Proceedings** Item 1. <u>43</u> **Risk Factors** Item 1A. <u>43</u> Item 2. Unregistered Sales of Equity Securities and Use of Proceeds 43 **Exhibits** Item 6. <u>43</u> **SIGNATURES** <u>44</u>

PART I — FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

HARSCO CORPORATION CONDENSED CONSOLIDATED BALANCE SHEETS (Unaudited)

(In thousands)	September 3 2018	September 30 2018		December 31 2017	
ASSETS					
Current assets:					
Cash and cash equivalents	\$ 61	,736	\$	62,098	
Restricted cash	2	,815		4,111	
Trade accounts receivable, net	304	,165		288,034	
Other receivables	55	,156		20,224	
Inventories	137	,768		178,293	
Current portion of contract assets	27	,870		_	
Other current assets	42	,068		39,332	
Total current assets	631	,578	-	592,092	
Property, plant and equipment, net	460	,498		479,747	
Goodwill		,351		401,758	
Intangible assets, net		,598		38,251	
Contract assets		,566			
Deferred income tax assets		,824		51,574	
Other assets		,002		15,263	
Total assets	\$ 1,660		\$	1,578,685	
LIABILITIES	 		_		
Current liabilities:					
Short-term borrowings	\$ 7	,655	\$	8,621	
Current maturities of long-term debt		,149	Ψ	11,208	
Accounts payable		,216		126,249	
Accrued compensation		,617		60,451	
Income taxes payable		,432		5,106	
Insurance liabilities		,436		11,167	
Current portion of advances on contracts		,682		117,958	
Other current liabilities		,887		133,368	
Total current liabilities		,074		474,128	
Long-term debt		,440		566,794	
Insurance liabilities		,761		22,385	
Retirement plan liabilities		,156		259,367	
Advances on contracts		,322		239,307	
Other liabilities		,273		40,846	
Total liabilities			-		
COMMITMENTS AND CONTINGENCIES	1,356	,020		1,363,520	
HARSCO CORPORATION STOCKHOLDERS' EQUITY					
Preferred stock					
Common stock	1.41	,837		141,110	
Additional paid-in capital		,930			
Accumulated other comprehensive loss				180,201	
		,291)		(546,582)	
Retained earnings Treasury stock	1,252			1,157,801	
		,765)		(762,079)	
Total Harsco Corporation stockholders' equity		,551		170,451	
Noncontrolling interests		,840		44,714	
Total equity		,391		215,165	
Total liabilities and equity	\$ 1,660	,417	\$	1,578,685	

HARSCO CORPORATION CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (Unaudited)

		Three Mont Septeml	ded			nths End mber 30	ths Ended nber 30		
(In thousands, except per share amounts)		2018		2017	2018		2017		
Revenues from continuing operations:									
Service revenues	\$	250,890	\$	246,144	\$	763,815	\$	738,059	
Product revenues		194,585		138,509		521,670		414,033	
Total revenues		445,475		384,653		1,285,485		1,152,092	
Costs and expenses from continuing operations:									
Cost of services sold		194,459		194,483		589,738		577,200	
Cost of products sold		132,262		95,849		367,218		295,367	
Selling, general and administrative expenses		59,297		59,993		175,307		168,315	
Research and development expenses		1,720		936		4,377		3,096	
Other (income) expenses, net		628		(1,237)		1,570		1,729	
Total costs and expenses		388,366		350,024		1,138,210		1,045,707	
Operating income from continuing operations		57,109		34,629		147,275		106,385	
nterest income		574		610		1,649		1,615	
interest expense		(9,665)		(12,122)		(29,241)		(36,180)	
Defined benefit pension income (expense)		928		(680)		2,671		(2,054)	
Loss on early extinguishment of debt		(125)				(1,159)		_	
Income from continuing operations before income taxes		48,821		22,437		121,195		69,766	
Income tax expense		(13,833)		(8,270)		(24,043)		(25,757)	
Income from continuing operations		34,988		14,167		97,152		44,009	
Discontinued operations:									
Loss on disposal of discontinued business		(433)		(578)		(274)		(538)	
Income tax benefit related to discontinued business		96		207		61		193	
Loss from discontinued operations		(337)		(371)		(213)		(345)	
Net income		34,651		13,796		96,939		43,664	
Less: Net income attributable to noncontrolling interests		(1,804)		(498)		(5,795)		(2,438)	
Net income attributable to Harsco Corporation	\$	32,847	\$	13,298	\$	91,144	\$	41,226	
Amounts attributable to Harsco Corporation common stockholders:									
Income from continuing operations, net of tax	\$	33,184	\$	13,669	\$	91,357	\$	41,571	
Loss from discontinued operations, net of tax		(337)		(371)		(213)		(345)	
Net income attributable to Harsco Corporation common stockholders	\$	32,847	\$	13,298	\$	91,144	\$	41,226	
Weighted-average shares of common stock outstanding	_	80,950		80,637	_	80,821	_	80,519	
Basic earnings per common share attributable to Harsco Corporation com	ımon st			00,007		00,021		00,010	
Continuing operations	\$	0.41	\$	0.17	\$	1.13	\$	0.52	
Discontinued operations		_		_		_		_	
Basic earnings per share attributable to Harsco Corporation									
common stockholders	\$	0.41	\$	0.16 _(a)	\$	1.13	\$	0.51	
Diluted weighted-average shares of common stock outstanding		83,879		83,136		83,690		82,753	
Diluted earnings per common share attributable to Harsco Corporation co	mmon	stockholders:							
Continuing operations	\$	0.40	\$	0.16	\$	1.09	\$	0.50	
Discontinued operations		_		_		_		_	
Diluted earnings per share attributable to Harsco Corporation	_								
common stockholders	\$	0.39 _(a)	\$	0.16	\$	1.09	\$	0.50	

HARSCO CORPORATION CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (Unaudited)

Three Months Ended September 30

	September 30					
(In thousands)		2018		2017		
Net income	\$	34,651	\$	13,796		
Other comprehensive income (loss):						
Foreign currency translation adjustments, net of deferred income taxes of \$(91) and \$1,747 in 2018 and 2017, respectively		(3,953)		16,005		
Net gain on cash flow hedging instruments, net of deferred income taxes of \$(306) and \$21 in 2018 and 2017, respectively		502		2,199		
Pension liability adjustments, net of deferred income taxes of \$(289) and \$(523) in 2018 and 2017, respectively		4,668		(7,324)		
Unrealized gain on marketable securities, net of deferred income taxes of \$(3) and \$(3) in 2018 and 2017, respectively		8		5		
Total other comprehensive income		1,225		10,885		
Total comprehensive income		35,876		24,681		
Less: Comprehensive income attributable to noncontrolling interests		(432)		(1,200)		
Comprehensive income attributable to Harsco Corporation	\$	35,444	\$	23,481		
			nber 30			
(In thousands)		2018		2017		
Net income	\$	96,939	\$	43,664		
Other comprehensive income (loss):						
Foreign currency translation adjustments, net of deferred income taxes of \$(1,043) and \$3,598 in 2018 and 2017, respectively		(40,157)		42,391		
Net gain on cash flow hedging instruments, net of deferred income taxes of \$(2,191) and \$888 in 2018 and 2017, respectively		6,081		1,471		
Pension liability adjustments, net of deferred income taxes of \$(902) and \$(1,567) in 2018 and 2017, respectively		24,294		(16,467)		
Unrealized gain (loss) on marketable securities, net of deferred income taxes of \$5 and \$(6) in 2018 and 2017, respectively		(19)		11		
Total other comprehensive income (loss)		(9,801)		27,406		
Total comprehensive income		87,138		71,070		
Less: Comprehensive income attributable to noncontrolling interests		(3,183)		(4,674)		
Comprehensive income attributable to Harsco Corporation	\$	83,955	\$	66,396		
			_			

HARSCO CORPORATION CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited)

Nine Months Ended September 30

		Septeml	ember 30		
(In thousands)	2018		2017		
Cash flows from operating activities:					
Net income	\$ 96,	939	\$ 43,664	4	
Adjustments to reconcile net income to net cash provided by operating activities:					
Depreciation	92,	324	91,519	9	
Amortization	7,	620	5,989	9	
Deferred income tax expense	1,	996	2,018	8	
Dividends from unconsolidated entities		88	93	3	
Other, net	2,	485	2,567	7	
Changes in assets and liabilities:					
Accounts receivable	(29,	022)	(26,633	3)	
Inventories	(18,	852)	(30,112	2)	
Contract assets	(10,	427)	_	_	
Accounts payable	17,	547	9,045	5	
Accrued compensation	(10,	438)	979	9	
Advances on contracts	(12,	339)	(6,534	4)	
Retirement plan liabilities, net	(28,	743)	(17,890	0)	
Other assets and liabilities	(14,	164)	8,200	0	
Net cash provided by operating activities	95,	014	82,905	5	
Cash flows from investing activities:					
Purchases of property, plant and equipment	(91,	302)	(64,131	1)	
Purchases of businesses, net of cash acquired	(56,	389)	_		
Proceeds from sales of assets	9,	096	10,746	6	
Net proceeds from settlement of foreign currency forward exchange contracts	3,	244	4,450	0	
Net cash used by investing activities	(135,	351)	(48,935	5)	
Cash flows from financing activities:				Ĺ	
Short-term borrowings, net	(543)	1,915	5	
Current maturities and long-term debt:	·				
Additions	128,	158	26,000	0	
Reductions	(75,	104)	(65,245	5)	
Dividends paid to noncontrolling interests	(5,	446)	(1,783	3)	
Sale (purchase) of noncontrolling interests		477	(3,412		
Stock-based compensation - Employee taxes paid	(3,	685)	(1,607	7)	
Deferred financing costs		537)	(42		
Other financing activities, net		_	(370		
Net cash provided (used) by financing activities	43,	320	(44,544	_	
Effect of exchange rate changes on cash and cash equivalents, including restricted cash		641)	4,058		
Net decrease in cash and cash equivalents, including restricted cash		658)	(6,516		
Cash and cash equivalents, including restricted cash, at beginning of period	·	209	71,879		
Cash and cash equivalents, including restricted cash, at end of period			\$ 65,363		
1 , ,	* 01,		- 03,000		

HARSCO CORPORATION CONDENSED CONSOLIDATED STATEMENTS OF EQUITY (Unaudited)

Common Stock

(In thousands, except share amounts)		Issued		Treasury	Additional Paid- in Capital		Retained Earnings		Comprehensive Loss	Noncontrolling Interests	Total
Balances, January 1, 2017	\$	140,625	\$	(760,391)	\$ 172,101	\$	1,150,688		\$ (606,722)	\$ 41,262	\$ 137,563
Adoption of new accounting standards (See Note 2)					1,106		(709)				397
Net income							41,226			2,438	43,664
Cash dividends declared:											
Noncontrolling interests										(1,783)	(1,783)
Total other comprehensive income, net of deferred income taxes of \$2,913									25,171	2,235	27,406
Purchase of subsidiary shares from noncontrolling interest					(2,242)					(1,170)	(3,412)
Stock appreciation rights exercised, net 8,965 shares		16		(63)	(16)						(63)
Vesting of restricted stock units and other stock grants, net 260,497 shares		452		(1,544)	(452)						(1,544)
Amortization of unearned portion of stock- based compensation, net of forfeitures					7,790					 	7,790
Balances, September 30, 2017	\$	141,093	\$	(761,998)	\$ 178,287	\$	1,191,205		\$ (581,551)	\$ 42,982	\$ 210,018
	Hars				 Compandion Stad	rhala	love? Equity				
		Comm	on S		Corporation Stock	KIIOIC			Accumulated Other		
(In thousands)	_	Comm	on S		Additional Paid- in Capital	KHOIC	Retained Earnings		Accumulated Other Comprehensive Loss	Noncontrolling Interests	Total
(In thousands) Balances, January 1, 2018	\$		on S	Stock	Additional Paid- in Capital	<u></u>	Retained		Comprehensive	\$	\$ Total 215,165
	\$	Issued	_	Stock Treasury	Additional Paid- in Capital		Retained Earnings		Comprehensive Loss	\$ Interests	\$
Balances, January 1, 2018 Adoption of new accounting standards (See	\$	Issued	_	Stock Treasury	Additional Paid- in Capital		Retained Earnings 1,157,801	_	Comprehensive Loss \$ (546,582)	\$ Interests	\$ 215,165
Balances, January 1, 2018 Adoption of new accounting standards (See Note 2)	\$	Issued	_	Stock Treasury	Additional Paid- in Capital		Retained Earnings 1,157,801 3,895		Comprehensive Loss \$ (546,582)	\$ Interests 44,714	\$ 215,165 2,375
Balances, January 1, 2018 Adoption of new accounting standards (See Note 2) Net income	\$	Issued	_	Stock Treasury	Additional Paid- in Capital		Retained Earnings 1,157,801 3,895		Comprehensive Loss \$ (546,582)	\$ Interests 44,714	\$ 215,165 2,375
Balances, January 1, 2018 Adoption of new accounting standards (See Note 2) Net income Cash dividends declared:	\$	Issued	_	Stock Treasury	Additional Paid- in Capital		Retained Earnings 1,157,801 3,895		Comprehensive Loss \$ (546,582)	\$ 44,714 5,795	\$ 215,165 2,375 96,939
Balances, January 1, 2018 Adoption of new accounting standards (See Note 2) Net income Cash dividends declared: Noncontrolling interests Sale of subsidiary shares to noncontrolling	\$	Issued	_	Stock Treasury	Additional Paid- in Capital		Retained Earnings 1,157,801 3,895		Comprehensive Loss \$ (546,582)	\$ 1nterests 44,714 5,795 (5,534)	\$ 215,165 2,375 96,939 (5,534)
Balances, January 1, 2018 Adoption of new accounting standards (See Note 2) Net income Cash dividends declared: Noncontrolling interests Sale of subsidiary shares to noncontrolling interest Total other comprehensive loss, net of	\$	Issued	_	Stock Treasury	Additional Paid- in Capital		Retained Earnings 1,157,801 3,895		Comprehensive Loss \$ (546,582) (1,520)	\$ 1nterests 44,714 5,795 (5,534) 477	\$ 215,165 2,375 96,939 (5,534) 477
Balances, January 1, 2018 Adoption of new accounting standards (See Note 2) Net income Cash dividends declared: Noncontrolling interests Sale of subsidiary shares to noncontrolling interest Total other comprehensive loss, net of deferred income taxes of \$(4,131) Stock appreciation rights exercised, net	\$	141,110	_	Treasury (762,079)	Additional Paidin Capital 5 180,201		Retained Earnings 1,157,801 3,895		Comprehensive Loss \$ (546,582) (1,520)	\$ 1nterests 44,714 5,795 (5,534) 477	\$ 215,165 2,375 96,939 (5,534) 477 (9,801)
Balances, January 1, 2018 Adoption of new accounting standards (See Note 2) Net income Cash dividends declared: Noncontrolling interests Sale of subsidiary shares to noncontrolling interest Total other comprehensive loss, net of deferred income taxes of \$(4,131) Stock appreciation rights exercised, net 27,669 shares Vesting of restricted stock units and other	\$	Issued 141,110	_	(273)	Additional Paidin Capital 5 180,201		Retained Earnings 1,157,801 3,895		Comprehensive Loss \$ (546,582) (1,520)	\$ 1nterests 44,714 5,795 (5,534) 477	\$ 215,165 2,375 96,939 (5,534) 477 (9,801) (273)

Harsco Corporation Stockholders' Equity

Accumulated Other

HARSCO CORPORATION NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Unaudited)

1. Basis of Presentation

Harsco Corporation (the "Company") has prepared these unaudited condensed consolidated financial statements in accordance with accounting principles generally accepted in the U.S. ("U.S. GAAP") for interim financial information and with the instructions to Form 10-Q and Rule 10-01 of Regulation S-X of the Securities and Exchange Commission (the "SEC"). Accordingly, the unaudited condensed consolidated financial statements do not include all information and disclosure required by U.S. GAAP for annual financial statements. The December 31, 2017 Condensed Consolidated Balance Sheet information contained in this Quarterly Report on Form 10-Q was derived from the 2017 audited consolidated financial statements. The unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements, including the notes thereto, included in the Company's Annual Report on Form 10-K for the year ended December 31, 2017. In the opinion of management, all adjustments (all of which are of a normal recurring nature) that are necessary for a fair statement are reflected in the unaudited condensed consolidated financial statements.

Reclassifications

Certain reclassifications have been made to prior year amounts to conform with current year classifications.

2. Recently Adopted and Recently Issued Accounting Standards

The following accounting standards have been adopted in 2018:

On January 1, 2018, the Company adopted changes, with subsequent amendments, issued by the Financial Accounting Standards Board ("FASB") related to the recognition of revenue from contracts with customers. The changes clarify the principles for recognizing revenue and develop a common revenue standard. The core principle of the changes is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The adoption of these changes resulted in the following modifications to the Company's revenue recognition process:

- Harsco Industrial Segment The timing of revenue recognition for air-cooled heat exchanger sales, which the Company historically recognized upon
 the completion of the efforts associated with these arrangements, is now recognized over time with the impact of increasing revenue in earlier
 periods. This change also impacted the Company's Condensed Consolidated Balance Sheets by decreasing both Inventories and Advances on
 contracts; and creating a new caption and establishing a balance related to Contract assets.
- Harsco Rail Segment The timing of revenue recognition for certain railway track maintenance equipment sales, which the Company historically recognized upon the completion of the efforts associated with these arrangements, is now recognized over time with the impact of increasing revenue in earlier periods. This change also impacted the Company's Condensed Consolidated Balance Sheets by decreasing both Inventories and Advances on contracts; and creating a new caption and establishing a balance related to Contract assets. In addition, certain advance payments received from customers, which provide a significant benefit of financing and are expected to be outstanding longer than twelve months, are treated as significant financing components to the related transactions and the Company will increase the overall transaction price with a corresponding increase in interest expense.

Additionally, the Company's disclosure related to revenue recognition has been expanded in accordance with the FASB changes. Please refer to Note 14, Revenue Recognition for additional information.

The Company chose to implement the impact of the FASB changes utilizing the modified retrospective transition method, using the following practical expedients:

- · The Company has elected to apply the changes only to revenue arrangements that were not completed as of January 1, 2018; and
- The Company has elected to reflect the aggregate effect of all contract modifications that occurred prior to the beginning of the earliest reported period when (i) identifying the satisfied and unsatisfied performance obligations;
 (ii) determining the transaction price; and (iii) allocating the transaction price to the satisfied and unsatisfied performance obligations.

Comparative information has not been restated and continues to be reported under U.S. GAAP in effect for those periods.

The cumulative effect of the changes made to the Condensed Consolidated Balance Sheet at January 1, 2018 was as follows:

(In thousands)	Balance at December 31, 201	7 Impact of Adoption	Balance at January 1, 2018
ASSETS			
Current assets:			
Trade accounts receivable, net	\$ 288,03	4 \$ 532	\$ 288,566
Inventories	178,29	(59,793)	118,500
Current portion of contract assets	-	– 18,248	18,248
Other current assets	39,33	2 179	39,511
Total current assets	592,09	2 (40,834)	551,258
Contract assets	_	– 3,566	3,566
Other assets	15,26	1,337	16,600
Total assets	1,578,68	5 (35,931)	1,542,754
LIABILITIES			
Current liabilities:			
Current portion of advances on contracts	117,95	8 (78,507)	39,451
Other current liabilities	133,36	13,995	147,363
Total current liabilities	474,12	8 (64,512)	409,616
Advances on contracts	_	_ 24,564	24,564
Other liabilities	40,84	6 1,580	42,426
Total liabilities	1,363,52	0 (38,368)	1,325,152
HARSCO CORPORATION STOCKHOLDERS' EQUITY			
Accumulated other comprehensive loss	(546,58	(1,520)	(548,102)
Retained earnings	1,157,80	3,957	1,161,758
Total Harsco Corporation stockholders' equity	170,45	2,437	172,888
Total equity	215,16	5 2,437	217,602
Total liabilities and equity	1,578,68	5 (35,931)	1,542,754

The impact of modifying the Company's Condensed Consolidated Balance Sheet at September 30, 2018 is as follows:

		September 30, 2018						
(In thousands)		As Reported		Impact of Adoption		Reported - Less act of Adoption		
ASSETS								
Current assets:								
Trade accounts receivable, net	\$	304,165	\$	(535)	\$	303,630		
Inventories		137,768		91,285		229,053		
Current portion of contract assets		27,870		(27,870)		_		
Other current assets		42,068		(157)		41,911		
Total current assets		631,578		62,723		694,301		
Contract assets		3,566		(3,566)		_		
Deferred income tax assets		39,824		1,874		41,698		
Other assets		21,002		(1,040)		19,962		
Total assets		1,660,417		59,991		1,720,408		

		September 30, 2018	
(In thousands)	As Reported	Impact of Adoption	As Reported - Less Impact of Adoption
LIABILITIES			
Current liabilities:			
Current portion of advances on contracts	43,682	83,121	126,803
Other current liabilities	121,887	(8,608)	113,279
Total current liabilities	431,074	74,513	505,587
Advances on contracts	10,322	(10,322)	_
Other liabilities	54,273	(216)	54,057
Total liabilities	1,356,026	63,975	1,420,001
HARSCO CORPORATION STOCKHOLDERS' EQUITY			
Accumulated other comprehensive loss	(555,291)	1,679	(553,612)
Retained earnings	1,252,840	(5,671)	1,247,169
Total Harsco Corporation stockholders' equity	261,551	(3,992)	257,559
Noncontrolling interests	42,840	8	42,848
Total equity	304,391	(3,984)	300,407
Total liabilities and equity	1,660,417	59,991	1,720,408

The impact of modifying the Company's Condensed Consolidated Statements of Operations for the three and nine months ended September 30, 2018 are as follows:

		Three Months Ended	
		September 30, 2018	
(In thousands, except per share amounts)	As Reported	Impact of Adoption	As Reported - Less Impact of Adoption
Revenues from continuing operations:			
Services revenues	\$ 250,890	\$ 512	\$ 251,402
Product revenues	194,585	(15,411)	179,174
Total revenues	445,475	(14,899)	430,576
Costs and expenses from continuing operations:			
Costs of services sold	194,459	1,273	195,732
Costs of products sold	132,262	(11,979)	120,283
Selling, general and administrative costs	59,297	66	59,363
Total costs and expenses	388,366	(10,640)	377,726
Operating income from continuing operations	57,109	(4,259)	52,850
Interest expense	(9,665)	550	(9,115)
Income from continuing operations before income taxes	48,821	(3,709)	45,112
Income tax (expense) benefit	(13,833)	932	(12,901)
Income from continuing operations	34,988	(2,777)	32,211
Net income	34,651	(2,777)	31,874
Less: Net income attributable to noncontrolling interests	(1,804)	(10)	(1,814)
Net income attributable to Harsco Corporation	32,847	(2,787)	30,060
Amounts attributable to Harsco Corporation common stockholders:			
Income from continuing operations, net of tax	33,184	(2,787)	30,397
Net income attributable to Harsco Corporation common stockholders	32,847	(2,787)	30,060
Basic earnings per share attributable to Harsco Corporation common stockholders:			
Continuing operations	0.41	(0.03)	0.38
Basic earnings per share attributable to Harsco Corporation common stockholders	0.41	(0.03)	0.37
Diluted earnings per share attributable to Harsco Corporation common stockholders:			
Continuing operations	0.40	(0.03)	0.36
Diluted earnings per share attributable to Harsco Corporation common stockholders	0.39	(0.03)	0.36

Nine Months Ended September 30, 2018

	September 30, 2018			
(In thousands, except per share amounts)			As Reported - Less Impact of Adoption	
Revenues from continuing operations:				
Services revenues	\$ 763,815	\$ 4,182	\$ 767,997	
Product revenues	521,670	(34,269)	487,401	
Total revenues	1,285,485	(30,087)	1,255,398	
Costs and expenses from continuing operations:				
Costs of services sold	589,738	3,980	593,718	
Costs of products sold	367,218	(30,091)	337,127	
Selling, general and administrative costs	175,307	103	175,410	
Total costs and expenses	1,138,210	(26,008)	1,112,202	
Operating income from continuing operations	147,275	(4,079)	143,196	
Interest expense	(29,241)	1,453	(27,788)	
Income from continuing operations before income taxes	121,195	(2,626)	118,569	
Income tax (expense) benefit	(24,043)	919	(23,124)	
Income from continuing operations	97,152	(1,707)	95,445	
Net income	96,939	(1,707)	95,232	
Less: Net income attributable to noncontrolling interests	(5,795)	(8)	(5,803)	
Net income attributable to Harsco Corporation	91,144	(1,715)	89,429	
Amounts attributable to Harsco Corporation common stockholders:				
Income from continuing operations, net of tax	91,357	(1,715)	89,642	
Net income attributable to Harsco Corporation common stockholders	91,144	(1,715)	89,429	
Basic earnings per share attributable to Harsco Corporation common stockholders:				
Continuing operations	1.13	(0.02)	1.11	
Basic earnings per share attributable to Harsco Corporation common stockholders	1.13	(0.02)	1.11	
Diluted earnings per share attributable to Harsco Corporation common stockholders:				
Continuing operations	1.09	(0.02)	1.07	
Diluted earnings per share attributable to Harsco Corporation common stockholders	1.09	(0.02)	1.07	

The impact of modifying the Company's Condensed Consolidated Statements of Cash Flows for the nine months ended September 30, 2018 is as follows:

	Nine Months Ended					
			Septembe	er 30, 2018		
(In thousands) Cash flows from operating activities:		As Reported		Impact of Adoption		eported - Less et of Adoption
Net income	\$	96,939	\$	(1,707)	\$	95,232
Adjustments to reconcile net income to net cash used by operating activities:						
Deferred income tax expense (benefit)		1,996		(919)		1,077
Changes in assets and liabilities:						
Accounts receivable		(29,022)		8		(29,014)
Inventories		(18,852)		(34,923)		(53,775)
Contract assets		(10,427)		10,427		_
Advances on contracts		(12,339)		21,794		9,455
Other assets and liabilities		(14,164)		5,320		(8,844)
Net cash used by operating activities		95,014		_		95,014

On January 1, 2018, the Company adopted changes issued by the FASB related to how employers that sponsor defined benefit pension plans and other postretirement plans present the net periodic pension cost ("NPPC") in the statement of operations. Employers are required to report the service cost component in the same line item or items as other compensation costs arising from services rendered by the pertinent employees during the period. Other components of NPPC are required to be presented in the statement of operations separately from the service cost component and outside of the subtotal of income from operations. The changes also allow only the service cost component to be eligible for capitalization. The adoption of these changes resulted in the Company reclassifying \$0.7 million and \$2.1 million of NPPC expense for the three and nine months ended September 30, 2017, respectively, from the captions Cost of services sold; Cost of products sold; and Selling, general and administrative expenses to the new caption, Defined benefit pension income (expense) in the Company's Condensed Consolidated Statements of Operations.

On January 1, 2018, the Company adopted changes issued by the FASB clarifying when revisions to the terms or conditions of a share-based payment award require an entity to apply modification accounting. The changes require modification accounting only in circumstances when the terms or conditions result in changes to the fair value, vesting conditions or classification of the award as an equity instrument or a liability. The adoption of these changes did not have an impact on the Company's condensed consolidated financial statements.

On January 1, 2018, the Company adopted changes issued by FASB which eliminate the requirement to defer the recognition of current and deferred income taxes for an intra-entity asset transfer until the asset has been sold to an outside party. Under the new guidance, an entity should recognize the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. The changes resulted in an adjustment to opening retained earnings of less than \$0.1 million.

The following accounting standards have been issued and become effective for the Company at a future date:

In February 2016, the FASB issued changes, with subsequent amendments, in accounting for leases, which become effective for the Company on January 1, 2019. The changes introduce a lessee model that brings most leases onto the balance sheet, which will result in an increase in lease-related assets and liabilities. The changes also align many of the underlying principles of the new lessor model with those in the FASB's new revenue recognition standard. Furthermore, the changes address other concerns related to the current lease model such as eliminating the requirement in current guidance for an entity to use bright-line tests in determining lease classification. The changes also require lessors to increase the transparency of their exposure to changes in value of their residual assets and how they manage that exposure. The Company has completed an assessment of existing leasing agreements and is in the process of quantifying the impact on the Company's consolidated financial statements. The Company has elected to adopt these changes on a modified retrospective basis and the practical expedients allowing for adoption on a prospective basis. In addition, the Company is in the process of identifying changes to current business processes and internal controls to support the reporting and disclosure requirements of the new standard.

In January 2017, the FASB issued changes that remove the second step of the annual goodwill impairment test, which requires a hypothetical purchase price allocation. The changes provide that the amount of goodwill impairment will be equal to the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. All other goodwill impairment guidance remains largely unchanged. The same one-step impairment test will be applied to goodwill at all reporting units, even those with zero or negative carrying amounts. Entities will be required to disclose the amount of goodwill at reporting units with zero or negative carrying amounts. The changes become effective for the Company on January 1, 2020. Management has determined that these changes will not have a material impact on the Company's condensed consolidated financial statements. However, should the Company be required to record a goodwill impairment charge in future periods, the amount recorded may differ compared to any amounts that might be recorded under current practice.

In August 2017, the FASB issued changes which expand and refine hedge accounting for both financial and non-financial risk components, aligns the recognition and presentation of the effects of hedging instruments and hedged items in the financial statements and includes certain targeted improvements to ease the application of current guidance related to the assessment of hedge effectiveness. The amendments in this update should be applied to hedging relationships existing on the date of adoption, which includes a cumulative-effect adjustment to eliminate any ineffectiveness recorded to accumulated other comprehensive income or loss with a corresponding adjustment to the opening balance of retained earnings as of the beginning of the fiscal year in which adoption occurred. Presentation and disclosure amendments are required to be applied prospectively. The changes become effective for the Company on January 1, 2019. Management is currently evaluating the impact of these changes on its condensed consolidated financial statements.

In February 2018, the FASB issued changes which allow entities to reclassify stranded income tax effects resulting from the Tax Cuts and Jobs Act (the "Act") from accumulated other comprehensive income to retained earnings in their consolidated financial statements. Under the Act, deferred taxes were adjusted to reflect the reduction of the historical corporate income

tax rate to the newly enacted corporate income tax rate, which left the tax effects on items within accumulated other comprehensive income stranded at historical tax rates. The changes become effective for the Company on January 1, 2019. The Company had approximately \$21 million of stranded income tax effects in accumulated other comprehensive income at December 31, 2017 resulting from the Act which the Company plans to reclassify upon initial adoption of these changes.

In August 2018, the FASB issued changes which modify the disclosure requirements for fair value measurements. The amendments in this update remove the requirement to disclose the amount of, and reasons for, transfers between Level 1 and Level 2 of the fair value hierarchy; the policy for timing of transfers between levels; and the valuation processes for Level 3 fair value measurements. The changes require disclosure of changes in unrealized gains and losses for the period included in other comprehensive income (loss) for recurring Level 3 fair value measurements held at the end of the reporting period and the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements. The changes become effective for the Company on January 1, 2020. Management is currently evaluating the impact of these changes on its condensed consolidated financial statements.

In August 2018, the FASB issued changes which modify the disclosure requirements for employers that sponsor defined benefit pension or other post-retirement plans. The changes remove the requirements to disclose: amounts in accumulated other comprehensive income (loss) expected to be recognized as components of net periodic benefit cost over the next fiscal year; the amount and timing of plan assets expected to be returned to the employer; and the effects of a one-percentage point change in assumed health care cost trend rates. The update also requires disclosure of an explanation of the reasons for significant gains and losses related to changes in the benefit obligation for the period. The changes become effective for the Company on January 1, 2021. Management is currently evaluating the impact of these changes on its condensed consolidated financial statements.

In August 2018, the FASB issued changes that require entities that are customers in cloud computing arrangements to defer implementation costs if they would be capitalized by the entity in software licensing arrangements under the internal-use software guidance. The Company intends to early adopt these changes effective October 1, 2018.

3. Acquisitions

In May 2018, the Company acquired Altek Europe Holdings Limited and its affiliated entities (collectively, "Altek"), a U.K.-based manufacturer of market leading products that enable aluminum producers and recyclers to manage and efficiently extract value from critical waste streams, reduce waste generation and improve operating productivity. The Company acquired Altek, on a debt and cash free basis, for a purchase price of £45 million (approximately \$60 million) in cash, with the potential for up to £25 million (approximately \$33 million) in additional contingent consideration through 2021 subject to the future financial performance of Altek. The preliminary purchase price included an upfront payment of \$60.1 million, subject to working capital adjustments and net of cash acquired, as well as contingent consideration with an estimated preliminary fair value of \$16.3 million as of the acquisition date. Altek's revenues and operating results have been included in the results of the Harsco Metals & Minerals Segment and were not material to the Company's consolidated results for the three and nine months ended September 30, 2018. The Company incurred approximately \$1 million of costs associated with the Altek acquisition in the caption Selling, general and administrative expenses in the Condensed Consolidated Statements of Operations.

The fair value recorded for the assets acquired and liabilities assumed for Altek is as follows:

	Preliminary Valuation							
(In millions)		June 30 Measurement Period 2018 Adjustments (a)			September 30 2018			
Cash and cash equivalents	\$	1.7	\$ —	\$	1.7			
Net working capital		(1.5)	0.2		(1.3)			
Property, plant and equipment		3.3	_		3.3			
Intangible assets		52.5	0.2		52.7			
Goodwill		20.9	5.8		26.7			
Net deferred tax liabilities		(8.5)	_		(8.5)			
Other liabilities		(0.3)	_		(0.3)			
Total identifiable net assets of Altek	\$	68.1	\$ 6.2	\$	74.3			

⁽a) The measurement period adjustments did not have a material impact on the Company's previously reported operating results.

The goodwill is attributable to strategic benefits, including enhanced operational and financial scale and product and market diversification that the Company expects to realize. The Company expects less than \$1.0 million of goodwill to be deductible for income tax purposes.

The following table details the preliminary valuation of identifiable intangible assets and amortization periods for Altek:

		Preliminary Valuation							
(Dollars in millions)	Amortization Period		June 30 Measurement Period 2018 Adjustments (a)				September 30 2018		
Customer related	14.2 years	\$	11.5	\$	0.1	\$	11.6		
Technology related	10.3 years		36.5		0.1		36.6		
Trade names	15.0 years		4.5		_		4.5		
Total identifiable intangible assets of Altek		\$	52.5	\$	0.2	\$	52.7		

(a) The measurement period adjustments did not have a material impact on the Company's previously reported operating results.

The Company valued the customer related assets, technology related assets, and trade names using an income-based approach that utilized either the multiperiod excess earnings method or the relief from royalty method.

The preliminary fair value of contingent consideration was estimated using a probability simulation model, which uses assumptions and estimates to forecast a range of outcomes for the contingent consideration. Key inputs to the model include projected earnings before interest, tax, depreciation and amortization; the discount rate; the projection risk neutralization rate; and volatility, which are Level 3 data. The Company will assess these assumptions and estimates on a quarterly basis as additional data impacting the assumptions is obtained. Any changes in the fair value of contingent consideration related to updated assumptions and estimates will be recognized in the Consolidated Statements of Operations during the period in which the change occurs.

The following table reflects the changes in the fair value of contingent consideration:

(In thousands)	Contingent Consideration
Balance, June 30, 2018	\$ 10,097
Measurement period adjustment (b)	6,177
Fair value adjustment (c)	412
Foreign currency translation (c)	(298)
Balance, September 30, 2018	\$ 16,388

(b) Measurement period adjustment was recorded to goodwill on the Condensed Consolidated Balance Sheet.

(c) These amounts are recorded in the caption Other (income) expenses, net on the Condensed Consolidated Statements of Operations.

The purchase price allocation for this transaction is not final and the fair value of intangible assets, goodwill and contingent consideration may vary from those reflected in the condensed consolidated financial statements at September 30, 2018. Inclusion of pro forma financial information for this transaction is not necessary as the acquisition is immaterial to the Company's results of operations.

4. Accounts Receivable and Inventories

Accounts receivable consist of the following:

(In thousands)	Se	September 30 2018		December 31 2017
Trade accounts receivable	\$	308,278	\$	292,765
Less: Allowance for doubtful accounts		(4,113)		(4,731)
Trade accounts receivable, net	\$	304,165	\$	288,034
Other receivables (a) (b)	\$	55,156	\$	20,224

(a) Other receivables include insurance claim receivables, employee receivables, tax claim receivables and other miscellaneous receivables not included in Trade accounts receivable, net.

⁽b) From time to time, based on developments including ongoing negotiations, the Company adjusts insured liabilities with offsetting insurance receivables, with no impact to the Condensed Consolidated Statements of Operations.

The provision (benefit) for doubtful accounts related to trade accounts receivable was as follows:

	Three Months Ended					Nine Months Ended			
	September 30					September 30			
(In thousands)	2018 2017			2018	2017				
Provision (benefit) for doubtful accounts related to trade accounts									
receivable	\$	(26)	\$	4,087	\$	(182)	\$	5,262	

Inventories consist of the following:

(In thousands)	Se	September 30 2018		December 31 2017
Finished goods	\$	19,957	\$	26,415
Work-in-process		22,175		24,367
Contracts-in-process (c)		_		45,599
Raw materials and purchased parts		72,935		58,943
Stores and supplies		22,701		22,969
Total inventories	\$	137,768	\$	178,293

Contracts-in-process consist of the following:

(In thousands)	Ι	December 31 2017
Contract costs accumulated to date	\$	73,740
Estimated forward loss provisions for contracts-in-process (d)		(28,141)
Contracts-in-process (c) (e)	\$	45,599

- (c) The Company has adopted the new revenue recognition standard utilizing the modified retrospective transition method, including use of practical expedients. Amounts previously reported as Contracts-in-progress have been recognized through the related cumulative catch-up adjustment. See Note 2, Recently Adopted and Recently Issued Accounting Standards for additional information.
- (d) For periods prior to January 1, 2018, to the extent that the estimated forward loss provision exceeds accumulated contract costs it is included in the caption Other current liabilities on the Condensed Consolidated Balance Sheets and amounted to \$3.0 million at December 31, 2017.
- (e) At December 31, 2017, the Company had \$97.9 million of net customer advances related to SBB contracts. These amounts are included in the caption Current portion of advances on contracts on the Condensed Consolidated Balance Sheets.

The Company recognized an initial estimated forward loss provision related to the contracts with the federal railway system of Switzerland ("SBB") of \$45.1 million for the year ended December 31, 2016. The Company recorded an additional forward loss provision of \$1.8 million for the nine months ended September 30, 2018. At September 30, 2018, the entire remaining estimated forward loss provision of \$9.7 million is included in the caption Other current liabilities on the Condensed Consolidated Balance Sheets. The estimated forward loss provision represents the Company's best estimate based on currently available information. It is possible that the Company's overall estimate of costs to complete these contracts may increase, which would result in an additional estimated forward loss provision at such time, but the Company is unable to estimate any further possible loss or range of loss at this time.

The Company recognized \$5.0 million and \$20.4 million of revenues for the contracts with SBB, on an over time basis, utilizing an input method based on costs incurred for the three and nine months ended September 30, 2018, respectively. The Company did not recognize any revenue for the contracts with SBB for the three and nine months ended September 30, 2017. For three and nine months ended September 30, 2018, consolidated product revenue gross margins were not significantly impacted by the revenue recognized under the SBB contracts. The Company is approximately 98% complete on the first contract and 24% complete on the second contract with SBB as of September 30, 2018.

5. Property, Plant and Equipment

Property, plant and equipment consists of the following:

(In thousands)	 September 30 2018		December 31 2017
Land	\$ 10,874	\$	10,840
Land improvements	15,874		14,996
Buildings and improvements	192,011		198,582
Machinery and equipment	1,554,559		1,599,713
Uncompleted construction	30,608		24,387
Gross property, plant and equipment	1,803,926		1,848,518
Less: Accumulated depreciation	(1,343,428)		(1,368,771)
Property, plant and equipment, net	\$ 460,498	\$	479,747

6. Goodwill and Other Intangible Assets

The following table reflects the changes in carrying amounts of goodwill by segment for the nine months ended September 30, 2018:

(In thousands)	co Metals & rals Segment	Н	arsco Industrial Segment	Harsco Rail Segment	Consolidated Totals
Balance at December 31, 2017	\$ 381,893	\$	6,839	\$ 13,026	\$ 401,758
Changes to goodwill	26,737	(a)	_	_	26,737
Foreign currency translation	(8,144)		_	_	(8,144)
Balance at September 30, 2018	\$ 400,486	\$	6,839	\$ 13,026	\$ 420,351

⁽a) Changes to goodwill in the Harsco Metals & Minerals Segment relate to the acquisition of Altek. The purchase price allocation is not yet final for this acquisition. See Note 3, Acquisitions.

The Company tests for goodwill impairment annually or more frequently if indicators of impairment exist, or if a decision is made to dispose of a business. The Company performs the annual goodwill impairment test as of October 1 and monitors for triggering events on an ongoing basis. The Company determined that, as of September 30, 2018, no interim goodwill impairment testing was necessary.

Intangible assets included in the caption, Intangible assets, net, on the Condensed Consolidated Balance Sheets consist of the following:

	September 30, 2018					December 31, 2017							
(In thousands)	Gross Carryin Amount		Gross Carrying Accumulated Amount Amortization							Gross Carrying Amount			Accumulated Amortization
Customer related (b)	\$	137,498	\$	98,834	\$	153,014	\$	121,385					
Patents		2,590		2,495		5,825		5,700					
Technology related (b)		36,666		1,851		26,131		26,131					
Trade names (b)		9,311		1,754		8,317		4,845					
Other		5,856		3,389		8,875		5,850					
Total	\$	191,921	\$	108,323	\$	202,162	\$	163,911					

⁽b) The increase in net Customer related, Technology related and Trade names intangible assets is related to the acquisition of Altek. The purchase price allocation is not yet final for this acquisition. See Note 3, Acquisitions.

Amortization expense for intangible assets was as follows:

	Three Mo	ded	Nine Months Ended					
	 Septer		September 30					
(In thousands)	2018		2017		2018		2017	
Amortization expense for intangible assets	\$ 2,395	\$	1,269	\$	5,326	\$	3,868	

The estimated amortization expense for the next five fiscal years based on current intangible assets is as follows:

(In thousands)	2018	2019	2020	2021	2022
Estimated amortization expense (c)	\$ 7,900	\$ 9,750	\$ 9,250	\$ 8,800	\$ 8,500

⁽c) These estimated amortization expense amounts do not reflect the potential effect of future foreign currency exchange fluctuations and are subject to change pending finalization of the purchase price allocation for Altek.

7. Debt and Credit Agreements

In June 2018, the Company amended the existing Senior Secured Credit Facility in order to, among other things, reduce the interest rate applicable to the Term Loan Facility and to increase the limit of the Revolving Credit Facility. As a result of the amendments, borrowings under the Term Loan Facility now bear interest at a rate per annum of 225 basis points over the adjusted LIBOR rate and the facility limit under the Revolving Credit Facility has increased to \$500 million. Additionally, a charge of \$1.0 million was recorded during the second quarter of 2018 consisting principally of fees associated with the transaction and the write-off of unamortized deferred financing costs. Incremental fees associated with the transaction were recorded during the third quarter of 2018 bringing the total charge to \$1.2 million for the nine months ended September 30, 2018.

8. Employee Benefit Plans

		Three Months Ended												
	September 30													
Defined Benefit Pension Plans Net Periodic Pension Cost (Benefit)	U.S. Plans International Plans													
(In thousands)		2018		2017		2018		2017						
Service costs	\$	10	\$	10	\$	401	\$	426						
Interest costs		2,391		2,469		5,498		5,843						
Expected return on plan assets		(3,017)		(2,620)		(10,820)		(10,632)						
Recognized prior service costs		_		8		(37)		48						
Recognized loss		1,302		1,425		3,737		4,130						
Defined benefit pension plans net periodic pension cost (benefit)	\$	686	\$	1,292	\$	(1,221)	\$	(185)						

Three Months Ended

	Nine Months Ended											
	Sept 30											
Defined Benefit Pension Plans Net Periodic Pension Cost (Benefit)		U.S.	Plans	·		Internat	ional l	Plans				
(In thousands)		2018		2017		2018		2017				
Service costs	\$	31	\$	32	\$	1,195	\$	1,243				
Interest costs		7,172		7,408		16,612		17,349				
Expected return on plan assets		(9,051)		(7,863)		(32,661)		(31,571)				
Recognized prior service costs		_		24		(113)		139				
Recognized loss		3,906		4,276		11,267		12,260				
Settlement/curtailment losses		166		_		_		_				
Defined benefit pension plans net periodic pension cost (benefit)	\$	2,224	\$	3,877	\$	(3,700)	\$	(580)				

On January 1, 2018, the Company adopted changes issued by the FASB related to how employers that sponsor defined benefit pension plans and other postretirement plans present NPPC in the statement of operations. Employers are required to report the service cost component in the same line item or items as other compensation costs arising from services rendered by the pertinent employees during the period. Other components of NPPC are required to be presented in the statement of operations separately from the service cost component and outside of the subtotal of income from operations. See Note 2, Recently Adopted and Recently Issued Accounting Standards, for additional details.

	Three Months Ended Nine Mon						ded		
Company Contributions	 September 30 September 30						30		
(In thousands)	2018		2017		2018		2017		
Defined benefit pension plans (U.S.)	\$ 5,958	\$	4,112	\$	9,309	\$	5,054		
Defined benefit pension plans (International)	3,219		3,038		16,192		14,338		
Multiemployer pension plans	492		498		1,512		1,481		
Defined contribution pension plans	2,306		3,278		7,888		8,306		

The Company's estimate of expected contributions to be paid during the remainder of 2018 for the U.S. and international defined benefit pension plans are \$0.5 million and \$2.4 million, respectively.

9. Income Taxes

Income tax expense related to continuing operations for the three and nine months ended September 30, 2018 was \$13.8 million and \$24.0 million, respectively and for the three and nine months ended September 30, 2017 was \$8.3 million and \$25.8 million, respectively. For the nine months ended September 30, 2018, income tax expense was positively affected by an \$8.3 million tax benefit arising from the adjustment to certain existing deferred tax asset valuation allowances as the result of the Altek acquisition.

An income tax benefit from an uncertain tax position may be recognized when it is more likely than not that the position will be sustained upon examination, based on technical merits, including resolutions of any related appeals or litigation processes. The reserve for uncertain tax positions at September 30, 2018 was \$4.6 million, including interest and penalties. Within the next twelve months, it is reasonably possible that \$0.9 million of unrecognized income tax benefits will be recognized upon settlement of tax examinations and the expiration of various statutes of limitations.

As a result of the changes in the U.S. tax law, the Company recorded a provisional charge of \$48.7 million included in Income tax expense in the Company's Consolidated Statements of Operations for 2017. Since year-end 2017, the Company has been accumulating and processing data and expects to finalize its assessment during the fourth quarter in 2018.

10. Commitments and Contingencies

Environmental

The Company is involved in a number of environmental remediation investigations and cleanups and, along with other companies, has been identified as a "potentially responsible party" for certain waste disposal sites. While each of these matters is subject to various uncertainties, it is probable that the Company will agree to make payments toward funding certain of these activities, and it is possible that some of these matters will be decided unfavorably to the Company. The Company has evaluated its potential liability, and its financial exposure is dependent upon such factors as the continuing evolution of environmental laws and regulatory requirements, the availability and application of technology, the allocation of cost among potentially responsible parties, the years of remedial activity required and the remediation methods selected. The Company did not have any material accruals or record any material expenses related to environmental matters during the periods presented.

The Company evaluates its liability for future environmental remediation costs on a quarterly basis. Although actual costs to be incurred at identified sites in future periods may vary from the estimates (given inherent uncertainties in evaluating environmental exposures), the Company does not expect that any costs that are reasonably possible to be incurred by the Company in connection with environmental matters in excess of the amounts accrued would have a material adverse effect on the Company's financial condition, results of operations or cash flows.

Brazilian Tax Disputes

The Company is involved in a number of tax disputes with federal, state and municipal tax authorities in Brazil. These disputes are at various stages of the legal process, including the administrative review phase and the collection action phase, and include assessments of fixed amounts of principal and penalties, plus interest charges that increase at statutorily determined amounts per month and are assessed on the aggregate amount of the principal and penalties. In addition, the losing party, at the collection action or court of appeals phase, could be subject to a charge to cover statutorily mandated legal fees, which are generally calculated as a percentage of the total assessed amounts due, inclusive of penalty and interest. Many of the claims relate to value-added ("ICMS"), services and social security tax disputes. The largest proportion of the assessed amounts relate to ICMS claims filed by the State Revenue Authorities from the State of São Paulo, Brazil (the "SPRA"), encompassing the period from January 2002 to May 2005.

In October 2009, the Company received notification of the SPRA's final administrative decision regarding the levying of ICMS in the State of São Paulo in relation to services provided to a customer in the State between January 2004 and May 2005. As of September 30, 2018, the principal amount of the tax assessment from the SPRA with regard to this case is approximately \$2 million, with penalty, interest and fees assessed to date increasing such amount by an additional \$20 million. Any change in the aggregate amount since the Company's last Annual Report on Form 10-K for the year ended December 31, 2017 is due to an increase in assessed interest and statutorily mandated legal fees for the period, as well as foreign currency translation. On June 4, 2018, the Appellate Court of the State of Sao Paulo ruled in favor of the SPRA, but ruled that the assessed penalty should be reduced to approximately \$2 million. After calculating the interest accrued on the penalty, the Company estimates that this ruling reduces the current overall liability for this case to approximately \$9 million. The Company has filed a motion for clarification on the ruling, which is still pending before the court. In the event the motion for clarification is unsuccessful, the Company plans to appeal both the liability ruling and the amount assessed. Due to multiple court precedents in the

Company's favor, as well as the Company's ability to seek clarification as well as appeal, the Company does not believe a loss is probable.

Another ICMS tax case involving the SPRA refers to the tax period from January 2002 to December 2003 and has not yet reached the judicial phase. The aggregate amount assessed by the tax authorities in August 2005 was \$6.3 million (the amounts with regard to this claim are valued as of the date of the assessment since it has not yet reached the collection phase), composed of a principal amount of \$1.5 million, with penalty and interest assessed through that date increasing such amount by an additional \$4.8 million. All such amounts include the effect of foreign currency translation.

The Company continues to believe that sufficient coverage for these claims exists as a result of the indemnification obligations of the Company's customer and such customer's pledge of assets in connection with the October 2009 notice, as required by Brazilian law.

The Company intends to continue its practice of vigorously defending itself against these tax claims under various alternatives, including judicial appeal. The Company will continue to evaluate its potential liability with regard to these claims on a quarterly basis; however, it is not possible to predict the ultimate outcome of these tax-related disputes in Brazil. No loss provision has been recorded in the Company's condensed consolidated financial statements for the disputes described above because the loss contingency is not deemed probable, and the Company does not expect that any costs that are reasonably possible to be incurred by the Company in connection with Brazilian tax disputes would have a material adverse effect on the Company's financial condition, results of operations or cash flows.

Brazilian Labor Disputes

The Company is subject to ongoing collective bargaining and individual labor claims in Brazil through the Harsco Metals & Minerals Segment which allege, among other things, the Company's failure to pay required amounts for overtime and vacation at certain sites. The Company is vigorously defending itself against these claims; however, litigation is inherently unpredictable, particularly in foreign jurisdictions. While the Company does not currently expect that the ultimate resolution of these claims will have a material adverse effect on the Company's financial condition, results of operations or cash flows, it is not possible to predict the ultimate outcome of these labor-related disputes.

The Company is continuing to review all known labor claims, and, as of September 30, 2018 and December 31, 2017, the Company has established reserves of \$7.4 million and \$9.6 million, respectively, on the Company's Condensed Consolidated Balance Sheets for amounts considered to be probable and estimable. As the Company continues to evaluate these claims and takes actions to address them, the amount of established reserves may be impacted.

Customer Disputes

The Company may, in the normal course of business, become involved in commercial disputes with subcontractors or customers. Although results of operations and cash flows for a given period could be adversely affected by a negative outcome in these or other lawsuits, claims or proceedings, management believes that the ultimate outcome of any ongoing matters will not have a material adverse effect on the Company's financial condition, results of operations or cash flows.

Lima Refinery Litigation

On April 8, 2016, Lima Refining Company filed a lawsuit against the Company in the District Court of Harris County, Texas related to a January 2015 explosion at an oil refinery operated by Lima Refining Company. The action seeks approximately \$317 million plus interest in property damages, lost profits and business interruption damages. The action alleges the explosion occurred because of a defect in a heat exchange cooler manufactured by Hammco Corporation ("Hammco") in 2009, prior to the Company's acquisition of Hammco in 2014. The Company is vigorously contesting the allegations against it. The Company has both an indemnity right from the sellers of Hammco and liability insurance coverage under various primary and excess policies that the Company believes will be available, if necessary, to cover substantially all such liability that might ultimately be incurred in the above action. As a result, the Company believes the situation will not result in a net unreimbursed loss.

Compliance Matter

As previously disclosed, in 2017, the Company undertook an internal investigation, with the assistance of outside counsel, after it became aware of allegations involving an employee and an agent of the Harsco Rail subsidiary in China ("Harsco Rail China"). During this investigation the Company learned about certain payments that potentially violate the Foreign Corrupt Practices Act. Revenues attributed to Harsco Rail China were approximately 2% of the Company's consolidated revenues for each of the prior three completed fiscal years.

The Company has voluntarily self-reported its initial findings to the SEC and the U.S. Department of Justice (the "DOJ") and intends to fully cooperate with these agencies in their review. Based on information known to date, the Company believes the amount of the potential improper payments are not material to the condensed consolidated financial statements. Any determination that the Company's operations or activities were not in compliance with existing laws or regulations could result in the imposition of fines and penalties. No provision with respect to this matter has been made in the Company's condensed consolidated financial statements. At this time, the Company cannot predict the outcome or impact of the investigation or the reviews by the SEC and the DOJ. However, based on information available at this time, the Company does not believe any potential liability would be material to the Company's condensed consolidated financial position, although an amount recorded, if any, could be material to the results of operations for the period in which it may be recorded.

Other

The Company is named as one of many defendants (approximately 90 or more in most cases) in legal actions in the U.S. alleging personal injury from exposure to airborne asbestos over the past several decades. In their suits, the plaintiffs have named as defendants, among others, many manufacturers, distributors and installers of numerous types of equipment or products that allegedly contained asbestos.

The Company believes that the claims against it are without merit. The Company has never been a producer, manufacturer or processor of asbestos fibers. Any asbestos-containing part of a Company product used in the past was purchased from a supplier and the asbestos encapsulated in other materials such that airborne exposure, if it occurred, was not harmful and is not associated with the types of injuries alleged in the pending actions.

At September 30, 2018, there were 17,287 pending asbestos personal injury actions filed against the Company. Of those actions, 16,737 were filed in the New York Supreme Court (New York County), 113 were filed in other New York State Supreme Court Counties and 437 were filed in courts located in other states.

The complaints in most of those actions generally follow a form that contains a standard damages demand of \$20 million or \$25 million, regardless of the individual plaintiff's alleged medical condition, and without identifying any specific Company product.

At September 30, 2018, 16,704 of the actions filed in New York Supreme Court (New York County) were on the Deferred/Inactive Docket created by the court in December 2002 for all pending and future asbestos actions filed by persons who cannot demonstrate that they have a malignant condition or discernible physical impairment. The remaining 33 cases in New York County are pending on the Active or In Extremis Docket created for plaintiffs who can demonstrate a malignant condition or physical impairment.

The Company has liability insurance coverage under various primary and excess policies that the Company believes will be available, if necessary, to substantially cover any liability that might ultimately be incurred in the asbestos actions referred to above. The costs and expenses of the asbestos actions are being paid by the Company's insurers.

In view of the persistence of asbestos litigation in the U.S., the Company expects to continue to receive additional claims in the future. The Company intends to continue its practice of vigorously defending these claims and cases. At September 30, 2018, the Company has obtained dismissal in 28,007 cases by stipulation or summary judgment prior to trial.

It is not possible to predict the ultimate outcome of asbestos-related actions in the U.S. due to the unpredictable nature of this litigation, and no loss provision has been recorded in the Company's condensed consolidated financial statements because a loss contingency is not deemed probable or estimable. Despite this uncertainty, and although results of operations and cash flows for a given period could be adversely affected by asbestos-related actions, the Company does not expect that any costs that are reasonably possible to be incurred by the Company in connection with asbestos litigation would have a material adverse effect on the Company's financial condition, results of operations or cash flows.

As previously disclosed, the Company has had ongoing meetings with the Supreme Council for Environment in Bahrain ("SCE") over processing a byproduct ("salt cakes") stored at the Al Hafeerah site. The Company's Bahrain operations that produced the salt cakes has ceased operations and are owned under a strategic venture for which its strategic venture partner owns a 35% minority interest. An Environmental Impact Assessment and Technical Feasibility Study were approved by the SCE during the first quarter of 2018. The Company has previously established a reserve of \$7.0 million, which represents the Company's best estimate of the ultimate costs to be incurred to resolve this matter. The Company continues to evaluate this reserve and any future change in estimated costs could be material to the Company's results of operations in any one period.

On July 27, 2018, Brazil's Federal and Rio de Janeiro State Public Prosecution Offices (MPF and MPE) filed a Civil Public Action against one of the Company's customers (CSN), the Company's Brazilian subsidiary, the Municipality of Volta Redonda, Brazil, and the Instituto Estadual do Ambiente (local environmental protection agency) seeking the implementation of various measures to limit and reduce the accumulation of customer-owned slag at the site in Brazil. On August 6, 2018, the 3rd Federal Court in Volta Redonda granted the MPF and MPE an injunction against the same parties requiring, among other things, CSN and the Company's Brazilian subsidiary to limit the volume of slag sent to the site. Because the customer owns the site and the slag located on the site, the Company believes that complying with this injunction is the steel producer's responsibility. Nevertheless, if the customer does not comply, the Company's Brazilian subsidiary, as a party to the injunction, could be assessed fines for non-compliance or could incur other losses related to the issue. The Company does not believe that a loss relating to this matter is probable or estimable at this point.

The Company is subject to various other claims and legal proceedings covering a wide range of matters that arose in the ordinary course of business. In the opinion of management, all such matters are adequately covered by insurance or by established reserves, and, if not so covered, are without merit or are of such kind, or involve such amounts, as would not have a material adverse effect on the financial position, results of operations or cash flows of the Company.

Insurance liabilities are recorded when it is probable that a liability has been incurred for a particular event and the amount of loss associated with the event can be reasonably estimated. Insurance reserves have been estimated based primarily upon actuarial calculations and reflect the undiscounted estimated liabilities for ultimate losses, including claims incurred but not reported. Inherent in these estimates are assumptions that are based on the Company's history of claims and losses, a detailed analysis of existing claims with respect to potential value, and current legal and legislative trends. If actual claims differ from those projected by management, changes (either increases or decreases) to insurance reserves may be required and would be recorded through income in the period the change was determined. When a recognized liability is covered by third-party insurance, the Company records an insurance claim receivable to reflect the covered liability. Insurance claim receivables are included in Other receivables on the Company's Condensed Consolidated Balance Sheets. See Note 1, Summary of Significant Accounting Policies, to the Consolidated Financial Statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2017 for additional information on Accrued insurance and loss reserves.

11. Reconciliation of Basic and Diluted Shares

		Three Mor	nths End	ded	Nine Months Ended					
		Septen	ıber 30		September 30					
(In thousands, except per share amounts)		2018		2017		2018		2017		
Income from continuing operations attributable to Harsco Corporation common stockholders	\$	33,184	\$	13,669	\$	91,357	\$	41,571		
Weighted-average shares outstanding - basic		80,950		80,637		80,821		80,519		
Dilutive effect of stock-based compensation		2,929		2,499		2,869		2,234		
Weighted-average shares outstanding - diluted		83,879		83,136		83,690		82,753		
Earnings from continuing operations per common share, attributable to	Harsco	Corporation o	ommo	n stockholders:			-			
Basic	\$	0.41	\$	0.17	\$	1.13	\$	0.52		
Diluted	\$	0.40	\$	0.16	\$	1.09	\$	0.50		

The following average outstanding stock-based compensation units were not included in the computation of diluted earnings per share because the effect was antidilutive:

	Three Mont	hs Ended	Nine Months Ended					
	Septemb	er 30	Septen	iber 30				
(In thousands)	2018	2017	2018	2017				
Stock options	_	55	_	55				
Stock appreciation rights	75	526	349	918				
Performance share units	_	_	_	212				

12. Derivative Instruments, Hedging Activities and Fair Value

Derivative Instruments and Hedging Activities

The Company uses derivative instruments, including foreign currency exchange forward contracts, interest rate swaps and cross-currency interest rate swaps ("CCIRs"), to manage certain foreign currency and interest rate exposures. Derivative instruments are viewed as risk management tools by the Company and are not used for trading or speculative purposes. All derivative instruments are recorded on the Condensed Consolidated Balance Sheets at fair value.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (an exit price). The Company utilizes market data or assumptions that the Company believes market participants would use in valuing the asset or liability, including assumptions about risk and the risks inherent in the inputs to the valuation technique.

The fair value hierarchy distinguishes between (1) market participant assumptions developed based on market data obtained from independent sources (observable inputs), and (2) an entity's own assumptions about market participant assumptions based on the best information available in the circumstances (unobservable inputs). The fair value hierarchy consists of three broad levels, which give the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3).

The three levels of the fair value hierarchy are described below:

- Level 1—Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.
- Level 2—Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly, including quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; inputs other than quoted prices that are observable for the asset or liability (e.g., interest rates); and inputs that are derived principally from or corroborated by observable market data by correlation or other means.
- Level 3—Inputs that are both significant to the fair value measurement and unobservable.

In instances in which multiple levels of inputs are used to measure fair value, hierarchy classification is based on the lowest level input that is significant to the fair value measurement in its entirety. The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment and considers factors specific to the asset or liability.

The Company primarily applies the market approach for recurring fair value measurements and endeavors to utilize the best available information. Accordingly, the Company utilizes valuation techniques that maximize the use of observable inputs, such as forward rates, interest rates, the Company's credit risk and counterparties' credit risks, and which minimize the use of unobservable inputs. The Company is able to classify fair value balances based on the ability to observe those inputs. Foreign currency exchange forward contracts, interest rate swaps and CCIRs are based upon pricing models using market-based inputs (Level 2). Model inputs can be verified, and valuation techniques do not involve significant management judgment.

The fair value of outstanding derivative contracts recorded as assets and liabilities on the Condensed Consolidated Balance Sheets was as follows:

(In thousands)	Balance Sheet Location	Deriva a	air Value of tives Designated as Hedging astruments	Fair Value of Derivatives Not ignated as Hedging Instruments	Total Fair Value
September 30, 2018					
Asset derivatives (Level 2):					
Foreign currency exchange forward contracts	Other current assets	\$	2,209	\$ 7,742	\$ 9,951
Interest rate swaps	Other current assets		1,900	_	1,900
Interest rate swaps	Other assets		3,453	_	3,453
Total		\$	7,562	\$ 7,742	\$ 15,304
Liability derivatives (Level 2):		-			
Foreign currency exchange forward contracts	Other current liabilities	\$	109	\$ 1,583	\$ 1,692
Interest rate swaps	Other liabilities		31	_	31
Total		\$	140	\$ 1,583	\$ 1,723

(In thousands)	Balance Sheet Location	Fair Value of Derivatives Designated as Hedging Instruments			Fair Value of Derivatives Not ignated as Hedging Instruments	Total Fair Value
December 31, 2017						
Asset derivatives (Level 2):						
Foreign currency exchange forward contracts	Other current assets	\$	2,329	\$	2,915	\$ 5,244
Interest rate swaps	Other current assets		464		_	464
Interest rate swaps	Other assets		170		_	\$ 170
Total		\$	2,963	\$	2,915	\$ 5,878
Liability derivatives (Level 2):						
Foreign currency exchange forward contracts	Other current liabilities	\$	153	\$	6,970	\$ 7,123
Interest rate swaps	Other liabilities		1,368		_	1,368
Total		\$	1,521	\$	6,970	\$ 8,491

All of the Company's derivatives are recorded in the Condensed Consolidated Balance Sheets at gross amounts and not offset. All of the Company's interest rate swaps, CCIRs and certain foreign currency exchange forward contracts are transacted under International Swaps and Derivatives Association ("ISDA") documentation. Each ISDA master agreement permits the net settlement of amounts owed in the event of default. The Company's derivative assets and liabilities subject to enforceable master netting arrangements resulted in a net asset of \$1.3 million and a net liability of \$0.2 million at September 30, 2018 and December 31, 2017, respectively.

The effect of derivative instruments in the Condensed Consolidated Statements of Operations and the Condensed Consolidated Statements of Comprehensive Income, was as follows:

Derivatives Designated as Hedging Instruments

(In thousands)	Recog Co Incon D	Amount gnized in Other mprehensive ne ("OCI") on Derivative - ective Portion		Location of Amount Reclassified from Accumulated OCI into Income - Effective Portion	Acci	Amount lassified from imulated OCI to Income - tive Portion or Equity	Location of Amount Recognized in Income on Derivative - Ineffective Portion and Amount Excluded from Effectiveness Testing	o - Ine a E:	Amount ecognized in Income n Derivative ffective Portion nd Amount xcluded from ffectiveness Testing
Three Months Ended September 30, 20	18:								
Foreign currency exchange forward contracts	\$	(410)		Product revenues	\$	(3)		\$	_
Interest rate swaps		1,276		Interest expense		(367)			_
Cross-currency interest rate swaps		_	(a)	Interest expense		312			_
	\$	866			\$	(58)		\$	_
Three Months Ended September 30, 20	17:								
Foreign currency exchange forward contracts	\$	2,333			\$	_		\$	_
Interest rate swaps		(335)				_			_
Cross-currency interest rate swaps		(72)	(a)	Interest Expense		252	Cost of services and products sold		(103)
	\$	1,926			\$	252		\$	(103)

(In thousands)	Recog Coi Incon D Effe	Amount gnized in Other mprehensive ne ("OCI") on erivative - ctive Portion		Location of Amount Reclassified from Accumulated OCI into Income - Effective Portion	Ac	Amount eclassified from cumulated OCI into Income - ective Portion or Equity	Location of Amount Recognized in Income on Derivative - Ineffective Portion and Amount Excluded from Effectiveness Testing	- Ine E	Amount Becognized in Income on Derivative Effective Portion and Amount xcluded from Effectiveness Testing
Nine Months Ended September 30, 201	18:			D 1					
Foreign currency forward exchange contracts	\$	1,369		Product revenues / Cost of services and products sold	\$	(112)		\$	_
Foreign currency forward exchange									
contracts		_		Retained earnings (b)		(1,520)			_
Interest rate swaps		6,657		Interest expense		(602)			
Cross currency interest rate swaps		_		Interest expense		960			_
	\$	8,026			\$	(1,274)		\$	_
Nine Months Ended September 30, 201	17:								
Foreign currency forward exchange				Product revenues / Cost of services and					
contracts	\$	3,096		products sold	\$	(185)		\$	_
Interest rate swaps		(2,878)				_			_
Cross currency interest rate swaps		(195)	(a)	Interest expense		745	Cost of services and products sold		(420)
	\$	23			\$	560		\$	(420)

(a) Amounts represent changes in foreign currency translation related to balances in Accumulated other comprehensive loss.

Derivatives Not Designated as Hedging Instruments

		Amount of Gain (Income on	
(In thousands)	Location of Gain (Loss) Recognized in Income on Derivative	2018	2017
Three Months Ended September 30:			
Foreign currency exchange forward contracts	Cost of services and products sold	\$ 3,194	\$ (7,025)
Nine Months Ended September 30:			
Foreign currency exchange forward contracts	Cost of services and products sold	\$ 13,459	\$ (18,764)

⁽c) These gains (losses) offset amounts recognized in cost of services and products sold principally as a result of intercompany or third party foreign currency exposures.

Foreign Currency Exchange Forward Contracts

The Company conducts business in multiple currencies and, accordingly, is subject to the inherent risks associated with foreign exchange rate movements. Foreign currency-denominated assets and liabilities are translated into U.S. dollars at the exchange rates existing at the respective balance sheet dates, and income and expense items are translated at the average exchange rates during the respective periods.

The Company uses derivative instruments to hedge cash flows related to foreign currency fluctuations. Foreign currency exchange forward contracts outstanding are part of a worldwide program to minimize foreign currency exchange operating income and balance sheet exposure by offsetting foreign currency exposures of certain future payments between the Company and various subsidiaries, suppliers or customers. The unsecured contracts are with major financial institutions. The Company may be exposed to credit loss in the event of non-performance by the contract counterparties. The Company evaluates the creditworthiness of the counterparties and does not expect default by them. Foreign currency exchange forward contracts are used to hedge commitments, such as foreign currency debt, firm purchase commitments and foreign currency cash flows for certain export sales transactions.

⁽b) The Company has adopted the new revenue recognition standard utilizing the modified retrospective transition method, including use of practical expedients. See Note 2, Recently Adopted and Recently Issued Accounting Standards for additional information.

Changes in the fair value of derivatives used to hedge foreign currency denominated balance sheet items are reported directly in earnings, along with offsetting transaction gains and losses on the items being hedged. Derivatives used to hedge forecasted cash flows associated with foreign currency commitments may be accounted for as cash flow hedges, as deemed appropriate, if the criteria for hedge accounting are met. Gains and losses on derivatives designated as cash flow hedges are deferred in Accumulated other comprehensive loss, a separate component of equity, and reclassified to earnings in a manner that matches the timing of the earnings impact of the hedged transactions. The ineffective portion of all hedges, if any, is recognized currently in earnings.

The recognized gains and losses offset amounts recognized in cost of services and products sold principally as a result of intercompany or third party foreign currency exposures. At September 30, 2018 and December 31, 2017, the notional amounts of foreign currency exchange forward contracts were \$652.6 million and \$671.9 million, respectively. These contracts are primarily denominated in British pounds sterling and Euros and mature through October 2021.

In addition to foreign currency exchange forward contracts, the Company designates certain loans as hedges of net investments in international subsidiaries. The Company recorded pre-tax net loss of \$0.8 million and \$7.5 million during the three and nine months ended September 30, 2018, respectively and pre-tax net gains of \$7.6 million and \$17.1 million for the three and nine months ended September 30, 2017, respectively, in Accumulated other comprehensive loss.

Interest Rate Swaps

The Company uses interest rate swaps in conjunction with certain debt issuances in order to secure a fixed interest rate. Changes in the fair value attributed to the effect of the swaps' interest spread and changes in the credit worthiness of the counter-parties are recorded in Accumulated other comprehensive loss.

In January 2017 and February 2018, the Company entered into a series of interest rate swaps that cover the period from 2018 through 2022 and had the effect of converting \$300.0 million of the Term Loan Facility from floating-rate to fixed-rate beginning in 2018. The fixed rates provided by the swaps replace the adjusted LIBOR rate in the interest calculation, ranging from 1.65% for 2018 to 3.12% for 2022. The total notional of the Company's interest rate swaps was \$300.0 million as of September 30, 2018.

Cross-Currency Interest Rate Swaps

The Company may use CCIRs in conjunction with certain debt issuances in order to secure a fixed local currency interest rate. Under these CCIRs, the Company receives interest based on a fixed or floating U.S. dollar rate and pays interest on a fixed local currency rate based on the contractual amounts in dollars and the local currency, respectively. At maturity, there is also the payment of principal amounts between currencies. Changes in the fair value attributed to the effect of the swaps' interest spread and changes in the credit worthiness of the counter-parties are recorded in Accumulated other comprehensive loss. Changes in value attributed to the effect of foreign currency fluctuations are recorded in the Condensed Consolidated Statements of Operations and offset currency fluctuation effects on the debt principal. The Company had no outstanding CCIRs at September 30, 2018.

Fair Value of Other Financial Instruments

The carrying amounts of cash and cash equivalents, accounts receivable, accounts payable, accrued liabilities and short-term borrowings approximate fair value due to the short-term maturities of these assets and liabilities. At September 30, 2018 and December 31, 2017, the total fair value of long-term debt (excluding deferred financing costs), including current maturities, was \$649.0 million and \$599.1 million, respectively, compared with a carrying value of \$646.5 million and \$593.7 million, respectively. Fair values for debt are based on pricing models using market-based inputs (Level 2) for similar issues or on the current rates offered to the Company for debt of the same remaining maturities.

13. Review of Operations by Segment

	Three Mo	nths En	ded		Nine Mo	nths Eı	ıded
	 Septer	nber 30			Septe	mber 3	0
(In thousands)	2018		2017		2018	2017	
Revenues From Continuing Operations							
Harsco Metals & Minerals	\$ 268,881	\$	255,163	\$	805,924	\$	761,503
Harsco Industrial	93,912		78,318		269,575		217,766
Harsco Rail	82,682		51,134		209,912		172,716
Corporate	 _		38		74		107
Total Revenues From Continuing Operations	\$ 445,475	\$	384,653	\$	1,285,485	\$	1,152,092
	Three Mo	nths En	ded		Nine Mo	nths Eı	ıded
	 September 30					mber 3	0
(In thousands)	2018		2017		2018		2017
Operating Income (Loss) From Continuing Operations							
Harsco Metals & Minerals	\$ 29,338	\$	23,613	\$	92,734	\$	80,834
Harsco Industrial	13,959		12,954		40,550		25,088
Harsco Rail	19,000		4,391		29,570		18,800
Corporate	 (5,188)		(6,329)		(15,579)		(18,337)
Total Operating Income From Continuing Operations	\$ 57,109	\$	34,629	\$	147,275	\$	106,385
Depreciation and Amortization		-					
Harsco Metals & Minerals	\$ 29,007	\$	28,636	\$	86,724	\$	84,444
Harsco Industrial	1,971		1,826		5,708		5,509
Harsco Rail	1,063		1,094		3,166		3,156
Corporate	1,332		1,449		4,346		4,399
Total Depreciation and Amortization	\$ 33,373	\$	33,005	\$	99,944	\$	97,508
Capital Expenditures		-					
Harsco Metals & Minerals	\$ 29,870	\$	20,994	\$	79,469	\$	58,065
Harsco Industrial	1,891		1,678		5,894		3,226
Harsco Rail	2,748		462		5,266		1,765

Reconciliation of Segment Operating Income to Income From Continuing Operations Before Income Taxes

	Three Months Ended						nded	
	 Septer	nber 3	30		Septe	mber :	30	
(In thousands)	2018		2017		2018		2017	
Segment operating income	\$ 62,297	\$	40,958	\$	162,854	\$	124,722	
General Corporate expense	(5,188)		(6,329)		(15,579)		(18,337)	
Operating income from continuing operations	57,109		34,629		147,275		106,385	
Interest income	574		610		1,649		1,615	
Interest expense	(9,665)		(12,122)		(29,241)		(36,180)	
Defined benefit pension income (expense)	928		(680)		2,671		(2,054)	
Loss on early extinguishment of debt	(125)		_		(1,159)		_	
Income from continuing operations before income taxes	\$ 48,821	\$	22,437	\$	121,195	\$	69,766	

\$

297

34,806

297

23,431

673

91,302

1,075

64,131

14. Revenue Recognition

Corporate

Total Capital Expenditures

The Company recognizes revenues to depict the transfer of promised services and products to customers in an amount that reflects the consideration the Company expects to receive in exchange for those services or products. Service revenues include the service components of the Harsco Metals & Minerals and Harsco Rail Segments. Product revenues include the Harsco Industrial Segment and the product revenues of the Harsco Metals & Minerals and Harsco Rail Segments.

Harsco Metals & Minerals - This Segment provides on-site services, under long-term contracts, for material logistics; product quality improvement and resource recovery from iron, steel and metals manufacturing; and also manufactures and sells industrial abrasives and roofing granule products.

Service revenues are recognized over time as the customer simultaneously receives the benefits provided by the Company's performance. The Company utilizes an output method based on work performed (liquid steel tons processed, weight of material handled, etc.) to measure progress, which is deemed to best depict the transfer of value to the customer and revenue earned by the Company. Transaction prices are based on contractual terms, which may include both fixed and variable portions. The fixed portion is recognized as earned (normally monthly) over the contractual period.

The variable portion is recognized as services are performed and differs based on the volume of services performed. Given the long-term nature of these arrangements, most contracts permit periodic adjustment of either the variable or both the fixed and variable portions based on the changes in macroeconomic indicators, including changes in commodity prices. Transaction prices, when the standalone selling price is not directly observable, are allocated to performance obligations utilizing an expected cost plus a margin approach. Amounts are typically billed and payable on a monthly basis as services are performed.

• Product revenues are recognized at the point when control transfers to the customer. Control generally transfers at the point of shipment for domestic orders and in accordance with the international commercial terms included in contracts for export sales. Transaction prices are based on contractual terms, which are generally fixed and when the standalone selling price is not directly observable, allocated to performance obligations utilizing an adjusted market assessment approach. Amounts are billed and payable upon completion of each transaction.

At September 30, 2018, the Harsco Metals & Minerals Segment had remaining, fixed, unsatisfied performance obligations, where the expected contract duration exceeds one-year totaling \$147.5 million. Of this amount, \$44.6 million is expected to be fulfilled by September 30, 2019, \$40.1 million by September 30, 2020, \$25.6 million by September 30, 2021, \$22.5 million by September 30, 2022 and the remainder thereafter. These amounts exclude any variable fees, fixed fees subject to indexation and any performance obligations expected to be satisfied within one year. The increase in remaining, fixed, unsatisfied performance obligations, where the expected contract duration exceeds one year is primarily attributable to new contracts entered into during the third quarter of 2018.

Harsco Industrial - This segment sells air-cooled heat exchangers, metal bar grating configurations and energy-efficient heat transfer products.

- For air-cooled heat exchangers, revenue is recognized over time as control is transferred to the customer. Control transfers over time because the air-cooled heat exchangers are customized, have no alternate use and the Company has an enforceable right to payment. The Company utilizes an input method based on costs incurred to measure progress, which is deemed to best depict the transfer of value to the customer and revenue earned by the Company. Transaction prices are based on contractual terms, which are generally fixed, and when the standalone selling price is not directly observable, allocated to performance obligations utilizing an adjusted market assessment approach. The Company may receive periodic payments associated with key milestones with any remaining consideration billed and payable upon completion of the transaction.
- For metal bar grating configurations and energy-efficient heat transfer products, revenue is recognized at the point when control transfers to the customer. Control generally transfers at the point of shipment for domestic orders and in accordance with the international commercial terms included in contracts for export sales. Transaction prices are based on contractual terms, which are generally fixed, and when the standalone selling price is not directly observable, allocated to performance obligations utilizing an adjusted market assessment approach. Amounts are billed and payable upon completion of each transaction though advance payments are required in limited circumstances.

Harsco Rail - This Segment sells railway track maintenance equipment, after-market parts and provides railway track maintenance services.

- For the majority of railway track maintenance equipment sales, revenue is recognized at the point when control transfers to the customer. Control generally transfers at the point of shipment for domestic orders and in accordance with the international commercial terms included in contracts for export sales. In certain railway track maintenance equipment sales, revenue is recognized over time because such equipment is highly customized, has no alternate use and the Company has an enforceable right to payment. In such instances, the Company utilizes an input method based on costs incurred to measure progress, which is deemed to best depict the transfer of value to the customer and revenue earned by the Company. Transaction prices are based on contracted terms, which are generally fixed, and when the standalone selling price is not directly observable, allocated to performance obligations utilizing either the adjusted market assessment or expected cost plus a margin approach. For certain transactions, the Company receives periodic payments associated with key milestones. In limited instances, those payments are intended to provide financing with such transactions being treated as including a significant financing component. Any remaining consideration is billed and payable upon completion of the transaction.
- For after-market parts sales, revenue is recognized at the point when control transfers to the customer. Control generally transfer to the customer at
 the point of shipment for domestic orders and in accordance with the international commercial terms included in contracts for export sales.
 Transaction prices are based on contracted terms, which are generally fixed, and when the standalone selling price is not directly observable,
 allocated to performance obligations utilizing an adjusted market assessment approach. Amounts are billed and payable upon completion of each
 contract.

Total Revenues (c)

• For railway track maintenance services, revenue is recognized over time as the customer simultaneously receives the benefits provided by the Company's performance. The Company utilizes an appropriate output method based on work performed (feet, miles, shifts worked, etc.) to measure progress, which is deemed to best depict the transfer of value to the customer and revenue earned by the Company. Transaction prices are based on contracted terms, which are generally variable. The variable portion is recognized as services are performed and differs based on the value of services. Given the long-term nature of these arrangements, most contracts permit periodic adjustment based on the changes in macroeconomic indicators. Transaction prices, when the standalone selling price is not directly observable, are allocated to performance obligations utilizing an expected cost plus a margin approach. Amounts are typically billed and payable on a monthly basis as services are performed.

At September 30, 2018, the Harsco Rail Segment had remaining, fixed, unsatisfied performance obligations, where the expected contract duration exceeds one-year totaling \$200.3 million. Of this amount, \$46.6 million is expected to be fulfilled by September 30, 2019, \$63.0 million by September 30, 2020, \$54.5 million by September 30, 2021, \$28.0 million by September 30, 2022 and the remainder thereafter. These amounts exclude any variable fees, fixed fees subject to indexation and any performance obligations expected to be satisfied within one year. The increase in remaining, fixed, unsatisfied performance obligations, where the expected contract duration exceeds one year is primarily attributable to the further satisfaction of performance obligations for over time equipment contracts.

A summary of the Company's revenues by primary geographical markets as well as by key product and service groups is as follows:

268,881

					Tl	hree Months Ended			
					S	September 30, 2018			
(In thousands)	Harsco Metals & Minerals Segment			Harsco Industrial Segment	Н	Iarsco Rail Segment	 Corporate	Consolidated Totals	
Primary Geographical Markets (a):									
North America	\$	78,844	\$	88,524	\$	62,823	\$ _	\$	230,191
Western Europe		97,411		_		10,720	_		108,131
Latin America (b)		36,165		5,388		1,130	_		42,683
Asia-Pacific		36,846		_		8,009	_		44,855
Middle East and Africa		12,370		_		_	_		12,370
Eastern Europe		7,245		_		_	_		7,245
Total Revenues (c)	\$	268,881	\$	93,912	\$	82,682	\$ _	\$	445,475
Key Product and Service Groups:					_				
On-site services and material logistics, product quality improvement and resource recovery for iron, steel and metals manufacturing; as well as value- added environmental solutions for industrial coproducts	\$	268,881	\$	_	\$	_	\$ _	\$	268,881
Railway track maintenance services and									
equipment		_		_		82,682	_		82,682
Air-cooled heat exchangers		_		52,093		_	_		52,093
Industrial grating and fencing products		_		31,782		_	_		31,782
Heat transfer products		_		10,037		_	_		10,037

93,912

\$

82,682

445,475

Three Months Ended September 30, 2017

	September 30, 2017												
(In thousands)		rsco Metals nerals Segment	Н	larsco Industrial Segment	Harse	co Rail Segment		Corporate	Co	nsolidated Totals			
Primary Geographical Markets (a):													
North America	\$	70,325	\$	72,260	\$	36,112	\$	38	\$	178,735			
Western Europe		89,481		_		10,495		_		99,976			
Latin America (b)		41,656		5,026		737		_		47,419			
Asia-Pacific		35,990		1,032		3,790		_		40,812			
Middle East and Africa		10,849		_		_		_		10,849			
Eastern Europe	<u> </u>	6,862				_		_		6,862			
Total Revenues (c)	\$	255,163	\$	78,318	\$	51,134	\$	38	\$	384,653			
Key Product and Service Groups:													
On-site services and material logistics, product quality improvement and resource recovery for iron, steel and metals manufacturing; as well as value- added environmental solutions for industrial coproducts	\$	255,163	\$	_	\$	_	\$	_	\$	255,163			
Railway track maintenance services and equipment		_		_		51,134		_		51,134			
Air-cooled heat exchangers		_		38,248		_		_		38,248			
Industrial grating and fencing products		_		29,659		_		_		29,659			
Heat transfer products		_		10,411		_		_		10,411			
General Corporate		_		_		_		38		38			
Total Revenues (c)	\$	255,163	\$	78,318	\$	51,134	\$	38	\$	384,653			
(In thousands)		nrsco Metals nerals Segment	Н	Iarsco Industrial Segment		ember 30, 2018		Corporate	Co	nsolidated Totals			
Primary Geographical Markets (a):		icruis segment		<u> </u>		eo rum segmene		Corporate		isomunica Totals			
North America	\$	229,771	\$	254,556	\$	150,775	\$	74	\$	635,176			
Western Europe		291,742		_		38,481		_		330,223			
Latin America (b)		115,011		15,019		3,294		_		133,324			
Asia-Pacific		110,855		_		17,362		_		128,217			
Middle East and Africa		36,073		_		_		_		36,073			
Eastern Europe		22,472		_		_		_		22,472			
Total Revenues (c)	\$	805,924	\$	269,575	\$	209,912	\$	74	\$	1,285,485			
Key Product and Service Groups:													
On-site services and material logistics, product quality improvement and resource recovery for iron, steel and metals manufacturing; as well as value- added environmental solutions for industrial coproducts	\$	805,924	\$	_	\$	_	\$	_	\$	805,924			
Railway track maintenance services and equipment		_		_		209,912		_		209,912			
Air-cooled heat exchangers		_		144,936		_		_		144,936			
Industrial grating and fencing products				94,325				_		94,325			
		_		J 4 ,J2J						3 .,5=5			
Heat transfer products		_		30,314		_		<u> </u>		30,314			
		_ _ _				_		— 74					

Nine Months Ended September 30, 2017

(In thousands)	arsco Metals nerals Segment	I	Harsco Industrial Segment		Harsco Rail Segment		Corporate		onsolidated Totals
Primary Geographical Markets (a):									
North America	\$ 208,317	\$	197,776	\$	130,010	\$	107	\$	536,210
Western Europe	278,717		_		26,866		_		305,583
Latin America (b)	119,434		16,916		1,991		_		138,341
Asia-Pacific	103,306		3,074		13,849		_		120,229
Middle East and Africa	31,358		_		_		_		31,358
Eastern Europe	20,371		_		_		_		20,371
Total Revenues (c)	\$ 761,503	\$	217,766	\$	172,716	\$	107	\$	1,152,092
Key Product and Service Groups:									
On-site services and material logistics, product quality improvement and resource recovery for iron, steel and metals manufacturing; as well as value- added environmental solutions for industrial coproducts	\$ 761,503	\$	_	\$	_	\$	_	\$	761,503
Railway track maintenance services and equipment	_		_		172,716		_		172,716
Air-cooled heat exchangers	_		102,483		_		_		102,483
Industrial grating and fencing products	_		86,952		_		_		86,952
Heat transfer products	_		28,331				_		28,331
General Corporate	_		_		_		107		107
Total Revenues (c)	\$ 761,503	\$	217,766	\$	172,716	\$	107	\$	1.152.092

(a) Revenues are attributed to individual countries based on the location of the facility generating the revenue.

b) Includes Mexico

The Company may receive payments in advance of earning revenue, which are treated as Advances on contracts on the Condensed Consolidated Balance Sheets. The Company may recognize revenue in advance of being able to contractually invoice the customer, which is treated as Contract assets on the Condensed Consolidated Balance Sheet. Contract assets are transferred to Trade accounts receivable, net when right to payment becomes unconditional. Contract assets and Contract liabilities are reported as a net position, on a contract-by-contract basis, at the end of each reporting period. These instances are primarily related to the Harsco Rail Segment and air-cooled heat exchangers business of the Harsco Industrial Segment.

The following table reflects Contract assets and Advances on contracts:

(In thousands)	Septen	ber 30, 2018	Dece	mber 31, 2017
Contract assets:				
Current portion of contract assets	\$	27,870	\$	_
Contract assets		3,566		_
Total contract assets	\$	31,436	\$	_
Advances on contracts:				
Current portion of advances on contracts	\$	43,682	\$	117,958
Advances on contracts		10,322		_
Total advances on contracts	\$	54,004	\$	117,958

The increase in Contract assets and decrease in Advances on contracts is primarily attributable to the initial adoption of the FASB issued changes related to revenue recognition as well as the Altek acquisition. See Note 2, Recently Adopted and Recently Issued Accounting Standards for additional information.

⁽c) The Company has adopted the new revenue recognition standard utilizing the modified retrospective transition method, including use of practical expedients. Comparative information has not been restated and continues to be reported under U.S. GAAP in effect for those periods. See Note 2, Recently Adopted and Recently Issued Accounting Standards for additional information.

The Company provides assurance type warranties primarily for product sales in the Harsco Industrial and Harsco Rail Segments. These warranties are typically not priced or negotiated separately (there is no option to separately purchase the warranty) or the warranty does not provide customers with a service in addition to the assurance that the product complies with agreed-upon specifications. Accordingly, such warranties do not represent separate performance obligations. See Note 1, Summary of Significant Accounting Policies, to the Consolidated Financial Statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2017 for additional information on warranties.

The Company has elected to utilize the following practical expedients on an ongoing basis as part of the adoption:

- The Company has not adjusted the promised amount of consideration for the effects of a significant financing component if the Company expects, at
 contract inception, that the period between when the Company transfers the promised good or services to the customer and when the customer pays
 for that good or service would be one year or less; and
- The Company has elected to exclude disclosures related to unsatisfied performance obligations where the related contract has a duration of one year
 or less; or where the consideration is entirely variable. Accordingly, the Company's disclosure related to unsatisfied performance obligations is
 limited to the railway track maintenance equipment in the Harsco Rail Segment and the fixed portion of fees related to metals services in the Harsco
 Metals & Minerals Segment.

Taxes assessed by governmental authorities that are both imposed on and concurrent with a specific revenue-producing transaction, that are collected by the Company from a customer, are excluded from revenue. Additionally, in certain contracts, the Company facilitates shipping and handling activities after control has transferred to the customer. The Company has elected to record all shipping and handling activities as costs to fulfill a contract. In situations where the shipping and handling costs have not been incurred at the time revenue is recognized, the respective shipping and handling costs are accrued.

15. Other (Income) Expenses, Net

The major components of this Condensed Consolidated Statements of Operations caption are as follows:

	Three Moi Septen			Nine Months Ended September 30					
(In thousands)	 2018	iii)Ci .	2017	2018			2017		
Employee termination benefit costs	\$ 1,037	\$	2,536	\$	3,249	\$	4,947		
Net gains (a)	(1,262)		(4,821)		(2,359)		(4,815)		
Other costs to exit activities	11		327		475		495		
Impaired asset write-downs	_		539		113		820		
Contingent consideration adjustments	412		_		412		_		
Other	430		182		(320)		282		
Other (income) expenses, net	\$ 628	\$	(1,237)	\$	1,570	\$	1,729		

⁽a) Net gains result from the sales of redundant properties (primarily land, buildings and related equipment) and non-core assets.

The caption, Other, above includes the adjustment to previously accrued amounts related to Other (income) expenses, net for which the ultimate settlement of such liability was less than previous estimates.

16. Components of Accumulated Other Comprehensive Loss

Accumulated other comprehensive loss is included in the Condensed Consolidated Statements of Equity. The components of Accumulated other comprehensive loss, net of the effect of income taxes, and activity for the nine months ended September 30, 2017 and 2018 was as follows:

	Components of Accumulated Other Comprehensive Income (Loss) - Net of Tax										
(In thousands)	For	Cumulative Foreign Exchange Translation Adjustments		ective Portion of Derivatives Designated as Hedging Instruments	Cumulative Unrecognized Actuarial Losses on Pension Obligations			Unrealized Gain (Loss) on Marketable Securities			Total
Balance at December 31, 2016	\$	(144,534)	\$	(1,089)		\$	(461,094)	\$	(5)	\$	(606,722)
Other comprehensive income (loss) before reclassifications		42,391 _(a)		1,133 _{(b}	o)		(31,600) _(a)		11		11,935
Amounts reclassified from accumulated other comprehensive loss, net of tax		_		338			15,133		_		15,471
Total other comprehensive income (loss)		42,391		1,471			(16,467)		11		27,406
Other comprehensive loss attributable to noncontrolling interests		(2,235)		_			_		_		(2,235)
Other comprehensive income (loss) attributable to Harsco Corporation		40,156		1,471			(16,467)		11		25,171
Balance at September 30, 2017	\$	(104,378)	\$	382		\$	(477,561)	\$	6	\$	(581,551)

	Components of Accumulated Other Comprehensive Income (Loss) - Net of Tax										
(In thousands)				ctive Portion of Derivatives esignated as Hedging nstruments	Α	Cumulative Unrecognized Actuarial Losses on Pension Obligations	Unrealized Gain (Loss) on Marketable Securities			Total	
Balance at December 31, 2017	\$	(111,567)	\$	808	\$	(435,840)	\$	17	\$	(546,582)	
Adoption of new accounting standard (c)		_		(1,520)		_		_		(1,520)	
Balance at January 1, 2018		(111,567)		(712)		(435,840)		17		(548,102)	
Other comprehensive income (loss) before reclassifications		(40,157) _(a)		6,055 _(b)		9,970 _(a)		(19)		(24,151)	
Amounts reclassified from accumulated other comprehensive loss, net of tax		_		26		14,324		_		14,350	
Total other comprehensive income (loss)		(40,157)		6,081		24,294		(19)		(9,801)	
Other comprehensive income attributable to noncontrolling interests		2,612		_		_		_		2,612	
Other comprehensive income (loss) attributable to Harsco Corporation		(37,545)		6,081		24,294		(19)		(7,189)	
Balance at September 30, 2018	\$	(149,112)	\$	5,369	\$	(411,546)	\$	(2)	\$	(555,291)	

⁽a) Principally foreign currency fluctuation.
(b) Net change from periodic revaluations.
(c) Represents the opening balance sheet adjustment to retained earnings related to the adoption of the revenue recognition standard adopted by the Company on January 1, 2018. See Note 2, Recently Adopted and Recently Issued Accounting Standards, for additional details.

Amounts reclassified from accumulated other comprehensive loss are as follows:

		Three Mo	nths I	Ended		Nine Mon	ths Ende	_			
(In thousands)	Sept	ember 30 2018	S	September 30 2017	Sej	September 30 September 30 2018 2017			Affected Caption in the Condensed Consolidated Statements of Operations		
Amortization of cash flow hedging in	strume	nts:									
Foreign currency exchange forward contracts	\$	(3)	\$	_	\$	(112)	\$	(189)	Product revenues		
Foreign currency exchange forward contracts		_		_		_		4	Cost of services and products sold		
Cross-currency interest rate swaps		312		252		960		745	Interest expense		
Interest rate swaps		(367)		_		(602)		_	Interest expense		
Total before tax		(58)		252		246		560			
Tax expense		(13)		(99)		(220)		(222)			
Total reclassification of cash flow hedging instruments, net of tax	\$	(71)	\$	153	\$	26	\$	338			
Amortization of defined benefit pens	ion item	ıs (d):									
Recognized losses	\$	5,039	\$	5,558	\$	15,173	\$	16,536	Defined benefit pension income (expense)		
Recognized prior-service costs		(37)		56		(113)		163	Defined benefit pension income (expense)		
Settlement/curtailment losses		_		_		166		_	Defined benefit pension income (expense)		
Total before tax		5,002		5,614		15,226		16,699			
Tax benefit		(289)		(523)		(902)		(1,566)			
Total reclassification of defined benefit pension items, net of tax	\$	4,713	\$	5,091	\$	14,324	\$	15,133			

⁽d) These accumulated other comprehensive loss components are included in the computation of net periodic pension costs. See Note 8, Employee Benefit Plans, for additional details.

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

The following discussion should be read in conjunction with the accompanying unaudited condensed consolidated financial statements as well as the audited consolidated financial statements of Harsco Corporation (the "Company"), including the notes thereto, included in the Company's Annual Report on Form 10-K for the year ended December 31, 2017 which includes additional information about the Company's critical accounting policies, contractual obligations, practices and the transactions that support the financial results, and provides a more comprehensive summary of the Company's outlook, trends and strategies for 2018 and beyond.

Certain amounts included in Item 2 of this Quarterly Report on Form 10-Q are rounded in millions and all percentages are calculated based on actual amounts. As a result, minor differences may exist due to rounding.

Forward-Looking Statements

The nature of the Company's business and the many countries in which it operates subject it to changing economic, competitive, regulatory and technological conditions, risks and uncertainties. In accordance with the "safe harbor" provisions of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, the Company provides the following cautionary remarks regarding important factors that, among others, could cause future results to differ materially from the results contemplated by forward-looking statements, including the expectations and assumptions expressed or implied herein. Forward-looking statements contained herein could include, among other things, statements about management's confidence in and strategies for performance; expectations for new and existing products, technologies and opportunities; and expectations regarding growth, sales, cash flows, and earnings. Forward-looking statements can be identified by the use of such terms as "may," "could," "expect," "anticipate," "intend," "believe," "likely," "estimate," "plan" or other comparable terms.

Factors that could cause actual results to differ, perhaps materially, from those implied by forward-looking statements include, but are not limited to: (1) changes in the worldwide business environment in which the Company operates, including general economic conditions; (2) changes in currency exchange rates, interest rates, commodity and fuel costs and capital costs;(3) changes in the performance of equity and bond markets that could affect, among other things, the valuation of the assets in the Company's pension plans and the accounting for pension assets, liabilities and expenses; (4) changes in governmental laws and regulations, including environmental, occupational health and safety, tax and import tariff standards; (5) market and competitive changes, including pricing pressures, market demand and acceptance for new products, services and technologies; (6) the Company's inability or failure to protect its intellectual property rights from infringement in one or more of the many countries in which the Company operates; (7) failure to effectively prevent, detect or recover from breaches in the Company's cybersecurity infrastructure; (8) unforeseen business disruptions in one or more of the many countries in which the Company operates due to political instability, civil disobedience, armed hostilities, public health issues or other calamities; (9) disruptions associated with labor disputes and increased operating costs associated with union organization; (10) the seasonal nature of the Company's business; (11) the Company's ability to successfully enter into new contracts and complete new acquisitions or strategic ventures in the time-frame contemplated, or at all; (12) the integration of the Company's strategic acquisitions; (13) the amount and timing of repurchases of the Company's common stock, if any; (14) the outcome of any disputes with customers, contractors and subcontractors; (15) the financial condition of the Company's customers, including the ability of customers (especially those that may be highly leveraged and those with inadequate liquidity) to maintain their credit availability; (16) implementation of environmental remediation matters; (17) risk and uncertainty associated with intangible assets; and (18) other risk factors listed from time to time in the Company's SEC reports. A further discussion of these, along with other potential risk factors, can be found in Part I, Item 1A, "Risk Factors," of the Company's Annual Report on Form 10-K for the year ended December 31, 2017 and Part II, Item 1A, Risk Factors herein, The Company cautions that these factors may not be exhaustive and that many of these factors are beyond the Company's ability to control or predict. Accordingly, forward-looking statements should not be relied upon as a prediction of actual results. The Company undertakes no duty to update forward-looking statements except as may be required by law.

Executive Overview

The Company is a diversified, multinational provider of industrial services and engineered products serving global industries that are fundamental to worldwide economic growth and infrastructure development. The Company's operations consist of three reportable segments: Harsco Metals & Minerals, Harsco Industrial and Harsco Rail. In general, each of the Company's segments are among the market leaders in their respective sectors. The Harsco Metals & Minerals Segment operates primarily under long-term contracts, providing critical services and support to the steelmaking process; and environmental and zero waste solutions for manufacturing by-products within the metals industry. The Harsco Industrial Segment is a supplier of custom-engineered and manufactured air-cooled heat exchangers that support the processing and distribution of natural gas and downstream refined products; manufactures a full range of metal bar grating configurations, used mainly in industrial flooring, as well as safety and security applications; and also manufactures energy-efficient heat transfer products such as boilers and water heaters, for various commercial and industrial applications. The Harsco Rail Segment is a provider of highly engineered maintenance equipment, after-market parts and safety and diagnostic systems which support railroad and transit customers worldwide. The Company has locations in approximately 30 countries, including the U.S. The Company was incorporated in 1956.

Highlights from the third quarter and nine months ended September 30, 2018 included (Refer to the discussion of segment and consolidated results included within Results of Operations below, as well as Liquidity and Capital Resources, for additional information pertaining to the key drivers impacting these highlights):

- Revenues for the third quarter and first nine months of 2018 increased approximately 16% and 12%, respectively, compared with the third quarter and first nine months of 2017. The primary drivers for these increases were higher demand and volumes across all businesses.
- Operating income from continuing operations for the third quarter and first nine months of 2018 increased approximately 65% and 38%, respectively, compared with the third quarter and first nine months of 2017. The primary driver for these increases were improved operating results across all businesses. In addition, operating results were positively affected by a \$3.2 million adjustment to previously accrued amounts related to the disposal of certain slag material in Latin America due to obtaining the necessary permits; the impact of a provision for bad debt expense of \$4.6 million and gain on sale of property of approximately \$4 million recorded during 2017 which did not repeat during 2018.
- Diluted earnings per common share from continuing operations attributable to Harsco Corporation for the third quarter and first nine months of 2018 were \$0.40 and \$1.09, respectively, an increase of approximately 150% and 118%, respectively, compared with the third quarter and first nine months of 2017. The primary drivers for the increase were improved operating results and a decrease in interest expense. The decrease in interest expense is due to the repricing of the Company's Senior Secured Credit Facility in both December 2017 and June 2018. Additionally, the Company's effective tax rate from continuing operations was positively affected by an \$8.3 million tax benefit arising from the adjustment to certain existing deferred tax asset valuation allowances as the result of the Altek acquisition, as well as changes in U.S. tax law.
- Cash flows from operating activities for the first nine months of 2018 was \$95.0 million, an increase of approximately 15% compared with the first nine months of 2017. The primary driver for this increase was higher net cash income.
- In May 2018, the Company acquired Altek Europe Holdings Limited and its affiliated entities (collectively, "Altek"), a U.K.-based manufacturer of market leading products that enable aluminum producers and recyclers to manage and efficiently extract value from critical waste streams, reduce waste generation and improve operating productivity. See Note 3, Acquisitions in Part I, Item 1, Financial Statements. The Company incurred acquisition related costs of approximately \$1 million related to Altek.

Looking forward, the Company maintains a positive outlook across all businesses. The Company's view for the remainder of 2018 and beyond is supported by the below factors, which should be considered in the context of other risks, trends and strategies in the Company's Annual Report on Form 10-K for the year ended December 31, 2017:

Markets served by the Harsco Metals & Minerals Segment continued to maintain recent improvements in customer steel production and higher
commodity volumes and prices. Increased short-cycle ad-hoc services provided to existing steel mill customers are expected to positively impact
results in 2018. Additionally, the impact of new sites (or contracts), lower operating costs achieved through improvement initiatives and increased
contributions from the Company's industrial abrasives, metal additives and roofing granules business are expected to positively impact results in
2018.

- The Harsco Industrial Segment's air-cooled heat exchangers business continues to be positively impacted by fundamental improvements within
 energy markets. Bookings for this business have increased significantly in recent quarters. Additionally, increased demand for metal grating and heat
 transfer products, new product innovations and manufacturing efficiencies are also anticipated to have a positive impact within this segment during
 2018
- Continued growth, market penetration and investment within after-market parts and Protran Technology are expected to support improved results in the Harsco Rail Segment. The Company is also anticipating continued improvement in demand for original equipment from North American railroads following a period of decreased demand in recent years.
- Corporate spending is now expected to decrease slightly when compared with 2017, while interest expense is forecasted to decline meaningfully following the repricing of the Company's Senior Secured Credit Facility in both December 2017 and June 2018.
- The Company expects its operational effective income tax rate to approximate 26% to 28% in 2018, representing a significant decline relative to 2017 as a result of recent U.S. tax reform.

Results of Operations

Segment Results

	Three Months Ended			nded	Nine Months Ended			
		Sept 30				Sept 30		
(In millions, except percentages)		2018		2017		2018		2017
Revenues:								
Harsco Metals & Minerals	\$	268.9	\$	255.2	\$	805.9	\$	761.5
Harsco Industrial		93.9		78.3		269.6		217.8
Harsco Rail		82.7		51.1		209.9		172.7
Total Revenues	\$	445.5	\$	384.7	\$	1,285.5	\$	1,152.1
Operating Income (Loss):								
Harsco Metals & Minerals	\$	29.3	\$	23.6	\$	92.7	\$	80.8
Harsco Industrial		14.0		13.0		40.6		25.1
Harsco Rail		19.0		4.4		29.6		18.8
Corporate		(5.2)		(6.3)		(15.6)		(18.3)
Total Operating Income:	\$	57.1	\$	34.6	\$	147.3	\$	106.4
Operating Margins:				_		_		
Harsco Metals & Minerals		10.9%		9.3%		11.5%		10.6%
Harsco Industrial		14.9		16.5		15.0		11.5
Harsco Rail		23.0		8.6		14.1		10.9
		12.8%		9.0%		11.5%		9.2%

Harsco Metals & Minerals Segment:

		September 30, 2018					
Significant Effects on Revenues (In millions)	Three Mo	nths Ended	Nine M	Ionths Ended			
Revenues — 2017	\$	255.2	\$	761.5			
Net effects of price/volume changes, primarily attributable to volume changes.		16.1		33.3			
Impact of foreign currency translation.		(10.2)		9.2			
Effect of Altek acquisition.		5.0		6.1			
Net impact of new and lost contracts.		2.8		(4.2)			
Revenues — 2018	\$	268.9	\$	805.9			

Factors Positively Affecting Operating Income:

- Overall, steel production by customers under services contracts, including the impact of new and exited contracts for first nine months of 2018
 increased modestly. Also, operating income was positively affected by increased short-cycle ad-hoc services provided to steel mill customers under
 existing contracts.
- The net of new and lost contracts increased operating income by approximately \$1 million and \$3 million, respectively, during the third quarter and first nine months of 2018 compared with the same periods in prior year.

- Operating results for the third quarter and first nine months of 2018 were positively affected by improved profitability in the Company's nickel-related sites partially due to increased nickel prices; and the metal additives businesses. Nickel prices increased 33% and 38%, respectively, for the third quarter and first nine months of 2018 compared with the same periods in prior year.
- Operating results for the third quarter and first nine months of 2018 were positively affected by \$4.6 million in bad debt expense, related to an Australian customer in voluntary administration, which occurred in the prior year and did not repeat during 2018.
- Operating results for the first nine months of 2018 were positively affected by a \$3.2 million reduction to previously accrued amounts related to the disposal of certain slag material in Latin America due to obtaining the necessary permits.
- Foreign currency translation increased operating income by \$1.5 million for the first nine months of 2018.

Factors Negatively Impacting Operating Income:

- Moderately higher selling, general and administrative costs due to compensation expense and higher professional fees to support and execute the Company's growth strategies.
- Costs associated with the Altek acquisition of approximately \$1 million for the first nine months of 2018.
- Foreign currency translation decreased operating income by \$0.9 million for the third quarter of 2018.

Harsco Industrial Segment:

	September 30, 2018			
Significant Effects on Revenues (In millions)	Three Mo	nths Ended	Nine Months Ended	
Revenues — 2017	\$	78.3	\$	217.8
Net effects of price/volume changes, primarily attributable to volume changes.		15.9		51.8
Impact of foreign currency translation.		(0.3)		_
Revenues — 2018	\$	93.9	\$	269.6

Factors Positively Affecting Operating Income:

- Higher overall volumes in the air-cooled heat exchanger business and a favorable product mix, resulting in increased operating income during the third quarter and first nine months of 2018 compared with the same periods in prior year.
- A favorable sales mix and higher prices led to increased operating income in the industrial grating businesses.

Factors Negatively Impacting Operating Income:

- Moderately higher selling, general and administrative costs for the first nine months of 2018 resulting primarily from increased commissions due to increased volumes in the air-cooled heat exchanger business.
- Operating income was negatively impacted by a gain on sale of property of approximately \$4 million in the third quarter of 2017 which did not repeat during 2018.

Harsco Rail Segment:

	September 30, 2018			
Significant Effects on Revenues (In millions)	Three Mon	ths Ended	Nine Mo	nths Ended
Revenues — 2017	\$	51.1	\$	172.7
Net effect of price/volume changes, primarily attributable to volume changes.		32.0		35.7
Impact of foreign currency translation.		(0.4)		1.5
Revenues — 2018	\$	82.7	\$	209.9

Factors Positively Affecting Operating Income:

- A favorable mix and increased demand for after-market part sales increased operating income during the third quarter and first nine months of 2018 compared with the same periods in the prior year.
- Improving demand for machine sales increased operating income during the third quarter of 2018.

Factors Negatively Impacting Operating Income:

- Lower contract service volumes decreased operating income in the third quarter and first nine months of 2018 compared with the same periods in prior.
- Increased selling, general and administrative expenses for the first nine months of 2018 primarily related to higher compensation expense for business growth.

- Increased research and development costs related to certain product improvements.
- Additional forward contract loss provision related to the Company's first of two contracts, which is nearing completion, with the federal railway
 system of Switzerland of \$1.8 million, during the first quarter of 2018, resulting from incurring actual costs to complete in excess of originally
 estimated costs.

Consolidated Results

	September 30								
	Three Months Ended					Nine Months Ended			
(In millions, except per share amounts)		2018		2017		2018	2017		
Total revenues	\$	445.5	\$	384.7	\$	1,285.5	\$	1,152.1	
Cost of services and products sold		326.7		290.3		957.0		872.6	
Selling, general and administrative expenses		59.3		60.0		175.3		168.3	
Research and development expenses		1.7		0.9		4.4		3.1	
Other (income) expenses, net		0.6		(1.2)		1.6		1.7	
Operating income from continuing operations		57.1		34.6		147.3		106.4	
Interest income		0.6		0.6		1.6		1.6	
Interest expense		(9.7)		(12.1)		(29.2)		(36.2)	
Defined benefit pension income (expense)		0.9		(0.7)		2.7		(2.1)	
Loss on early extinguishment of debt		(0.1)		_		(1.2)		_	
Income tax expense		(13.8)		(8.3)		(24.0)		(25.8)	
Income from continuing operations		35.0		14.2		97.2		44.0	
Loss from discontinued operations		(0.3)		(0.4)		(0.2)		(0.3)	
Net income		34.7		13.8		96.9		43.7	
Total other comprehensive income (loss)		1.2		10.9		(9.8)		27.4	
Total comprehensive income		35.9		24.7		87.1		71.1	
Diluted earnings per common share from continuing operations									
attributable to Harsco Corporation common stockholders		0.40		0.16		1.09		0.50	
Effective income tax rate for continuing operations		28.3%		36.9%		19.8%		36.9%	

Comparative Analysis of Consolidated Results

Revenues

Revenues for the third quarter of 2018 increased \$60.8 million or 15.8% from the third quarter of 2017. Revenues for the first nine months of 2018 increased \$133.4 million or 11.6% from the first nine months of 2017. Foreign currency translation decreased revenues by approximately \$11 million for the third quarter of 2018 and increased revenues by approximately

\$11 million the first nine months of 2018, compared with the same periods in the prior year. Refer to the segment results discussion above for information pertaining to factors positively affecting and negatively impacting revenues.

Cost of Services and Products Sold

Cost of services and products sold for the third quarter of 2018 increased \$36.4 million or 12.5% from the third quarter of 2017. Cost of services and products sold for the first nine months of 2018 increased \$84.4 million or 9.7% from the nine months ended September 30, 2017. Changes in cost of services and products sold for the periods presented were attributable to the following significant items:

	September 30, 2018				
(In millions)	Three M	Ionths Ended	Nine M	Ionths Ended	
Increased costs due to changes in revenues (exclusive of the effects of foreign currency translation and including					
fluctuations in commodity costs included in selling prices).	\$	43.9	\$	74.4	
Impact of foreign currency translation.		(8.6)		9.3	
Other.		1.1		0.7	
Total change in cost of services and products sold — 2018 vs. 2017	\$	36.4	\$	84.4	

Selling, General and Administrative Expenses

Selling, general and administrative expenses for the third quarter of 2018 were consistent with the comparable prior year period decreasing \$0.7 million or 1.2% from the third quarter of 2017. Selling, general and administrative expenses for the first nine months of 2018 increased \$7.0 million or 4.2% from the first nine months of 2017. This increase was primarily related to increased compensation expense; increased professional fees needed to support and execute the Company's growth strategy; and increased broker commissions in the Company's air-cooled heat exchange business; partially offset by a decrease in bad debt expense in the Harsco Metals & Minerals Segment due to bad debt expense in 2017 not repeating.

Other (Income) Expenses, Net

The major components of this Condensed Consolidated Statements of Operations caption are as follows:

	Three Months Ended			Nine Months Ended				
		Septen	nber (30	September 30)
(In thousands)		2018		2017		2018		2017
Employee termination benefit costs	\$	1,037	\$	2,536	\$	3,249	\$	4,947
Net gains (a)		(1,262)		(4,821)		(2,359)		(4,815)
Other costs to exit activities		11		327		475		495
Impaired asset write-downs		_		539		113		820
Contingent consideration adjustments		412		_		412		_
Other		430		182		(320)		282
Other (income) expenses, net	\$	628	\$	(1,237)	\$	1,570	\$	1,729

⁽a) Net gains result from the sales of redundant properties (primarily land, buildings and related equipment) and non-core assets.

Additional information on Other (income) expenses, net is included in Note 15, Other Expenses, Net in Part I, Item 1, Financial Statements.

Interest Expense

Interest expense during the third quarter and the first nine months of 2018 decreased \$2.5 million and \$6.9 million, compared with the third quarter and the first nine months of 2017. The decrease primarily relates to reduced interest rates for the Company's Senior Secured Credit Facility, which was amended in December 2017 and June 2018.

Defined Benefit Pension Income (Expense)

Defined benefit pension income for the third quarter of 2018 was \$0.9 million, compared with defined benefit pension expense of \$0.7 million for the third quarter of 2017. Defined benefit pension income for the first nine months of 2018 was \$2.7 million, compared with defined benefit pension expense of \$2.1 million for the first nine months of 2017. The change primarily relates to improved returns on pension plan assets.

Loss on Early Extinguishment of Debt

In June 2018, the Company amended the existing Senior Secured Credit Facility in order to, among other things, reduce the interest rate applicable to the Term Loan Facility and to increase the limit of the Revolving Credit Facility. As a result, a charge of \$1.0 million was recorded during the second quarter of 2018 consisting principally of fees associated with the transaction and the write-off of unamortized deferred financing costs. Incremental fees associated with the transaction were recorded during the third quarter of 2018 bringing the total charge to \$1.2 million for the first nine months of 2018. See Note 7, Debt and Credit Agreements in Part I, Item 1, Financial Statements.

Income Tax Expense

Income tax expense related to continuing operations for the third quarter and nine months ended September 30, 2018 was \$13.8 million and \$24.0 million, respectively, compared with an income tax expense related to continuing operations of \$8.3 million and \$25.8 million, respectively, for the third quarter and the first nine months of 2017. Income tax expense increased primarily due to the increase in income in profitable jurisdictions and was partially offset by the changes in U.S. tax law for the three months ended September 30, 2018. For the nine months ended September 30, 2018, income tax expense moderately decreased primarily due to an \$8.3 million tax benefit arising from the adjustment to certain existing deferred tax asset valuation allowances as the result of the Altek acquisition, as well as changes in U.S. tax law, which were mostly offset by the increase in income in profitable jurisdictions.

Income from Continuing Operations

Income from continuing operations was \$35.0 million and \$97.2 million, respectively, in the third quarter and first nine months of 2018 compared with \$14.2 million and \$44.0 million, respectively, in the third quarter and first nine months of 2017. The primary driver for these increases was improved operating results across all businesses, a decrease in interest expense and a \$4.6 provision for bad debt expense recorded during 2017 which did not repeat during 2018. In addition, results for the first nine months of 2018 were positively affected by an \$8.3 million tax benefit arising from the adjustment to certain existing deferred tax asset valuation allowances as the result of the Altek acquisition and a \$3.2 million adjustment to previously accrued amounts related to the disposal of certain slag material in Latin America due to obtaining the necessary permits.

Total Other Comprehensive Income (Loss)

Total other comprehensive income was \$1.2 million in the third quarter of 2018 and total other comprehensive loss was \$9.8 million in the first nine months of 2018, compared with total other comprehensive income of \$10.9 million and \$27.4 million, respectively, in the third quarter and first nine months of 2017. The primary driver of these decreases were the net unfavorable impact of foreign currency translation due to the strengthening of the U.S. dollar against multiple currencies during the first nine months of 2018 compared to the weakening of the U.S. dollar against multiple currencies during the first nine months of 2017.

Liquidity and Capital Resources

Cash Flow Summary

The Company has sufficient financial liquidity and borrowing capacity to support the strategies within each of its businesses. The Company currently expects operational and business needs to be met by cash provided by operations supplemented with borrowings from time to time due to historical patterns of seasonal cash flow and for the funding of various projects. The Company regularly assesses capital needs in the context of operational trends and strategic initiatives.

The Company's cash flows from operating, investing and financing activities, as reflected in the Condensed Consolidated Statements of Cash Flows, are summarized in the following table:

	Nine Months Ended			1ed	
	September 30				
(In millions)		2018		2017	
Net cash provided (used) by:					
Operating activities	\$	95.0	\$	82.9	
Investing activities		(135.4)		(48.9)	
Financing activities		43.3		(44.5)	
Effect of exchange rate changes on cash and cash equivalents, including restricted cash		(4.6)		4.1	
Net change in cash and cash equivalents, including restricted cash	\$	(1.7)	\$	(6.5)	

Nine Months Ended

Net cash provided by operating activities — Net cash provided by operating activities in the first nine months of 2018 was \$95.0 million, an increase of \$12.1 million from net cash used by operating activities in the first nine months of 2017. The increase is primarily attributable to increased cash net income; partially offset by increased net working capital and the change in other assets and liabilities. The increase of net working capital primarily consisted of payments of accrued compensation and additional defined benefit pension plan contributions. The change in other assets and liabilities was due principally to the settlement of various accrued amounts.

Net cash used by investing activities — Net cash used by investing activities in the first nine months of 2018 was \$135.4 million, an increase of \$86.4 million from the net cash used by investing activities in the first nine months of 2017. The increase was primarily due to the Altek acquisition and an increase in capital expenditures, primarily in the Company's Harsco Metals & Minerals Segment in the first nine months of 2018, compared with the first nine months of 2017.

Net cash provided (used) by financing activities — Net cash provided by financing activities in the first nine months of 2018 was \$43.3 million, an increase of \$87.9 million from net cash used by financing activities in the first nine months of 2017. The change was primarily due to net cash borrowings of \$52.5 million in the first nine months of 2018 compared with net cash payments of \$37.3 million in the nine months of 2017. The increased borrowings were used to fund the Altek acquisition and the increased capital expenditures in the Harsco Metals & Minerals Segment.

Sources and Uses of Cash

The Company's principal sources of liquidity are cash provided by operations and borrowings under the Senior Secured Credit Facility, augmented by cash proceeds from asset sales. In addition, the Company has other bank credit facilities available throughout the world. The Company expects to continue to utilize all of these sources to meet future cash requirements for operations and growth initiatives.

In June 2018, the Company amended the existing Senior Secured Credit Facility in order to, among other things, reduce the interest rate applicable to the Term Loan Facility and to increase the limit of the Revolving Credit Facility. As a result of the amendments, borrowings under the Term Loan Facility now bear interest at a rate per annum of 225 basis points over the adjusted LIBOR rate and the facility limit under the Revolving Credit Facility has increased to \$500 million. As a result, a charge of \$1.0 million was recorded during the second quarter of 2018 consisting principally of fees associated with the transaction and the write-off of unamortized deferred financing costs. Incremental fees associated with the transaction were recorded during the third quarter of 2018 bringing the total charge to \$1.2 million for the first nine months of 2018.

Summary of Senior Secured Credit Facility Borrowings: (In millions)	September 30 2018]	December 31 2017
By type:				
Revolving Credit Facility	\$	101.0	\$	41.0
Term Loan Facility		543.1		545.9
Total	\$	644.1	\$	586.9
By classification:				
Current	\$	5.4	\$	5.5
Long-term		638.7		581.4
Total	\$	644.1	\$	586.9

	 September 30, 2018					
(In millions)	 Facility Limit		Outstanding Balance	Outs	tanding Letters of Credit	Available Credit
Multi-year revolving credit facility	\$ 500.0	\$	101.0	\$	30.4	\$ 368.6

The Company plans to redeploy discretionary cash on a disciplined basis for future growth opportunities, such as organic growth through higher-return service contract opportunities in attractive markets and investments, such as the recent Altek acquisition, to strengthen the technical and applied product capabilities for the Harsco Metals & Minerals Segment, and strategic investments or possible acquisitions, including in the Harsco Rail and Harsco Industrial Segments, that improve competitive positioning in core growth and technology applications and adjacent markets.

On May 2, 2018 the Company announced that the Board of Directors authorized a share repurchase program pursuant to which the Company could repurchase shares in an amount up to \$75 million. The extent to which the Company repurchases shares, and the timing of such repurchases, will depend upon a variety of factors including market conditions and other corporate considerations as determined by the Company's management. The repurchase program may be suspended or discontinued at any time.

The Company did not purchase any shares of common stock under this program during the quarter ended September 30, 2018. Subsequent to the end of the quarter ended September 30, 2018 and through October 30, 2018, the Company has purchased 550,508 shares of the Company's common stock, at an average price of \$23.95 per share.

Debt Covenants

The Senior Secured Credit Facility contains a consolidated net debt to consolidated adjusted earnings before interest, tax depreciation and amortization ("EBITDA") ratio covenant, which is not to exceed 3.75 to 1.0, and a minimum consolidated adjusted EBITDA to consolidated interest charges ratio covenant, which is not to be less than 3.0 to 1.0. The consolidated net debt to consolidated adjusted EBITDA ratio covenant is reduced to 3.5 to 1.0 after December 31, 2018. At

September 30, 2018, the Company was in compliance with these covenants, as the total net leverage ratio was 1.8 to 1.0 and total interest coverage ratio was 8.1 to 1.0. Based on balances and covenants in effect at September 30, 2018, the Company could increase net debt by \$637.7 million, and still be in compliance with these debt covenants. Alternatively, keeping all other factors constant, the Company's adjusted EBITDA could decrease by \$170.0 million and the Company would still be within these debt covenants. The Company expects to continue to be in compliance with these debt covenants for at least the next twelve months. In addition, the Senior Secured Credit Facility imposes certain restrictions including, but not limited to, restrictions as to the types and amounts of debt or liens that may be incurred by the Company, limitations on dividend payments and certain acquisitions by the Company.

Cash Management

The Company has various cash management systems throughout the world that centralize cash in various bank accounts where it is economically justifiable and legally permissible to do so. These centralized cash balances are then redeployed to other operations to reduce short-term borrowings and to finance working capital needs or capital expenditures. Due to the transitory nature of cash balances, they are normally invested in bank deposits that can be withdrawn at will or in very liquid short-term bank time deposits and government obligations. The Company's policy is to use the largest banks in the various countries in which the Company operates. The Company monitors the creditworthiness of banks and when appropriate will adjust banking operations to reduce or eliminate exposure to less creditworthy banks. The Company plans to continue the strategy of targeted, prudent investing for strategic purposes for the foreseeable future, and to make more efficient use of existing investments.

At September 30, 2018, the Company's consolidated cash and cash equivalents included \$60.3 million held by non-U.S. subsidiaries. At September 30, 2018, approximately 1% of the Company's consolidated cash and cash equivalents had regulatory restrictions that would preclude the transfer of funds with and among subsidiaries. Non-U.S. subsidiaries also held \$17.0 million of cash and cash equivalents in consolidated strategic ventures. The strategic venture agreements may require strategic venture partner approval to transfer funds with and among subsidiaries. While the Company's remaining non-U.S. cash and cash equivalents can be transferred with and among subsidiaries, the majority of these non-U.S. cash balances will be used to support the ongoing working capital needs and continued growth of the Company's non-U.S. operations.

Recently Adopted and Recently Issued Accounting Standards

Information on recently adopted and recently issued accounting standards is included in Note 2, Recently Adopted and Recently Issued Accounting Standards, in Part I, Item 1, Financial Statements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market risks have not changed significantly from those disclosed in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2017.

ITEM 4. CONTROLS AND PROCEDURES

The Company's adoption of ASC 606, Revenue from Contracts with Customers, required the implementation of new accounting processes, which changed the Company's internal controls over revenue recognition. The Company has completed the design of these controls and they have been implemented as of September 30, 2018. Other than these changes, there have been no changes in internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting during the third quarter and first nine months of 2018.

Based on the evaluation required by Securities Exchange Act Rules 13a-15(b) and 15d-15(b), the Company's management, including the Chief Executive Officer and Chief Financial Officer, conducted an evaluation of the effectiveness of disclosure controls and procedures, as defined in Securities Exchange Act Rules 13a-15(e) and 15d-15(e), at September 30, 2018. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the disclosure controls and procedures were effective at September 30, 2018.

PART II — OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

Information on legal proceedings is included in Note 10, Commitments and Contingencies, in Part I, Item 1, Financial Statements.

ITEM 1A. RISK FACTORS

The Company's risk factors as of September 30, 2018 have not changed materially from those described in Part 1, Item 1A, "Risk Factors," of the Company's Annual Report on Form 10-K for the year ended December 31, 2017.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

On May 2, 2018, the Company announced that the Board of Directors adopted a share repurchase program authorizing the Company to repurchase up to \$75,000,000 of outstanding shares of the Company's common stock through April 24, 2021. The Company did not purchase any shares of common stock under this program during the quarter ended September 30, 2018. When and if appropriate, repurchases are made in open market transactions, depending on market conditions. Share repurchases may not occur and may be discontinued at any time.

ITEM 6. EXHIBITS

The following exhibits are included as part of this report by reference:

Exhibit Number	Description
<u>31.1</u>	Certification Pursuant to Rule 13a-14(a) or 15d-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (Chairman, President and Chief Executive Officer).
<u>31.2</u>	Certification Pursuant to Rule 13a-14(a) or 15d-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (Chief Financial Officer).
<u>32</u>	Certifications Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Chairman, President and Chief Executive Officer and Chief Financial Officer).
101.Def	Definition Linkbase Document
101.Pre	Presentation Linkbase Document
101.Lab	Labels Linkbase Document
101.Cal	Calcuation Linkbase Document
101.Sch	Schema Document
101.Ins	Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.

SIGNATURES

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

		HARSCO CORPORATION
		(Registrant)
DATE	October 31, 2018	/s/ PETER F. MINAN
		Peter F. Minan
		Senior Vice President and Chief Financial Officer
		(On behalf of the registrant and as Principal Financial Officer)
DATE	October 31, 2018	/s/ SAMUEL C. FENICE
		Samuel C. Fenice
		Vice President and Corporate Controller

44

(Principal Accounting Officer)

HARSCO CORPORATION CERTIFICATION PURSUANT TO RULE 13a-14(a) OR 15d-14(a) AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, F. Nicholas Grasberger, III, certify that:

- 1. I have reviewed this Quarterly Report on Form 10-Q of Harsco 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 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.

October 31, 201	18			

/s/ F. NICHOLAS GRASBERGER, III
F. Nicholas Grasberger, III

Chairman, President and Chief Executive Officer

HARSCO CORPORATION CERTIFICATION PURSUANT TO RULE 13a-14(a) OR 15d-14(a) AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Peter F. Minan, certify that:

- 1. I have reviewed this Quarterly Report on Form 10-Q of Harsco 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 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.

October 31, 2018	

/s/ PETER F. MINAN
Peter F. Minan
Senior Vice President and Chief Financial Officer

HARSCO CORPORATION CERTIFICATIONS PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Harsco Corporation (the "Company") on Form 10-Q for the period ending September 30, 2018, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), we certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of our knowledge:

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

October 31, 2018

/s/ F. NICHOLAS GRASBERGER, III F. Nicholas Grasberger, III Chairman, President and Chief Executive Officer /s/ PETER F. MINAN

Peter F. Minan

Senior Vice President and Chief Financial Officer

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