PRAXAIR INC Form 10-Q October 27, 2016 Table of Contents

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549 **FORM 10-O** QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF $\overset{\circ}{y}_{1934}$ For the quarterly period ended September 30, 2016 OR "TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the transition period from to PRAXAIR, INC. (Exact name of registrant as specified in its charter) DELAWARE (State or other jurisdiction of incorporation) 1-11037 06-1249050 (Commission File Number) (IRS Employer Identification No.) 39 OLD RIDGEBURY ROAD, DANBURY, CT 06810-5113 (Address of principal executive offices) (Zip Code) (203) 837-2000 (Registrant's telephone number, including area code) N/A (Former name, former address and former fiscal year, if changed since last report) 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 ý No " Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (\$232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ý No " Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definitions of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act. Large accelerated filer vAccelerated filer Non-accelerated filer "Smaller reporting company" Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes " No ý

At September 30, 2016, 285,388,991 shares of common stock (\$0.01 par value) of the Registrant were outstanding.

INDEX

PART I - FINANCIAL INFORMATION

Item 1. Financial Statements

Consolidated Statements of Income - Praxair, Inc. and Subsidiaries Quarters Ended September 30, 2016	$\frac{5}{2}$
and 2015 (Unaudited)	<u>2</u>

Consolidated Statements of Income - Praxair Inc. and Subsidiaries Nine Months Ended September 30, 2016 and 2015 (Unaudited)

<u>Consolidated Statements of Comprehensive Income - Praxair, Inc. and Subsidiaries Quarters Ended</u> 5 September 30, 2016 and 2015 (Unaudited) 5

<u>Consolidated Statements of Comprehensive Income - Praxair, Inc. and Subsidiaries Nine Months Ended</u> <u>September 30, 2016 and 2015 (Unaudited)</u> <u>6</u>

<u>Condensed Consolidated Balance Sheets - Praxair, Inc. and Subsidiaries</u> September 30, 2016 and December 31, 2015 (Unaudited)

<u>Condensed Consolidated Statements of Cash Flows - Praxair, Inc. and Subsidiaries</u> Nine Months Ended September 30, 2016 and 2015 (Unaudited) <u>8</u>

Notes to Condensed Consolidated Financial Statements - Praxair, Inc. and Subsidiaries (Unaudited) 9

- Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations
- Item 3. Quantitative and Qualitative Disclosures about Market Risk
- Item 4. <u>Controls and Procedures</u>

PART II - OTHER INFORMATION

Item 1.	Legal Proceedings	<u>54</u>
Item 1A.	Risk Factors	<u>54</u>
Item 2.	Unregistered Sales of Equity Securities and Use of Proceeds	<u>54</u>
Item 3.	Defaults Upon Senior Securities	<u>54</u>
Item 4.	Mine Safety Disclosures	<u>54</u>
Item 5.	Other Information	<u>54</u>
Item 6.	Exhibits	<u>55</u>
Signature		<u>56</u>

4

7

29

53

PRAXAIR, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF INCOME (Millions of dollars, except per share data) (UNAUDITED)

-		Silu	ed Septem	ber
30,			0015	
2016			2015	
SALES \$ 2,			\$ 2,686	
Cost of sales, exclusive of depreciation and amortization 1,53	3		1,488	
Selling, general and administrative 291			281	
Depreciation and amortization 284			276	
Research and development 22			23	
Cost reduction program and other charges 100			26	
Other income (expense) - net 11			2	
OPERATING PROFIT 497			594	
Interest expense - net 43			35	
INCOME BEFORE INCOME TAXES AND EQUITY INVESTMENTS 454			559	
Income taxes 120			156	
INCOME BEFORE EQUITY INVESTMENTS 334			403	
Income from equity investments 10			10	
NET INCOME (INCLUDING NONCONTROLLING INTERESTS) 344			413	
Less: noncontrolling interests (5)	(12)
NET INCOME - PRAXAIR, INC. \$ 33	9		\$ 401	
PER SHARE DATA - PRAXAIR, INC. SHAREHOLDERS				
Basic earnings per share \$ 1.	19		\$ 1.40	
Diluted earnings per share \$ 1.	18		\$ 1.40	
Cash dividends per share \$ 0.	75		\$ 0.715	
WEIGHTED AVERAGE SHARES OUTSTANDING (000's):				
Basic shares outstanding 285,	858		285,651	
Diluted shares outstanding 288,	195		287,311	
The accompanying notes are an integral part of these financial statements.				

PRAXAIR, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF INCOME (Millions of dollars, except per share data) (UNAUDITED)

	Nine Mo Ended	onths
	Septemb	er 30,
	2016	2015
SALES	\$7,890	\$8,181
Cost of sales, exclusive of depreciation and amortization	4,382	4,534
Selling, general and administrative	873	877
Depreciation and amortization	837	831
Research and development	69	70
Cost reduction program and other charges	100	172
Other income (expense) - net	10	
OPERATING PROFIT	1,639	1,697
Interest expense - net	152	119
INCOME BEFORE INCOME TAXES AND EQUITY INVESTMENTS	1,487	1,578
Income taxes	399	449
INCOME BEFORE EQUITY INVESTMENTS	1,088	1,129
Income from equity investments	31	31
NET INCOME (INCLUDING NONCONTROLLING INTERESTS)	1,119	1,160
Less: noncontrolling interests	(25)	(35)
NET INCOME - PRAXAIR, INC.	\$1,094	\$1,125
PER SHARE DATA - PRAXAIR, INC. SHAREHOLDERS		
Basic earnings per share	\$3.83	\$3.91
Diluted earnings per share	\$3.80	\$3.88
Cash dividends per share	\$2.25	\$2.145
WEIGHTED AVERAGE SHARES OUTSTANDING (000's):		
Basic shares outstanding	285,663	287,578
Diluted shares outstanding	287,727	289,835
The accompanying notes are an integral part of these financial statements.		

PRAXAIR, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS) (Millions of dollars) (UNAUDITED)

	Quarter Ended September 30,			nber
NET INCOME (INCLUDING NONCONTROLLING INTERESTS)	2016 \$ 344		2015 \$413	
OTHER COMPREHENSIVE INCOME (LOSS)				
Translation adjustments:				
Foreign currency translation adjustments	(47)	(792)
Income taxes	8		28	
Translation adjustments	(39)	(764)
Funded status - retirement obligations (Note 11):				
Retirement program remeasurements	(11)	16	
Reclassifications to net income	18		27	
Income taxes	(2)	(10)
Funded status - retirement obligations	5		33	
Derivative instruments (Note 6):				
Current quarter unrealized gain (loss)			(1)
Reclassifications to net income			1	
Income taxes				
Derivative instruments				
TOTAL OTHER COMPREHENSIVE INCOME (LOSS)	(34)	(731)
COMPREHENSIVE INCOME (LOSS) (INCLUDING NONCONTROLLING INTERESTS)	310		(318)
Less: noncontrolling interests	(8)	5	
COMPREHENSIVE INCOME (LOSS) - PRAXAIR, INC.	\$ 302	,	\$ (313)
The accompanying notes are an integral part of these financial statements.				,

PRAXAIR, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (Millions of dollars) (UNAUDITED)

NET INCOME (INCLUDING NONCONTROLLING INTERESTS)	Nine M Ended Septer 2016 \$1,119	nb)
OTHER COMPREHENSIVE INCOME (LOSS)				
Translation adjustments:				
Foreign currency translation adjustments	392		(1,366)
Income taxes	(3)	15	
Translation adjustments	389		(1,351)
Funded status - retirement obligations (Note 11):				
Retirement program remeasurements	(35)	(7)
Reclassifications to net income	47		66	
Income taxes	(5)	(16)
Funded status - retirement obligations	7		43	
Derivative instruments (Note 6):				
Current period unrealized gain (loss)			(1)
Reclassifications to net income	1		1	
Income taxes	(1)		
Derivative instruments				
TOTAL OTHER COMPREHENSIVE INCOME (LOSS)	396		(1,308)
COMPREHENSIVE INCOME (INCLUDING NONCONTROLLING INTERESTS)	1,515		(148)
Less: noncontrolling interests	(36)	2	
COMPREHENSIVE INCOME - PRAXAIR, INC.	\$1,479	9	\$(146)
The accompanying notes are an integral part of these financial statements.				

PRAXAIR, INC. AND SUBSIDIARIES CONDENSED CONSOLIDATED BALANCE SHEETS (Millions of dollars) (UNAUDITED)

	September 30, 2016	r December 31, 2015
ASSETS	50, 2010	51, 2015
Cash and cash equivalents	\$627	\$147
Accounts receivable - net	1,699	1,601
Inventories	538	531
Prepaid and other current assets	398	347
TOTAL CURRENT ASSETS	3,262	2,626
Property, plant and equipment (less accumulated depreciation of \$12,560 in 2016 and \$11,696 in	in	
2015)	^{III} 11,635	10,998
Goodwill	3,163	2,986
Other intangible assets - net	595	568
Other long-term assets	1,231	1,141
TOTAL ASSETS	\$19,886	\$18,319
LIABILITIES AND EQUITY		
Accounts payable	\$867	\$791
Short-term debt	606	250
Current portion of long-term debt	11	6
Other current liabilities	950	846
TOTAL CURRENT LIABILITIES	2,434	1,893
Long-term debt	9,225	8,975
Other long-term liabilities	2,578	2,545
TOTAL LIABILITIES	14,237	13,413
Commitments and contingencies (Note 12)		
Redeemable noncontrolling interests (Note 14)	11	113
Praxair, Inc. Shareholders' Equity:		
Common stock \$0.01 par value, authorized - 800,000,000 shares, issued 2016 and 2015 - 383,230,625 shares	4	4
Additional paid-in capital	4,027	4,005
Retained earnings	12,686	12,229
Accumulated other comprehensive income (loss) (Note 14)		(4,596)
Less: Treasury stock, at cost (2016 - 97,841,634 shares and 2015 - 98,351,546 shares)		(7,253)
Total Praxair, Inc. Shareholders' Equity	5,245	4,389
Noncontrolling interests	393	404
TOTAL EQUITY	5,638	4,793
TOTAL LIABILITIES AND EQUITY	\$19,886	\$18,319
The accompanying notes are an integral part of these financial statements.	φ17,000	φ10,517
The decompanying notes are an integral part of these financial statements.		

PRAXAIR, INC. AND SUBSIDIARIES CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (Millions of dollars) (UNAUDITED)

Cash dividends - Praxair, Inc. shareholders $(642) (615)$ Excess tax benefit on share-based compensation $ 18$ Noncontrolling interest transactions and other $(122) (44)$ Net cash provided by (used for) financing activities $(232) (900)$ Effect of exchange rate changes on cash and cash equivalents $25 (42)$ Change in cash and cash equivalents $480 $ 10Cash and cash equivalents, beginning-of-period $147 $ 126Cash and cash equivalents, end-of-period $\$627 $ \$136		Nine M Ended Septen 2016			
Noncontrolling interests2535Net income (including noncontrolling interests)1,1191,160Adjustments to reconcile net income to net cash provided by operating activities:3139Depreciation and amortization837831831Deferred income taxes(30)2525Share-based compensation362554Working capital:(44)) (57))Accounts receivable(44)) (57))Inventory11(14))Pensial and other current assets(32)(37))Payables and accruals6(20))Pension contributions(8)(13))Long-term assets, liabilities and other59(135))Net cash provided by operating activities $(1,056)$ (1,154))Acquisitions, net of cash acquired(345)(43))Divestitures and asset sales41245)(126)Net cash used for investing activities(728)(999)))Long-term debt borrowings (repayments) - net359(126))Long-term debt payaments(642)(615))Long-term debt prayaments <td>OPERATIONS</td> <td></td> <td></td> <td></td> <td></td>	OPERATIONS				
Net income (including noncontrolling interests)1,1191,160Adjustments to reconcile net income to net cash provided by operating activities: 33 139 Depreciation and amorization 837 831 Deferred income taxes $(30 -)$ 25 Share-based compensation 36 25 Working capital: $(44 -)$ $(57 -)$ Accounts receivable $(44 -)$ $(57 -)$ Inventory $11 - (14 -)$ Prepaid and other current assets $(32 -)$ $(37 -)$ Payables and accruals $6 - (20 -)$ Pension contributions $(8 -)$ $(13 -)$ Long-term assets, liabilities and other $59 - (135 -)$ Net cash provided by operating activities $2,047 - 1,904$ INVESTING $(1,056 -)$ $(1,154 -)$ Acquisitions, net of cash acquired $(345 -)$ $(43 -)$ Divestitures and asset sales $41 - 245$ $245 -)$ Net cash used for investing activities $(1,360 -)$ $(952 -)$ FINANCING $(135 -)$ $(126 -)$ $(136 -)$ Short-term debt borrowings (repayments) - net $359 - (126 -)$ $(133 -)$ Long-term debt borrowings (repayments) - net $(133 -)$ $(728 -)$ Long-term debt borrowings (repayments) - net $(133 -)$ $(724 -)$ Long-term debt propayments - net $(122 -)$ $(44 -)$ Long-term debt propayments - net $(122 -)$ $(44 -)$ Long-term debt provings (repayments) - net $(122 -)$ $(136 -)$ Long-term debt provi	Net income - Praxair, Inc.	\$1,094	ł	\$1,125	5
Net income (including noncontrolling interests) 1,119 1,160 Adjustments to reconcile net income to net cash provided by operating activities: 7 837 Cost reduction program and other charges, net of payments 93 139 Depereciation and amortization 837 831 Deferred income taxes (30)) 25 Share-based compensation 36 25 Working capital:	Noncontrolling interests	25		35	
Adjustments to reconcile net income to net cash provided by operating activities: 33 33 Cost reduction program and other charges, net of payments 93 139 Depreciation and amortization 837 831 Deferred income taxes 30 25 Share-based compensation 36 25 Working capital: $(44 \) (57 \)$ $)$ Accounts receivable $(44 \) (57 \)$ $)$ Inventory $11 \ (14 \)$ $)$ Prepaid and other current assets $(32 \) (37 \)$ Payables and accruals $6 \ (20 \)$ Pension contributions $(8 \) (13 \)$ Long-term assets, liabilities and other $59 \ (135 \)$ Net cash provided by operating activities $2,047 \ 1,904 \)$ INVESTING $(1,056 \) (1,154 \)$ Capital expenditures $(1,056 \) (1,154 \)$ Acquisitions, net of cash acquired $345 \) (43 \)$ Divestitures and asset sales $41 \ 245 \)$ Net cash used for investing activities $109 \ 74 \)$ Inverterm debt borrowings (repayments) - net $359 \ (126 \) \)$ Long-term debt borrowings (repayments) - net $359 \ (126 \) \)$ Long-term debt borrowings (repayments) - net $359 \ (126 \) \)$ Long-term debt provendes compensation $18 \)$ Noncontrolling interest transactions and other $(122 \) \ (615 \) \)$ Long-term debt provendes compensation $18 \)$ Noncontrolling interest transactions and other $(122 \) \ (641 \) \)$ Not cash provided by (used for) financ	÷	1,119		1,160	
Cost reduction program and other charges, net of payments93139Depreciation and amortization837831Deferred income taxes(30)25Share-based compensation3625Working capital:(44)(57)Accounts receivable(44)(57)Inventory11(14)Prepaid and other current assets(32)(37)Payables and accruals6(20)Pension contributions(8)(13)Long-term assets, liabilities and other59(135)Net cash provided by operating activities2,0471,904INVESTING71245Capital expenditures(1,056)(1,154)Acquisitions, net of cash acquired(345)(43)Divestitures and asset sales41245Net cash used for investing activities(1,360)(952)FINANCING728(999))Issuances of common stock10974Long-term debt borrowings (repayments) - net359(126)Long-term debt perayments(728)(999)Issuances of common stock10974Norcontrolling interest transactions and other(122)(44)Net cash provided by (used for) financing activities(232)(900)Excess tax benefit on share-based compensation—18Noncontrolling interest transactions and other(122)(44)Net cash provided by (used for) financing activities(232)(900)Excess t					
Deferred income taxes (30) 25 Share-based compensation 36 25 Working capital: 44 (57) Accounts receivable (44) (57) Inventory 11 (14) Prepaid and other current assets (32) (37) Payables and accruals 6 (20) Pension contributions (8) (13) Long-term assets, liabilities and other 59 (135) Net cash provided by operating activities $2,047$ $1,904$ INVESTING (345) (43) $(1,56)$ Capital expenditures $(1,056)$ $(1,154)$ Acquisitions, net of cash acquired (345) (43) Divestitures and asset sales 41 245 Net cash used for investing activities $(1,360)$ (952) FINANCING (133) (704) Long-term debt borrowings (repayments) - net 359 (126) Long-term debt peroxyments (728) (999) Issuances of common stock (133) (704) Long-term debt repayments (642) (615) Excess tax benefit on share-based compensation $ 18$ Noncontrolling interest transactions and other (122) (44) Net cash provided by (used for) financing activities (232) (900) Effect of exchange rate changes on cash and cash equivalents 25 (42) Cash and cash equivalents, beginning-of-period 47 126 Cash and cash equivalents, beginning-of-period 47	Cost reduction program and other charges, net of payments	93		139	
Deferred income taxes (30) 25 Share-based compensation 36 25 Working capital: 44 (57) Accounts receivable (44) (57) Inventory 11 (14) Prepaid and other current assets (32) (37) Payables and accruals 6 (20) Pension contributions (8) (13) Long-term assets, liabilities and other 59 (135) Net cash provided by operating activities $2,047$ $1,904$ INVESTING (345) (43) $(1,56)$ Capital expenditures $(1,056)$ $(1,154)$ Acquisitions, net of cash acquired (345) (43) Divestitures and asset sales 41 245 Net cash used for investing activities $(1,360)$ (952) FINANCING (133) (704) Long-term debt borrowings (repayments) - net 359 (126) Long-term debt peroxyments (728) (999) Issuances of common stock (133) (704) Long-term debt repayments (642) (615) Excess tax benefit on share-based compensation $ 18$ Noncontrolling interest transactions and other (122) (44) Net cash provided by (used for) financing activities (232) (900) Effect of exchange rate changes on cash and cash equivalents 25 (42) Cash and cash equivalents, beginning-of-period 47 126 Cash and cash equivalents, beginning-of-period 47	Depreciation and amortization	837		831	
Working capital:Accounts receivable $(44 \) (57 \)$ Inventory11 (14)Prepaid and other current assets $(32 \) (37 \)$ Payables and accuals6 (20)Pension contributions $(8 \) (13 \)$ Long-term assets, liabilities and other59 (135)Net cash provided by operating activities $2,047 \ 1,904$ INVESTING7Capital expenditures $(1,056 \) (1,154 \)$ Acquisitions, net of cash acquired $(345 \) (43 \)$ Divestitures and asset sales41 245Net cash used for investing activities $(1,360 \) (952 \)$ FINANCING59Short-term debt borrowings (repayments) - net359 (126 \)Long-term debt repayments $(728 \) (999 \)$ Issuances of common stock $(133 \) (704 \)$ Cash dividends - Praxair, Inc. shareholders $(642 \) (615 \)$ Excess tax benefit on share-based compensation—Net cash provided by (used for) financing activities $(232 \) (900 \)$ Excess tax benefit on share-based compensation—Net cash provided by (used for) financing activities $(232 \) (900 \)$ Excess tax benefit on share-based compensation—Net cash provided by (used for) financing activities $(232 \) (44 \)$ Net cash and cash equivalents $480 \ 10$ Cash and cash equivalents, end-of-period $477 \ 126$ Cash and cash equivalents, end-of-period $5627 \ 136		(30)	25	
Accounts receivable $(44) (57)$ Inventory11 (14)Prepaid and other current assets $(32) (37)$ Payables and accruals6 (20)Pension contributions $(8) (13)$ Long-term assets, liabilities and other $59 (135)$ Net cash provided by operating activities $2,047 $ 1,904INVESTING $(345) (43)$ Capital expenditures $(1,056) (1,154)$ Acquisitions, net of cash acquired $(345) (43)$ Divestitures and asset sales $41 $ 245Net cash used for investing activities $(1,360) (952)$ FINANCING $(728) (999)$ Short-term debt borrowings (repayments) - net $359 $ (126)Long-term debt borrowings (repayments) - net $(728) (999)$ Issuances of common stock $109 $ 74Purchases of common stock $109 $ 74Purchases of common stock $(133) (704)$ Cash dividends - Praxair, Inc. shareholders $(642) (615)$ Excess tax benefit on share-based compensation $-$ 18Noncontrolling interest transactions and other $(122) (44)$ Net cash provided by (used for) financing activities $(232) (900)$ Effect of exchange rate changes on cash and cash equivalents $25 $ (42)Change in cash and cash equivalents $480 $ 10Cash and cash equivalents, end-of-period $47 $ 126Cash and cash equivalents, end-of-period $5627 $ \$136	Share-based compensation	36		25	
Inventory11 (14) Prepaid and other current assets (32) (37) Payables and accruals6 (20) Pension contributions (8) (13) Long-term assets, liabilities and other 59 (135) Net cash provided by operating activities $2,047$ $1,904$ INVESTING $(1,056)$ $(1,154)$ Capital expenditures $(1,056)$ $(1,154)$ Acquisitions, net of cash acquired (345) (43) Divestitures and asset sales 41 245 Net cash used for investing activities $(1,360)$ (952) FINANCING (728) (999) Short-term debt borrowings (repayments) - net 359 (126) Long-term debt borrowings 925 $1,496$ Long-term debt repayments (728) (999) Issuances of common stock 109 74 Purchases of common stock (133) (704) Cash dividends - Praxair, Inc. shareholders (642) (615) Excess tax benefit on share-based compensation $ 18$ Noncontrolling interest transactions and other (122) (44) Net cash provided by (used for) financing activities (232) (900) Effect of exchange rate changes on cash and cash equivalents 25 (42) Change in cash and cash equivalents 480 10 Cash and cash equivalents, beginning-of-period 147 126 Cash and cash equivalents, end-of-period 5627 $$136$	Working capital:				
Prepaid and other current assets (32) (37))Payables and accruals6 (20) Pension contributions (8) (13) Long-term assets, liabilities and other 59 (135) Net cash provided by operating activities $2,047$ $1,904$ INVESTING $(1,056)$ $(1,154)$ Capital expenditures $(1,056)$ $(1,154)$ Acquisitions, net of cash acquired (345) (43) Divestitures and asset sales 41 245 Net cash used for investing activities $(1,360)$ (952) FINANCING (728) (999) Short-term debt borrowings (repayments) - net 359 (126) Long-term debt payments (728) (999) Issuances of common stock 109 74 Purchases of common stock (133) (704) Cash dividends - Praxair, Inc. shareholders (642) (615) Excess tax benefit on share-based compensation $ 18$ Noncontrolling interest transactions and other (122) (44) Net cash provided by (used for) financing activities (232) (900) Effect of exchange rate changes on cash and cash equivalents 480 10 Cash and cash equivalents, beginning-of-period 147 126 Cash and cash equivalents, end-of-period 5627 $$136$	Accounts receivable	(44)	(57)
Payables and accruals6 (20) Pension contributions (8) (13) Long-term assets, liabilities and other 59 (135) Net cash provided by operating activities $2,047$ $1,904$ INVESTING $(1,056)$ $(1,154)$ Capital expenditures $(1,056)$ $(1,154)$ Acquisitions, net of cash acquired (345) (43) Divestitures and asset sales 41 245 Net cash used for investing activities $(1,360)$ (952) FINANCING (133) (728) (999) Short-term debt borrowings (repayments) - net 359 (126) Long-term debt perowings 925 $1,496$ Long-term debt perowings (728) (999) Issuances of common stock (109) 74 Purchases of common stock (133) (704) Cash dividends - Praxair, Inc. shareholders (642) (615) Excess tax benefit on share-based compensation—18Noncontrolling interest transactions and other (122) (44) Net cash provided by (used for) financing activities (232) (900) Effect of exchange rate changes on cash and cash equivalents 480 10 Cash and cash equivalents, beginning-of-period 147 126 Cash and cash equivalents, end-of-period 5627 $$136$	Inventory	11		(14)
Payables and accruals6 (20) Pension contributions (8) (13) Long-term assets, liabilities and other 59 (135) Net cash provided by operating activities $2,047$ $1,904$ INVESTING $(1,056)$ $(1,154)$ Capital expenditures $(1,056)$ $(1,154)$ Acquisitions, net of cash acquired (345) (43) Divestitures and asset sales 41 245 Net cash used for investing activities $(1,360)$ (952) FINANCING (133) (728) (999) Short-term debt borrowings (repayments) - net 359 (126) Long-term debt perowings 925 $1,496$ Long-term debt perowings (728) (999) Issuances of common stock (109) 74 Purchases of common stock (133) (704) Cash dividends - Praxair, Inc. shareholders (642) (615) Excess tax benefit on share-based compensation—18Noncontrolling interest transactions and other (122) (44) Net cash provided by (used for) financing activities (232) (900) Effect of exchange rate changes on cash and cash equivalents 480 10 Cash and cash equivalents, beginning-of-period 147 126 Cash and cash equivalents, end-of-period 5627 $$136$	Prepaid and other current assets	(32)	(37)
Long-term assets, liabilities and other59 (135) Net cash provided by operating activities2,0471,904INVESTING(1,056) $(1,154)$ Capital expenditures $(1,056)$ $(1,154)$ Acquisitions, net of cash acquired (345) (43) Divestitures and asset sales41245Net cash used for investing activities $(1,360)$ (952) FINANCING9251,496Long-term debt borrowings (repayments) - net359 (126) Long-term debt perpayments (728) (999) Issuances of common stock10974Purchases of common stock (133) (704) Cash dividends - Praxair, Inc. shareholders (642) (615) Excess tax benefit on share-based compensation—18Noncontrolling interest transactions and other (122) (44) Net cash provided by (used for) financing activities (232) (900) Effect of exchange rate changes on cash and cash equivalents 25 (42) Cash and cash equivalents, beginning-of-period 147 126 Cash and cash equivalents, end-of-period 5627 $$136$		6		(20)
Net cash provided by operating activities $2,047$ $1,904$ INVESTING(1,056) $(1,154)$ Capital expenditures (345) (43) Acquisitions, net of cash acquired (345) (43) Divestitures and asset sales 41 245 Net cash used for investing activities $(1,360)$ (952) FINANCING $(1,360)$ (952) Short-term debt borrowings (repayments) - net 359 (126) Long-term debt borrowings 925 $1,496$ Long-term debt repayments (728) (999) Issuances of common stock 109 74 Purchases of common stock (133) (704) Cash dividends - Praxair, Inc. shareholders (642) (615) Excess tax benefit on share-based compensation $$ 18 Noncontrolling interest transactions and other (122) (44) Net cash provided by (used for) financing activities (232) (900) Effect of exchange rate changes on cash and cash equivalents 25 (42) Change in cash and cash equivalents 480 10 Cash and cash equivalents, beginning-of-period 147 126 Cash and cash equivalents, end-of-period $$627$ $$136$	Pension contributions	(8)	(13)
INVESTING(1,056)(1,154)Capital expenditures(345)(43)Acquisitions, net of cash acquired(345)(43)Divestitures and asset sales41245Net cash used for investing activities(1,360)(952)FINANCING5126)Short-term debt borrowings (repayments) - net359(126)Long-term debt borrowings9251,496Long-term debt repayments(728)(999)Issuances of common stock10974Purchases of common stock(133)(704)Cash dividends - Praxair, Inc. shareholders(642)(615)Excess tax benefit on share-based compensation—18Noncontrolling interest transactions and other(122)(44)Net cash provided by (used for) financing activities(232)(900)Effect of exchange rate changes on cash and cash equivalents25(42)Change in cash and cash equivalents48010Cash and cash equivalents, beginning-of-period147126Cash and cash equivalents, end-of-period\$627\$136	Long-term assets, liabilities and other	59		(135)
Capital expenditures $(1,056)$ $(1,154)$ Acquisitions, net of cash acquired (345) (43) Divestitures and asset sales 41 245 Net cash used for investing activities $(1,360)$ (952) FINANCING 359 (126) Short-term debt borrowings (repayments) - net 359 (126) Long-term debt borrowings 925 $1,496$ Long-term debt repayments (728) (999) Issuances of common stock 109 74 Purchases of common stock (133) (704) Cash dividends - Praxair, Inc. shareholders (642) (615) Excess tax benefit on share-based compensation $$ 18 Noncontrolling interest transactions and other (122) (44) Net cash provided by (used for) financing activities 25 (42) Change in cash and cash equivalents 25 (42) Cash and cash equivalents, beginning-of-period 147 126 Cash and cash equivalents, end-of-period $$627$ $$136$	Net cash provided by operating activities	2,047		1,904	
Acquisitions, net of cash acquired $(345) (43)$ Divestitures and asset sales41 245Net cash used for investing activities $(1,360) (952)$ FINANCING5Short-term debt borrowings (repayments) - net359 (126)Long-term debt borrowings925 1,496Long-term debt repayments $(728) (999)$ Issuances of common stock109 74Purchases of common stock $(133) (704)$ Cash dividends - Praxair, Inc. shareholders $(642) (615)$ Excess tax benefit on share-based compensation $-$ 18Noncontrolling interest transactions and other $(122) (44)$ Net cash provided by (used for) financing activities25 (42)Change in cash and cash equivalents480 10Cash and cash equivalents, beginning-of-period147 126Cash and cash equivalents, end-of-period\$627 \$136	INVESTING				
Divestitures and asset sales41245Net cash used for investing activities(1,360) (952)FINANCING359(126)Short-term debt borrowings (repayments) - net359(126)Long-term debt borrowings9251,496Long-term debt repayments(728) (999))Issuances of common stock10974Purchases of common stock(133) (704))Cash dividends - Praxair, Inc. shareholders(642) (615)Excess tax benefit on share-based compensation—18Noncontrolling interest transactions and other(122) (44)Net cash provided by (used for) financing activities25(42)Change in cash and cash equivalents48010Cash and cash equivalents, beginning-of-period147126Cash and cash equivalents, end-of-period\$627\$136	Capital expenditures	(1,056)	(1,154)
Net cash used for investing activities(1,360) (952)FINANCINGShort-term debt borrowings (repayments) - net359(126)Long-term debt borrowings9251,496Long-term debt repayments(728) (999))Issuances of common stock10974Purchases of common stock(133) (704))Cash dividends - Praxair, Inc. shareholders(642) (615))Excess tax benefit on share-based compensation—18Noncontrolling interest transactions and other(122) (44))Net cash provided by (used for) financing activities(232) (900))Effect of exchange rate changes on cash and cash equivalents25(42)Cash and cash equivalents, beginning-of-period147126Cash and cash equivalents, end-of-period\$627\$136	Acquisitions, net of cash acquired	(345)	(43)
FINANCING 359 $(126$)Short-term debt borrowings (repayments) - net 359 $(126$)Long-term debt borrowings 925 $1,496$ Long-term debt repayments (728) (999) Issuances of common stock 109 74 Purchases of common stock (133) (704) Cash dividends - Praxair, Inc. shareholders (642) (615) Excess tax benefit on share-based compensation $$ 18 Noncontrolling interest transactions and other (122) (44) Net cash provided by (used for) financing activities (232) (900) Effect of exchange rate changes on cash and cash equivalents 25 (42) Change in cash and cash equivalents 480 10 Cash and cash equivalents, beginning-of-period 147 126 Cash and cash equivalents, end-of-period $$627$ \$136	Divestitures and asset sales	41		245	
Short-term debt borrowings (repayments) - net 359 (126) Long-term debt borrowings 925 $1,496$ Long-term debt repayments (728) (999))Issuances of common stock 109 74 Purchases of common stock (133) (704))Cash dividends - Praxair, Inc. shareholders (642) (615))Excess tax benefit on share-based compensation $$ 18 Noncontrolling interest transactions and other (122) (44))Net cash provided by (used for) financing activities 25 (42))Effect of exchange rate changes on cash and cash equivalents 25 (42))Cash and cash equivalents, beginning-of-period 147 126)Cash and cash equivalents, end-of-period $$627$ \$136	Net cash used for investing activities	(1,360)	(952)
Long-term debt borrowings9251,496Long-term debt repayments (728) (999))Issuances of common stock 109 74 Purchases of common stock (133) (704) Cash dividends - Praxair, Inc. shareholders (642) (615) Excess tax benefit on share-based compensation $$ 18 Noncontrolling interest transactions and other (122) (44) Net cash provided by (used for) financing activities (232) (900) Effect of exchange rate changes on cash and cash equivalents 25 (42) Change in cash and cash equivalents 480 10 Cash and cash equivalents, beginning-of-period 147 126 Cash and cash equivalents, end-of-period $$627$ $$136$	FINANCING				
Long-term debt repayments(728) (999)Issuances of common stock109Purchases of common stock(133) (704)Cash dividends - Praxair, Inc. shareholders(642) (615)Excess tax benefit on share-based compensation—Noncontrolling interest transactions and other(122) (44)Net cash provided by (used for) financing activities(232) (900)Effect of exchange rate changes on cash and cash equivalents25Change in cash and cash equivalents480Cash and cash equivalents, beginning-of-period147Cash and cash equivalents, end-of-period\$627\$136	Short-term debt borrowings (repayments) - net	359		(126)
Issuances of common stock10974Purchases of common stock (133) (704) Cash dividends - Praxair, Inc. shareholders (642) (615) Excess tax benefit on share-based compensation $-$ 18Noncontrolling interest transactions and other (122) (44) Net cash provided by (used for) financing activities (232) (900) Effect of exchange rate changes on cash and cash equivalents25 (42) Change in cash and cash equivalents48010Cash and cash equivalents, beginning-of-period147126Cash and cash equivalents, end-of-period\$627\$136	Long-term debt borrowings	925		1,496	
Purchases of common stock (133) (704) Cash dividends - Praxair, Inc. shareholders (642) (642) (615) Excess tax benefit on share-based compensation $ 18$ Noncontrolling interest transactions and other (122) (44) Net cash provided by (used for) financing activities (232) (900) Effect of exchange rate changes on cash and cash equivalents 25 (42) Change in cash and cash equivalents 480 10 Cash and cash equivalents, beginning-of-period 147 126 Cash and cash equivalents, end-of-period $$627$ $$136$	Long-term debt repayments	(728)	(999)
Cash dividends - Praxair, Inc. shareholders $(642) (615)$ Excess tax benefit on share-based compensation $ 18$ Noncontrolling interest transactions and other $(122) (44)$ Net cash provided by (used for) financing activities $(232) (900)$ Effect of exchange rate changes on cash and cash equivalents $25 (42)$ Change in cash and cash equivalents $480 $ 10Cash and cash equivalents, beginning-of-period $147 $ 126Cash and cash equivalents, end-of-period $\$627 $ \$136	Issuances of common stock	109			
Cash dividends - Praxair, Inc. shareholders $(642) (615)$ Excess tax benefit on share-based compensation $ 18$ Noncontrolling interest transactions and other $(122) (44)$ Net cash provided by (used for) financing activities $(232) (900)$ Effect of exchange rate changes on cash and cash equivalents $25 (42)$ Change in cash and cash equivalents $480 $ 10Cash and cash equivalents, beginning-of-period $147 $ 126Cash and cash equivalents, end-of-period $\$627 $ \$136	Purchases of common stock	(133)	(704)
Noncontrolling interest transactions and other(122) (44)Net cash provided by (used for) financing activities(232) (900)Effect of exchange rate changes on cash and cash equivalents25 (42)Change in cash and cash equivalents480 10Cash and cash equivalents, beginning-of-period147 126Cash and cash equivalents, end-of-period\$627 \$136	Cash dividends - Praxair, Inc. shareholders	(642)		
Net cash provided by (used for) financing activities(232) (900)Effect of exchange rate changes on cash and cash equivalents25(42)Change in cash and cash equivalents48010Cash and cash equivalents, beginning-of-period147126Cash and cash equivalents, end-of-period\$627\$136	Excess tax benefit on share-based compensation			18	
Effect of exchange rate changes on cash and cash equivalents25(42)Change in cash and cash equivalents48010Cash and cash equivalents, beginning-of-period147126Cash and cash equivalents, end-of-period\$627\$136	•	(122)	(44)
Change in cash and cash equivalents48010Cash and cash equivalents, beginning-of-period147126Cash and cash equivalents, end-of-period\$627\$136		(232)	(900)
Cash and cash equivalents, beginning-of-period147126Cash and cash equivalents, end-of-period\$627\$136		25		(42)
Cash and cash equivalents, end-of-period \$627 \$136	÷ .	480		10	
The accompanying notes are an integral part of these financial statements		\$627		\$136	
The accompanying notes are an integral part of these financial statements.	The accompanying notes are an integral part of these financial statements.				

Table of Contents

INDEX TO NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS Notes to Condensed Consolidated Financial Statements - Praxair, Inc. and Subsidiaries (Unaudited)

Note 1. Summary of Significant Accounting Policies	<u>10</u>
Note 2. Cost Reduction Program and Other Charges	<u>11</u>
Note 3. Acquisitions	<u>12</u>
Note 4. Supplemental Information	<u>13</u>
Note 5. Debt	<u>14</u>
Note 6. Financial Instruments	<u>15</u>
Note 7. Fair Value Disclosures	<u>18</u>
Note 8. Earnings Per Share – Praxair, Inc. Shareholders	<u>19</u>
Note 9. Goodwill and Other Intangible Assets	<u>20</u>
Note 10. Share-Based Compensation	<u>21</u>
Note 11. Retirement Programs	<u>23</u>
Note 12. Commitments and Contingencies	<u>24</u>
Note 13. Segments	<u>25</u>
Note 14. Equity and Redeemable Noncontrolling Interests	<u>26</u>

PRAXAIR, INC. AND SUBSIDIARIES NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

1. Summary of Significant Accounting Policies

Presentation of Condensed Consolidated Financial Statements - In the opinion of Praxair, Inc. (Praxair) management, the accompanying condensed consolidated financial statements include all adjustments necessary for a fair presentation of the results for the interim periods presented and such adjustments are of a normal recurring nature. The accompanying condensed consolidated financial statements should be read in conjunction with the notes to the consolidated financial statements of Praxair, Inc. and subsidiaries in Praxair's 2015 Annual Report on Form 10-K. There have been no material changes to the company's significant accounting policies during 2016. Accounting Standards Implemented in 2016

Accounting for Share-based Compensation - In June 2014, the FASB issued updated guidance on the accounting for share-based payments when the terms of an award provide that a performance target could be achieved after the requisite service period. The adoption of this guidance did not have a significant impact on the condensed consolidated financial statements.

Improvements to Employee Share-Based Payment Accounting - In March 2016, the FASB issued updated guidance on the accounting for employee share-based payments. The new guidance, among other changes, requires that all excess tax benefits and deficiencies associated with share-based payment awards be recorded in Income taxes in the statement of income in the period in which they occur, and within operating cash flows. Previously, such excess tax benefits were recorded as direct credits to equity (not via the statement of income), and as financing cash flows. Effective in the second quarter 2016, Praxair elected to adopt the requirements of this new accounting standard. Accordingly, income tax expense for the quarter and nine months ended September 30, 2016, and operating cash flows for the quarter and nine months ended September 30, 2016 include \$5 million and \$15 million of excess tax benefits, respectively. For this change relating to excess tax benefits, Praxair did not adjust the 2016 first-quarter amounts because the impact was not material, and the Company elected not to adjust prior-year cash flow presentations.

The new standard also amends the condensed consolidated statement of cash flows by requiring that cash paid to taxing authorities at settlement arising from the withholding of shares from employees be classified in cash flows from financing activities (such amounts were previously included in cash flows from operating activities). This portion of the standard was required to be adopted on a retrospective basis. Accordingly, \$6 million of such cash paid to taxing authorities during the first quarter 2016 was reclassified from operating to financing cash flows, and \$13 million was similarly reclassified for the nine months ended September 30, 2015.

Accounting Standards to be Implemented

Revenue Recognition – In May 2014, the FASB issued updated guidance on the reporting and disclosure of revenue. The new guidance requires the evaluation of contracts with customers to determine the recognition of revenue when or as the entity satisfies a performance obligation, and would require expanded disclosures. Subsequently, the FASB has issued amendments to certain aspects of the guidance including the effective date. This guidance is required to be effective beginning in the first quarter 2018 (with early adoption beginning in 2017 optional) and includes several transition options. Praxair is currently in the process of reviewing the new guidance and will provide updates on the expected impact to Praxair in future filings, as determined.

Simplifying the Measurement of Inventory – In July 2015, the FASB issued updated guidance on the measurement of inventory. The new guidance requires that inventory be measured at the lower of cost or net realizable value. Currently inventory is measured at the lower of cost or market. This new guidance will be effective for Praxair beginning in the first quarter 2017 on a prospective basis, with early adoption optional. Praxair does not expect this requirement to have a material impact.

Balance Sheet Classification of Deferred Taxes - In November 2015, the FASB issued updated guidance on the balance sheet classification of deferred taxes. Currently deferred income tax liabilities and assets are required to be separated and classified as current or non-current in a classified balance sheet. The amendments in this update require

that deferred tax liabilities and assets be classified as non-current in a classified balance sheet. This new guidance will be effective for Praxair beginning in the first quarter 2017, with early adoption

optional. The new guidance may be applied either prospectively or retrospectively. Praxair does not expect this requirement to have a material impact.

Leases – In February 2016, the FASB issued updated guidance on the accounting and financial statement presentation of leases. The new guidance requires lessees to recognize a right-of-use asset and lease liability for all leases, except those that meet certain scope exceptions, and would require expanded quantitative and qualitative disclosures. This guidance will be effective for Praxair beginning in the first quarter 2019, with early adoption optional, and requires companies to transition using a modified retrospective approach. Praxair is in the early stages of reviewing the new guidance and will provide updates on the expected impact to Praxair in future filings, as determined. Classification of Certain Cash Receipts and Cash Payments – In August 2016, the FASB issued updated guidance on the classification of certain cash receipts and cash payments within the statement of cash flows. The update provides accounting guidance for specific cash flow issues with the objective of reducing diversity in practice. This new guidance will be effective for Praxair beginning in the first quarter 2018 on a retrospective basis, with early adoption optional. Praxair does not expect this requirement to have a material impact.

Reclassifications – Certain prior years' amounts have been reclassified to conform to the current year's presentation, including reclassifications to the condensed consolidated statement of cash flows due to the adoption of the new share-based payment accounting standard.

2. 2016 and 2015 Cost Reduction Program and Other Charges

2016 Cost Reduction Program and Other Charges

In the third quarter of 2016, Praxair recorded pre-tax charges totaling \$96 million (\$63 million after-tax and noncontrolling interests or \$0.22 per diluted share). Following is a summary of the pre-tax charge by reportable segment:

(millions of dollars)	Severance	Other	Total	
(minibils of donars)	costs	Charges	Total	
North America	\$ 14	\$ 29	\$43	
Europe	12	3	15	
South America	5	7	12	
Asia	6	13	19	
Surface Technologies	3	4	7	
Total	\$ 40	\$ 56	\$ 96	

The severance costs of \$40 million are for the elimination of 730 positions. The other charges of \$56 million are primarily related to (i) the consolidation of operations for efficiencies and cost reduction primarily in North America and Surface Technologies, (ii) integration costs for recent acquisitions in Europe and North America, and (iii) asset write-downs and other charges related to the impacts of weaker underlying industrial activity, primarily in the Americas and Asia. Amounts related to asset write-downs are net of expected sale proceeds, which are not significant. The total cash requirement of the cost reduction program and other charges are estimated to be approximately \$57 million, of which \$3 million was paid through September 30, 2016.

2016 Pension Settlement Charge

In 2015 a number of senior managers retired. These retirees are covered by the U.S. supplemental pension plan which provides for a lump sum benefit payment option. Under certain circumstances, such lump sum payments must be accounted for as a settlement of the related pension obligation, but only when paid. Accordingly, in the third quarter of 2016, Praxair recorded a pension settlement charge related to net unrecognized actuarial losses of \$4 million (\$3 million after-tax or \$0.01 per diluted share).

2015 Charges

In the second quarter of 2015, Praxair recorded pre-tax charges totaling \$146 million (\$112 million after-tax and noncontrolling interests, or \$0.39 per diluted share) and in the third quarter recorded pre-tax charges totaling \$26 million, including \$19 million for a cost reduction program and \$7 million for a pension settlement charge (\$18 million after-tax or \$0.06 per diluted share). For further details regarding the cost reduction program and other charges, refer to Note 2 to the consolidated financial statements of Praxair's 2015 Annual Report on Form 10-K.

Reconciliation

The following table summarizes the activities related to the company's cost reduction and other charges for the nine months ended September 30, 2016:

(millions of dollars)	Severance	Other	Total	
(minions of donars)	costs Charges		Total	
Balance, January 1, 2016	\$ 30	\$ 20	\$50	
2016 Cost Reduction Program and Other Charges	40	56	96	
Less: Cash payments	(24)	(4)	(28)	
Less: Non-cash charges		(39)	(39)	
Foreign currency translation	1		1	
Balance, September 30, 2016	\$ 47	\$ 33	\$80	

Classification in the condensed consolidated financial statements

The pre-tax charges for each year are shown within operating profit in a separate line item on the consolidated statements of income. In the condensed consolidated balance sheets, reductions in assets are recorded against the carrying value of the related assets and unpaid amounts are recorded primarily as short-term liabilities. On the condensed consolidated statement of cash flows, the pre-tax impact of these charges, net of cash payments, is shown as an adjustment to reconcile net income to net cash provided by operating activities. In Note 13 - Segments, Praxair excluded these charges from its management definition of segment operating profit; a reconciliation of segments operating profit to consolidated operating profit is shown within the segment operating profit table. 3. Acquisitions

2016 Acquisitions

During the nine months ended September 30, 2016, Praxair had acquisitions totaling \$345 million, primarily the acquisition of Yara International ASA's European carbon dioxide business ("European CO2 business") and packaged gases businesses in North America and Europe. These transactions resulted in goodwill and other intangible assets of \$129 million and \$71 million, respectively (see Note 9). In addition, Praxair purchased a remaining 34% share in a Scandinavian joint venture for \$104 million (see Note 14).

European CO2 Acquisition

On June 1, 2016 Praxair, Inc. completed an acquisition of a European CO2 business, which is a leading supplier of liquid CO2 and dry ice primarily to the European food and beverage industries. The business operates CO2 liquefaction plants and dry ice production facilities across the UK, Ireland, Norway, Denmark, Germany, Netherlands, Belgium, France and Italy. This acquisition was accounted for as a business combination; accordingly, the results of operations were consolidated from June 1, 2016 in the European business segment.

The purchase price for the acquisition was approximately \$230 million (€206 million) and resulted in \$126 million of intangible assets. The intangible assets primarily consist of \$69 million of Goodwill and \$53 million of customer relationships that will be amortized over their estimated useful life of 20 years. The allocation of the purchase price is based on preliminary estimates and assumptions, which are subject to revision based on final information received,

including appraisals and other analysis that support underlying estimates. Currently, any potential adjustments are not expected to be material.

2015 Acquisitions

During the nine months ended September 30, 2015, Praxair had acquisitions totaling \$43 million, primarily acquisitions of packaged gases businesses in North and South America. These transactions resulted in goodwill and other intangible assets of \$28 million and \$10 million, respectively.

4. Supplemental Information Inventories The following is a summary of Praxair's consolidated inventories: September 30, December 31, (Millions of dollars) 2016 2015 Inventories Raw materials and supplies \$ 188 202 \$ Work in process 47 48 Finished goods 303 281 Total inventories 538 \$ \$ 531

Long-term receivables

Long-term receivables are not material and are largely reserved. Such long-term receivables are included within other long-term assets in the condensed consolidated balance sheets and totaled \$39 million and \$33 million at September 30, 2016 and December 31, 2015, respectively. These amounts are net of reserves of \$49 million and \$35 million, respectively. The amounts in both periods relate primarily to government receivables in Brazil and other long-term notes receivable from customers. Collectability is reviewed regularly and uncollectible amounts are written off as appropriate. The account balance changes during 2016 were primarily due to additional government receivables in Brazil and foreign exchange rate movements.

5. Debt

The following is a summary of Praxair's outstanding debt at September 30, 2016 and December 31, 2015:								
(Millions of dollars)	September 30 2016	, December 31, 2015						
SHORT-TERM	2010	2015						
Commercial paper and U.S. bank borrowings	\$ 486	\$ 87						
Other bank borrowings (primarily international)	120	163						
Total short-term debt	606	250						
LONG-TERM (a)								
U.S. borrowings (U.S. dollar denominated unless otherwise noted)								
0.75% Notes due 2016 (b, c)		400						
5.20% Notes due 2017 (b)		325						
Floating Rate Notes due 2017 (c)	150	150						
1.05% Notes due 2017	400	399						
1.20% Notes due 2018	499	499						
1.25% Notes due 2018 (d)	482	480						
4.50% Notes due 2019	598	597						
1.90% Notes due 2019	499	499						
1.50% Euro-denominated notes due 2020	669	646						
2.25% Notes due 2020	299	298						
4.05% Notes due 2021	497	497						
3.00% Notes due 2021	496	496						
2.45% Notes due 2022	597	596						
2.20% Notes due 2022	498	497						
2.70% Notes due 2023	497	497						
1.20% Euro-denominated notes due 2024 (e)	615	—						
2.65% Notes due 2025	397	396						
1.625% Euro-denominated notes due 2025	554	535						
3.20% Notes due 2026 (e)	725	446						
3.55% Notes due 2042	662	661						
Other	12	3						
International bank borrowings	83	57						
Obligations under capital leases	7	7						
	9,236	8,981						
Less: current portion of long-term debt		(6)						
Total long-term debt	9,225	8,975						
Total debt	\$ 9,842	\$ 9,231						

(a) Amounts are net of unamortized discounts, premiums and/or debt issuance costs as applicable.

In February 2016, Praxair repaid \$400 million of 0.75% notes that became due. Also in February 2016, Praxair (b)redeemed \$325 million of 5.20% notes due March 2017 resulting in a \$16 million interest charge (\$10 million after-tax, or \$0.04 per diluted share).

(c) Classified as long-term because of the company's intent to refinance this debt on a long-term basis and the availability of such financing under the terms of an existing \$2.5 billion long-term credit facility.

(d) September 30, 2016 and December 31, 2015 include an \$8 million and \$6 million fair value increase, respectively, related to hedge accounting. See Note 6 for additional information.

In February 2016, Praxair issued €550 million of 1.20% Euro-denominated notes due 2024. In addition, Praxair (e)issued \$275 million of 3.20% notes due 2026. The proceeds of these debt issuances were used for general corporate purposes.

6. Financial Instruments

In its normal operations, Praxair is exposed to market risks relating to fluctuations in interest rates, foreign currency exchange rates, energy costs and to a lesser extent precious metal prices. The objective of financial risk management at Praxair is to minimize the negative impact of such fluctuations on the company's earnings and cash flows. To manage these risks, among other strategies, Praxair routinely enters into various derivative financial instruments ("derivatives") including interest-rate swap and treasury rate lock agreements, currency-swap agreements, forward contracts, currency options, and commodity-swap agreements. These instruments are not entered into for trading purposes and Praxair only uses commonly traded and non-leveraged instruments.

There are three types of derivatives that the company enters into: (i) those relating to fair-value exposures, (ii) those relating to cash-flow exposures, and (iii) those relating to foreign currency net investment exposures. Fair-value exposures relate to recognized assets or liabilities, and firm commitments; cash-flow exposures relate to the variability of future cash flows associated with recognized assets or liabilities, or forecasted transactions; and net investment exposures relate to the impact of foreign currency exchange rate changes on the carrying value of net assets denominated in foreign currencies.

When a derivative is executed and hedge accounting is appropriate, it is designated as either a fair-value hedge, cash-flow hedge, or a net investment hedge. Currently, Praxair designates all interest-rate and treasury-rate locks as hedges for accounting purposes; however, currency contracts are generally not designated as hedges for accounting purposes unless they are related to forecasted transactions. Whether designated as hedges for accounting purposes or not, all derivatives are linked to an appropriate underlying exposure. On an ongoing basis, the company assesses the hedge effectiveness of all derivatives designated as hedges for accounting purposes to determine if they continue to be highly effective in offsetting changes in fair values or cash flows of the underlying hedged items. If it is determined that the hedge is not highly effective, then hedge accounting will be discontinued prospectively.

Counterparties to Praxair's derivatives are major banking institutions with credit ratings of investment grade or better and no collateral is required, and there are no significant risk concentrations. Management believes the risk of incurring losses on derivative contracts related to credit risk is remote and any losses would be immaterial. The following table is a summary of the notional amount and fair value of derivatives outstanding at September 30, 2016 and December 31, 2015 for consolidated subsidiaries:

	Notion	<u>_1</u>	Amounts	Fair Ass	Valu	e	Т	iabili	tion	
						210 21				0 1 21
(Millions of dollars)	Septem 2016		e&mber 31, 015		62015			epten)16	201	
Derivatives Not Designated as Hedging Instruments:										
Currency contracts:										
Balance sheet items (a)	\$2,098	\$	2,548	\$9	\$	15	\$	12	\$	11
Derivatives Designated as Hedging Instruments:										
Currency contracts:										
Balance sheet items (a)	\$38	\$	38	\$—	\$	1	\$		\$	_
Interest rate contracts:										
Interest rate swaps (b)	475	47	75	8	6			-		
Total Hedges	\$513	\$	513	\$8	\$	7	\$		\$	_
Total Derivatives	\$2,611	\$	3,061	\$17	\$	22	\$	12	\$	11

(a) Assets are recorded in prepaid and other current assets, and liabilities are recorded in other current liabilities. (b) Assets are recorded in other long term assets

Currency Contracts

Foreign currency contracts related to balance sheet items consist of forward contracts entered into to manage the exposure to fluctuations in foreign-currency exchange rates on recorded balance sheet assets and liabilities denominated in currencies other than the functional currency of the related operating unit. Certain forward currency contracts are entered into to protect underlying monetary assets and liabilities denominated in foreign currencies from

foreign exchange risk and are not designated as hedging instruments. The fair value adjustments on these contracts are offset by the fair value adjustments recorded on the underlying monetary assets and liabilities. Praxair also enters into forward currency contracts, which are designated as hedging

instruments, to limit the cash flow exposure on certain foreign-currency denominated intercompany loans. The fair value adjustments on these contracts are recorded to AOCI, with the effective portion immediately reclassified to earnings to offset the fair value adjustments on the underlying debt instrument.

Net Investment Hedge

In 2014 Praxair designated the €600 million (\$669 million as of September 30, 2016) 1.50% Euro-denominated notes due 2020 and the €500 million (\$554 million as of September 30, 2016) 1.625% Euro-denominated notes due 2025, as a hedge of the net investment position in its European operations. In 2016 Praxair designated an incremental €550 million (\$615 million as of September 30, 2016) 1.20% Euro-denominated notes due 2024 as an additional hedge of the net investment position in its European operations. These Euro-denominated debt instruments reduce the company's exposure to changes in the currency exchange rate on investments in foreign subsidiaries with Euro functional currencies. Since hedge inception, exchange rate movements have reduced long-term debt by \$221 million (long-term debt increased by \$40 million during the nine months ended September 30, 2016), with the offsetting gain shown within the cumulative translation component of AOCI in the condensed consolidated balance sheets and the consolidated statements of comprehensive income.

Interest Rate Contracts

Outstanding Interest Rate Swaps

At September 30, 2016, Praxair had one outstanding interest rate swap agreement with a \$475 million notional amount related to the \$475 million 1.25% notes that mature in 2018. The interest rate swap effectively converts fixed-rate interest to variable-rate interest and is designated as a fair value hedge. Fair value adjustments are recognized in earnings along with an equally offsetting charge / benefit to earnings for the changes in the fair value of the underlying debt instrument. At September 30, 2016, \$8 million was recognized as an increase in the fair value of these notes (\$6 million at December 31, 2015).

Terminated Treasury Rate Locks

The following table summarizes the unrecognized gains (losses) related to terminated treasury rate lock contracts:

	Year	Original	Unrecognized Gain / (Loss) (a)						
(Millions of dollars)	Terminated	Gain / (Loss)	September 30, 2016		December 2015		er 31,		
Treasury Rate Locks									
Underlying debt instrument:									
\$500 million 2.20% fixed-rate notes that mature in 2022 (b)	2012	\$ (2)	\$	(1)	\$	(1)	
\$500 million 3.00% fixed-rate notes that mature in 2021 (b)	2011	(11)	(6)	(6)	
\$600 million 4.50% fixed-rate notes that mature in 2019 (b)	2009	16	5			6			
Total - pre-tax			\$	(2)	\$	(1)	
Less: income taxes			1						
After- tax amounts			\$	(1)	\$	(1)	

The unrecognized gains / (losses) for the treasury rate locks are shown in accumulated other comprehensive income ("AOCI") and are being recognized on a straight line basis to interest expense – net over the term of the underlying debt agreements. Refer to the table below summarizing the impact on the company's consolidated statements of income and AOCI for current period gain (loss) recognition.

The notional amount of the treasury rate lock contracts are equal to the underlying debt instrument with the (b)exception of the treasury rate lock contract entered into to hedge the \$600 million 4.50% fixed-rate notes that mature in 2019. The notional amount of this contract was \$500 million.

The following table summarizes the impact of the company's derivatives on the consolidated statements of income and AOCI:

	Amount of Pre-Tax Gain (Loss)						
	Recognized in Earnings *						
	Quarter 30,	Ended S	Nine Months September Ended				
	50,		September 30,				
(Millions of dollars)	2016	2015	2016	2015			
Derivatives Not Designated as Hedging Instruments							
Currency contracts:							
Balance sheet items							
Debt-related	\$(10)	\$(93)	\$73	\$(171)			
Other balance sheet items	(1)	(6)	2	(11)			
Total	\$(11)	\$(99)	\$75	\$(182)			
Derivatives Not Designated as Hedging Instruments Currency contracts: Balance sheet items Debt-related Other balance sheet items	2016 \$ (10) (1)	\$ (93) (6)	2016 \$ 73 2	2015 \$(171) (11)			

* The gains (losses) on balance sheet items are offset by gains (losses) recorded on the underlying hedged assets and liabilities. Accordingly, the gains (losses) for the derivatives and the underlying hedged assets and liabilities related to debt items are recorded in the consolidated statements of income as interest expense-net. Other balance sheet items and anticipated net income gains (losses) are recorded in the consolidated statements of income as other income (expenses)-net.

The following tables summarize the impacts of the company's derivatives designated as hedging instruments that impact AOCI:

Derivatives Designated as Hedging Instruments **

	Quarter Ended									
				Amount of Gain (Loss)						
	Amou	nt of C	Gain	Reclassified from AOCI to						
	(Loss)			the Consolidated						
	Recog	nized	in AO	DCSItatement of						
	-			Inco	ome					
(Millions of dollars)	Sep Seq 201 2 0	-	£ r, 30,), September 3 2016 2015			: 30,			
Currency contracts:										
Balance sheet items	\$ \$	(1)	\$		\$	(1)		
Net Investment Hedge			,							
Interest rate contracts:										
Treasury rate lock contracts										
Total - pre tax	\$ _\$	(1)	\$		\$	(1)		
Less: income taxes										
Total - Net of Taxes	\$ - \$	(1)	\$		\$	(1)		
	Nine N	Aonths	s Ende	ed						
				A	mou	nt of	Gain	(Loss)		
	Amou	nt of C	Gain					AOCI to		
	(Loss)			the Consolidated Statement						
	Recog		in AO							
	0				com	e				
$(\mathbf{A}_{111}^{(11)}, \dots, \mathbf{A}_{n-1}^{(n-1)}, \mathbf{A}_{n-1}^{(n-1)})$										

(Millions of dollars)

	Septe	Step	teither	30,	Se	ptembe	er 30	,Sep	tember	: 30,
	2016	201	5		20	16		201	5	
Currency contracts:										
Balance sheet items	\$—	\$	(1)	\$			\$	(1)
Net Investment Hedge	(4)									
Interest rate contracts:										
Treasury rate lock contracts					(1)			
Total - pre tax	(4)	\$	(1)	\$	(1)	\$	(1)
Less: income taxes	1				1					
Total - Net of Taxes	\$(3)	\$	(1)	\$			\$	(1)

**The gains (losses) on net investment hedges are recorded as a component of AOCI within foreign currency translation adjustments in the condensed consolidated balance sheets and the condensed consolidated statements of comprehensive income. The gains (losses) on treasury rate locks are recorded as a component of AOCI within derivative instruments in the condensed consolidated balance sheets and the condensed consolidated statements of comprehensive income. There was no ineffectiveness for these instruments during 2016 or 2015. The gains (losses) on net investment hedges are reclassified to earnings only when the related currency translation adjustments are required to be reclassified, usually upon sale or liquidation of the investment. The gains (losses) for interest rate contracts are reclassified to earnings as interest expense –net on a straight-line basis over the remaining maturity of the underlying debt. Net losses of \$2 million are expected to be reclassified to earnings during the next twelve months.

7. Fair Value Disclosures

The fair value hierarchy prioritizes the input to valuation techniques used to measure fair value into three broad levels as follows:

Level 1 - quoted prices in active markets for identical assets or liabilities

Level 2 – quoted prices for similar assets and liabilities in active markets or inputs that are observable

Level 3 - inputs that are unobservable (for example cash flow modeling inputs based on assumptions)

Assets and Liabilities Measured at Fair Value on a Recurring Basis

The following table summarizes assets and liabilities measured at fair value on a recurring basis:

Fair Value Measurements Using								
	Level 1				Level 3			
(Millions of dollars)	SEpetcembleer3301,	Septem	nbec	Sember 31,	September	3December 31,		
(withous of donars)	20065	2016	16 2015		2016	2015		
Assets								
Derivatives		\$ 17	\$	22	_			
Liabilities								
Derivatives		\$ 12	\$	11	_			

The fair values of the derivative assets and liabilities are based on market prices obtained from independent brokers or determined using quantitative models that use as their basis readily observable market parameters that are actively quoted and can be validated through external sources, including third-party pricing services, brokers and market transactions. Investments are marketable securities traded on an exchange.

The fair values of cash and cash equivalents, short-term debt, accounts receivable-net, and accounts payable approximate carrying amounts because of the short maturities of these instruments. The fair value of long-term debt is estimated based on the quoted market prices for similar issues, which is deemed a level 2 measurement. At September 30, 2016, the estimated fair value of Praxair's long-term debt portfolio was \$9,708 million versus a carrying value of \$9,236 million. At December 31, 2015, the estimated fair value of Praxair's long-term debt portfolio was \$9,069 million versus a carrying value of \$8,981 million. Differences from carrying amounts are attributable to interest-rate changes subsequent to when the debt was issued.

8. Earnings Per Share - Praxair, Inc. Shareholders

Basic earnings per share is computed by dividing Net income – Praxair, Inc. for the period by the weighted average number of Praxair common shares outstanding. Diluted earnings per share is computed by dividing Net income – Praxair, Inc. for the period by the weighted average number of Praxair common shares outstanding and dilutive common stock equivalents, as follows:

	Quarter Ende 30,	ed September	Nine Months Ended September 30,			
	2016	2015	2016	2015		
Numerator (Millions of dollars)						
Net income - Praxair, Inc.	\$ 339	\$ 401	\$1,094	\$1,125		
Denominator (Thousands of shares)						
Weighted average shares outstanding	285,467	285,253	285,27	7287,179		
Shares earned and issuable under compensation plans	391	398	386	399		
Weighted average shares used in basic earnings per share	285,858	285,651	285,66	3287,578		
Effect of dilutive securities						
Stock options and awards	2,337	1,660	2,064	2,257		
Weighted average shares used in diluted earnings per share	288,195	287,311	287,72	7289,835		
Basic Earnings Per Share	\$ 1.19	\$ 1.40	\$3.83	\$ 3.91		
Diluted Earnings Per Share	\$ 1.18	\$ 1.40	\$3.80	\$ 3.88		
Stock options of 2 624 190 and 2 625 825 for the quarter and	d nine months	ended Senter	mber 30	2016 and sto		

Stock options of 2,624,190 and 2,625,825 for the quarter and nine months ended September 30, 2016 and stock options of 3,893,857 and 2,712,895 for the quarter and nine months ended September 30, 2015 were antidilutive and therefore excluded in the computation of diluted earnings per share.

9. Goodwill and Other Intangible Assets

Changes in the carrying amount of goodwill for the nine months ended September 30, 2016 were as follows:

(Millions of dollars)	North	South	Furone	Acia	Su	rface	Total	
(withous of donars)	America	America	Lutope	Asia	Surface Technologies		Total	
Balance, December 31, 2015	\$2,111	\$98	\$ 582	\$59	\$	136	\$2,986	
Acquisitions (Note 3)	58		71				129	
Purchase adjustments & other	6				2		8	
Foreign currency translation	(5)	25	20				40	
Balance, September 30, 2016	\$2,170	\$ 123	\$ 673	\$ 59	\$	138	\$3,163	

Praxair has performed its goodwill impairment tests annually during the second quarter of each year, and historically has determined that the fair value of each of its reporting units was substantially in excess of its carrying value. For the 2016 test completed last quarter, Praxair applied the FASB's accounting guidance (refer to Note 1 to the consolidated financial statements of Praxair's 2015 Annual Report on Form 10-K) which allows the Company to first assess qualitative factors to determine the extent of additional quantitative analysis, if any, that may be required to test goodwill for impairment. Based on the qualitative assessments performed, Praxair concluded that it was more likely than not that the fair value of each reporting unit substantially exceeded its carrying value and therefore, further quantitative analysis was not required. As a result, no impairment was recorded. There were no indicators of impairment through September 30, 2016.

Changes in the carrying amounts of other intangibles for the nine months ended September 30, 2016 were as follows:

(Millions of dollars)	Customer & License/Use			on-compe			&	Total	
	Agreements			Agreements		Other			
Cost:									
Balance, December 31, 2015	\$ 698	\$		38		\$ 47		\$783	
Additions (Note 3)	62	4				5		71	
Foreign currency translation	(3)	_	_			(1)	(4)
Other	(3)	(8	3)			(11)
Balance, September 30, 2016	\$ 754	\$		34		\$ 51		\$839	
Less: Accumulated amortization									
Balance, December 31, 2015	\$ (179)	\$		(23)	\$ (13)	\$(215	5)
Amortization expense	(30)	(4	1)	(3)	(37)
Foreign currency translation	1		_					1	
Other		7						7	
Balance, September 30, 2016	\$ (208)	\$		(20)	\$ (16)	\$(244	1)
Net balance at September 30, 2016	\$ 546	\$		14		\$ 35		\$595	

There are no expected residual values related to these intangible assets. The remaining weighted-average amortization period for intangible assets is approximately 18 years.

Total estimated annual amortization expense is as follows:

(Millions of dollars)	
Remaining 2016	\$15
2017	47
2018	42
2019	40
2020	38
Thereafter	413
	\$595

10. Share-Based Compensation

Share-based compensation of \$14 million (\$10 million after-tax) and \$8 million (\$6 million after-tax) was recognized during the quarters ended September 30, 2016 and 2015, respectively. Share-based compensation of \$36 million (\$26 million after-tax) and \$25 million (\$18 million after-tax) was recognized during the nine months ended September 30, 2016 and 2015, respectively. Expense amounts reflect current estimates of achieving performance targets relating to performance-based compensation. The expense was recorded primarily in selling, general and administrative expenses. There was no share-based compensation cost that was capitalized. For further details regarding Praxair's share-based compensation arrangements and prior-year grants, refer to Note 15 to the consolidated financial statements of Praxair's 2015 Annual Report on Form 10-K.

Stock Options

The weighted-average fair value of options granted during the nine months ended September 30, 2016 was \$8.91 (\$11.99 in 2015) based on the Black-Scholes Options-Pricing model. The decrease in grant date fair value year-over-year was primarily attributable to a decrease in the company's stock price.

The following weighted-average assumptions were used to value the grants in 2016 and 2015:

6 6		U			
	Nine Months				
	Ended				
	Septem	ber 30,			
	2016	2015			
Dividend yield	2.9 %	2.2 %			
Volatility	14.4%	13.5%			
Risk-free interest rate	1.41%	1.51%			
Expected term years	6	5			

The following table summarizes option activity under the plans as of September 30, 2016 and changes during the nine-month period then ended (averages are calculated on a weighted basis; life in years; intrinsic value expressed in millions):

	Number of Options (000's)	Average Exercise Price	Average Remaining Life	Aggregate Intrinsic Value
Outstanding at January 1, 2016	11,273	\$ 96.58		
Granted	2,473	102.23		
Exercised	(1,443)	69.82		
Cancelled or Expired	(162)	110.62		
Outstanding at September 30, 2016	12,141	100.69	5.7	\$ 265
Exercisable at September 30, 2016	8,391	\$ 95.77	4.3	\$ 220

The aggregate intrinsic value represents the difference between the company's closing stock price of \$120.83 as of September 30, 2016 and the exercise price multiplied by the number of in the money options outstanding as of that date. The total intrinsic value of stock options exercised during the quarter and nine months ended September 30, 2016 was \$22 million and \$64 million, respectively (\$6 million and \$57 million during the same periods in 2015, respectively).

Cash received from option exercises under all share-based payment arrangements for the quarter and nine months ended September 30, 2016 was \$41 million and \$101 million, respectively (\$9 million and \$60 million for the same time periods in 2015, respectively). The cash tax benefit realized from share-based compensation totaled \$7 million and \$26 million for the quarter and nine months ended September 30, 2016 (\$2 million and \$31 million cash tax benefit for the same periods in 2015).

As of September 30, 2016, \$23 million of unrecognized compensation cost related to non-vested stock options is expected to be recognized over a weighted-average period of approximately 1 year.

Performance-Based and Restricted Stock Awards

During the nine months ended September 30, 2016, the company granted performance-based stock awards to employees of 240,505 shares that vest, subject to the attainment of pre-established minimum performance criteria, principally on the third anniversary of their date of grant. These awards are tied to either return on capital ("ROC") performance or relative total shareholder return ("TSR") performance versus that of the S&P 500. The actual number of shares issued in settlement of a vested award can range from zero to 200 percent of the target number of shares granted based upon the company's attainment of specified performance targets at the end of a three-year period. Compensation expense related to these awards is recognized over the three-year period based on the fair value of the closing market price of the company's common stock on

the date of the grant and the estimated performance that will be achieved. Compensation expense will be adjusted during the three-year performance period based upon the estimated performance levels that will be achieved. During the nine months ended September 30, 2016, the company also granted restricted stock units to employees of 97,542 shares. The majority of the restricted stock units vest at the end of a three-year service period. Compensation expense related to the restricted stock units is recognized on a straight line basis over the vesting period. The weighted-average fair value of ROC performance-based stock awards and restricted stock units granted during the nine months ended September 30, 2016 was \$93.46 and \$98.12, respectively (\$120.04 and \$120.32 for the same periods in 2015). These fair values are based on the closing market price of Praxair's common stock on the grant date adjusted for dividends that will not be paid during the vesting period.

The weighted-average fair value of performance-based stock tied to relative TSR performance granted during the nine months ended September 30, 2016 was \$124.18 (none in 2015), and was estimated using a Monte Carlo simulation performed as of the grant date.

The following table summarizes non-vested performance-based and restricted stock award activity as of September 30, 2016 and changes during the nine months then ended (shares based on target amounts, averages are calculated on a weighted basis):

	Dorform	ance-Based	Restricted		
	renom	lance-Daseu	Stock		
	of Shares	Average Grant Date Fair Value	Average Of Grant Shares (000's) Value		
Non-vested at January 1, 2016	802	\$ 114.41	286 \$112.48		
Granted	241	105.34	98 98.12		
Vested	(107)	103.46	(90) 105.58		
Cancelled and Forfeited	(208)	104.54	(15) 114.29		
Non-vested at September 30, 2016	728	\$ 115.80	279 \$109.58		

There are approximately 12 thousand performance-based shares and 11 thousand restricted stock shares that are non-vested at September 30, 2016 which will be settled in cash due to foreign regulatory limitations. The liability related to these grants reflects the current estimate of performance that will be achieved and the current common stock price.

As of September 30, 2016, based on current estimates of future performance, \$26 million of unrecognized compensation cost related to performance-based awards is expected to be recognized through the first quarter of 2019 and \$14 million of unrecognized compensation cost related to the restricted stock awards is expected to be recognized primarily through the first quarter of 2019.

11. Retirement Programs

The components of net pension and postretirement benefits other than pensions ("OPEB") costs for the quarter and nine months ended September 30, 2016 and 2015 are shown below:

	Quarter Ended September			Nine Months Ended			
	30,			September 30,			
	Pensions		OPEB	Pensions		OPEB	
(Millions of dollars)	2016	2015	20162015	2016	2015	2010	52015
Service cost	\$ 11	\$ 13	\$ — \$ —	\$35	\$41	\$2	\$ 2
Interest cost	27	28	2 2	76	85	4	6
Expected return on plan assets	(39)	(38)		(117)	(116)		
Net amortization and deferral	14	20		45	61	(2)	(2)
Net periodic benefit cost	\$13	\$ 23	\$ 2 \$ 2	\$39	\$71	\$4	\$6
Pension settlement charge (Note 2)	4	7		4	7		
Net periodic benefit cost	\$ 17	\$ 30	\$ 2 \$ 2	\$43	\$78	\$4	\$6

Praxair estimates that 2016 required contributions to its pension plans will be in the range of \$10 million to \$15 million, of which \$8 million have been made through September 30, 2016. At the end of 2015, the Company changed the approach used to measure service and interest costs for significant pension and OPEB plans by applying specific spot rates along the yield curve rather than a single weighted-average rate derived from the yield curve (the "spot rate approach"). This change was accounted for as a change in accounting estimate and, as such, is applied on a prospective basis starting in 2016.

12. Commitments and Contingencies

Contingent Liabilities

Praxair is subject to various lawsuits and government investigations that arise from time to time in the ordinary course of business. These actions are based upon alleged environmental, tax, antitrust and personal injury claims, among others. Praxair has strong defenses in these cases and intends to defend itself vigorously. It is possible that the company may incur losses in connection with some of these actions in excess of accrued liabilities. Management does not anticipate that in the aggregate such losses would have a material adverse effect on the company's consolidated financial position or liquidity; however, it is possible that the final outcomes could have a significant impact on the company's reported results of operations in any given period (see Note 17 to the consolidated financial statements of Praxair's 2015 Annual Report on Form 10-K).

Significant matters are:

During May 2009, the Brazilian government published Law 11941/2009 instituting a new voluntary amnesty program ("Refis Program") which allowed Brazilian companies to settle certain federal tax disputes at reduced amounts. During the 2009 third quarter, Praxair decided that it was economically beneficial to settle many of its outstanding federal tax disputes and such disputes were enrolled in the Refis Program, subject to final calculation and review by the Brazilian federal government. The Company recorded estimated liabilities based on the terms of the Refis Program. Since 2009, Praxair has been unable to reach final agreement on the calculations and recently initiated litigation against the government in an attempt to resolve certain items. Open issues relate to the following matters: (i) application of cash deposits and net operating loss carryforwards to satisfy obligations, and (ii) the amount of tax reductions available under the Refis Program. It is difficult to estimate the timing of resolution of legal matters in Brazil.

At September 30, 2016 the most significant non-income and income tax claims in Brazil, after enrollment in the Refis Program, relate to state VAT tax matters and a federal income tax matter where the taxing authorities are challenging the tax rate that should be applied to income generated by a subsidiary company. The total estimated exposure relating to such claims, including interest and penalties, as appropriate, is approximately \$220 million. Praxair has not recorded any liabilities related to such claims based on management judgments, after considering judgments and opinions of outside counsel. Because litigation in Brazil historically takes many years to resolve, it is very difficult to estimate the timing of resolution of these matters; however, it is possible that certain of these matters may be resolved within the near term. The company is vigorously defending against the proceedings.

On September 1, 2010, CADE (Brazilian Administrative Council for Economic Defense) announced alleged anticompetitive activity on the part of five industrial gas companies in Brazil and imposed fines on all five companies. Originally, CADE imposed a civil fine of R\$2.2 billion Brazilian reais (US\$678 million) against White Martins, the Brazil-based subsidiary of Praxair, Inc. In response to a motion for clarification, the fine was reduced to R\$1.7 billion Brazilian reais (US\$524 million) due to a calculation error made by CADE. The amount of the fine is subject to indexation using SELIC. On September 2, 2010, Praxair issued a press release and filed a report on Form 8-K rejecting all claims and stating that the fine represents a gross and arbitrary disregard of Brazilian law. On October 19, 2010, White Martins filed an annulment petition ("appeal") with the Federal Court in Brasilia seeking to have the fine against White Martins entirely overturned. In order to suspend payment of the fine pending the completion of the appeal process, Brazilian law required that the company tender a form of guarantee in the amount of the fine as security. Initially, 50% of the guarantee was satisfied by letters of credit with a financial institution and 50% by equity of a Brazilian subsidiary. On April 15, 2016, the Ninth Federal Court in Brasilia allowed White Martins to withdraw and cancel the letters of credit. Accordingly, the guarantee is currently satisfied solely by equity of a Brazilian subsidiary.

On September 14, 2015, the Ninth Federal Court of Brasilia overturned the fine against White Martins and declared the original CADE administrative proceeding to be null and void. On June 30, 2016, CADE filed an appeal against this decision with the Federal Circuit Court in Brasilia.

Praxair strongly believes that the allegations are without merit and that the fine will be entirely overturned during the appeal process. The company further believes that it has strong defenses and will vigorously defend against the allegations and related fine up to such levels of the Federal Courts in Brazil as may be necessary. Because appeals in Brazil historically take many years to resolve, it is very difficult to estimate when the appeal will be finally decided.

Based on management judgments, after considering judgments and opinions of outside counsel, no reserve has been recorded for this proceeding as management does not believe that a loss is probable.

13. Segments

Sales and operating profit by segment for the quarters and nine months ended September 30, 2016 and 2015 are shown below. For a description of Praxair's operating segments, refer to Note 18 to the consolidated financial statements of Praxair's 2015 Annual Report on Form 10-K.

statements of Francis	5 2010 111114	ui itopoit oli i	Nine M					
Ouarter Ended September			Ended	ionuis				
	30			h an 20				
			-	ber 30,				
(Millions of dollars)	2016	2015	2016	2015				
SALES ^(a)								
North America	\$ 1,431	\$ 1,463	\$4,195	\$4,444				
Europe	366	338	1,041	995				
South America	378	343	1,047	1,132				
Asia	391	395	1,160	1,153				
Surface Technologies	s 150	147	447	457				
Total sales	\$ 2,716	\$ 2,686	\$7,890	\$8,181				
Nine Months							onths	
			-	Quarter Ended September Ended				
				30, September				
(Millions of dollars)			201	6	2015	2016	2015	
OPERATING PROF	IT							
North America			\$ 1	363	\$ 385	\$1,071	\$1,152	
Europe			72		63	202	188	
South America		68		70	193	236		
Asia			68		77	198	215	
Surface Technologies			26		25	75	78	
Segment operating profit			597	7	620	1,739	1,869	
			2) (10	0)	(26)	(100)	(172)	
Total operating profit		0		497	\$ 594	\$1,639	\$1,697	
1 01							-	

(a) Sales reflect external sales only. Intersegment sales, primarily from North America to other segments, were not material.

14. Equity and Redeemable Noncontrolling Interests Equity

A summary of the changes in total equity for the quarters ended September 30, 2016 and 2015 is provided below: Ouarter Ended September 30

	Quarter	r Ended Se	pten	nber 30,					
(Millions of dollars)	2016				2015				
	Praxair	.,			Praxai	ir,			
Activity	Inc.	Noncont	rolli	nFotal	Inc.	Noncont	rolli	nFotal	
Activity	Shareh	ol date rests		Equity	Sharel	hol dnte rests		Equit	у
	Equity				Equity	¥			
Balance, beginning of period	\$5,140	\$ 407		\$5,547	\$4,96	4 \$ 380		\$5,34	4
Net income (a)	339	3		342	401	10		411	
Other comprehensive income (loss)	(37) 3		(34) (714) (9)	(723)
Noncontrolling interests:									
Additions (reductions) (b)		(12)	(12) —	1		1	
Dividends and other capital changes		(8)	(8) —	(2)	(2)
Redemption value adjustments	1	—		1	(1) —		(1)
Dividends to Praxair, Inc. common stock holders									
(\$0.75 per share in 2016 and \$0.715 per share in	(214) —		(214) (204) —		(204)
2015)									
Issuances of common stock:									
For the dividend reinvestment and stock purchase pla	in1			1	3			3	
For employee savings and incentive plans	46			46	13	—		13	
Other	5	_		5					
Purchases of common stock	(50) —		(50) (207) —		(207)
Tax benefit from share-based compensation		_			1			1	
Share-based compensation	14			14	8			8	
Balance, end of period	\$5,245	\$ 393		\$5,638	\$4,26	4 \$ 380		\$4,64	4

	Nine M	onths Endec	1 S	eptember	: 30,			
(Millions of dollars)	2016				2015			
	Praxair,				Praxair,			
A _4::4	Inc.	Noncontro	olli	n F otal	Inc.	Noncontrol	lliı	nFotal
Activity	Shareho	ol dnte rests		Equity	Shareho	ol dete rests		Equity
	Equity				Equity			
Balance, beginning of period	\$4,389	\$ 404		\$4,793	\$5,623	\$ 387		\$6,010
Net income (a)	1,094	21		1,115	1,125	27		1,152
Other comprehensive income (loss)	385	7		392	(1,271)) (23)	(1,294)
Noncontrolling interests:								
Additions (reductions) (b)		(12)	(12)) —	3		3
Dividends and other capital changes		(27)	(27)) —	(14)	(14)
Redemption value adjustments	4			4	(5) —		(5)
Dividends to Praxair, Inc. common stock holders								
(\$2.25 per share in 2016 and \$2.145 per share in	(642) —		(642)	(616) —		(616)
2015)								
Issuances of common stock:								
For the dividend reinvestment and stock purchase pla	ın5			5	6			6
For employee savings and incentive plans	102			102	57			57
Other	5			5				
Purchases of common stock	(133) —		(133)	(698) —		(698)
Tax benefit from share-based compensation				—	18			18
Share-based compensation	36			36	25			25
Balance, end of period	\$5,245	\$ 393		\$5,638	\$4,264	\$ 380		\$4,644

Net income for noncontrolling interests excludes Net income related to redeemable noncontrolling interests of \$2

(a) million and \$4 million for the quarter and nine months ended September 30, 2016, respectively (\$2 million and \$8 million for the same time periods in 2015, respectively), which is not part of total equity (see redeemable noncontrolling interests section below).

The quarter and nine months ended September 30, 2016, primarily relates to the sale of an ownership interest in a (b) majority-owned joint venture in India. Prior period amounts relate to increased ownership changes in certain (b) consolidated subsidiaries. The difference between the purchase price and the related noncontrolling interest was

recorded as a decrease in Praxair's additional paid-in-capital.

The components of AOCI are as follows:

	Septeml	ber Decem	lber
	30,	31,	
(Millions of dollars)	2016	2015	
Cumulative translation adjustment - net of taxes:			
North America	\$ (943) \$(899)
South America	(1,955) (2,272)
Europe	(458) (526)
Asia	(252) (285)
Surface Technologies	(32) (36)
	(3,640) (4,018)
Derivatives - net of taxes	(1) (1)
Pension / OPEB funded status obligation (net of \$320 million and \$325 million tax benefit in September 30, 2016 and December 31, 2015, respectively)	(570) (577)
	\$ (4,211) \$(4,59	6)

Redeemable Noncontrolling Interests

Noncontrolling interests with redemption features, such as put/sell options, that are not solely within the Company's control ("redeemable noncontrolling interests") are reported separately in the consolidated balance sheets at the greater of carrying value or redemption value. For redeemable noncontrolling interests that are not yet exercisable, Praxair calculates the redemption value by accreting the carrying value to the redemption value over the period until exercisable. If the redemption value is greater than the carrying value, any increase is adjusted directly to equity and does not impact net income.

At September 30, 2016, redeemable noncontrolling interests includes one packaged gas distributor in the United States where the noncontrolling shareholder has a put option. At December 31, 2015, redeemable noncontrolling interests also included Yara Praxair Holding AS, a 66%-owned joint venture in Scandinavia. On June 1, 2016, Praxair acquired the remaining 34% stake in this joint venture for \$104 million. The cash payment is shown in the financing section of the consolidated statements of cash flows under the caption "Noncontrolling interest transactions and other". The following is a summary of the changes in redeemable noncontrolling interests for the nine months ended September 30, 2016 and 2015:

September 50, 2010 and 2015.			
(Millions of dollars)	2016	2015	
Balance, January 1	\$113	\$176	
Net income	4	8	
Distributions to noncontrolling interest and other	(2)	(6)
Redemption value adjustments/accretion	(4)	5	
Foreign currency translation	4	(14)
Purchase of noncontrolling interest	(104)	—	
Balance, September 30	\$11	\$169	

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

The following table provides summary data for the quarter and nine months ended September 30, 2016 and 2015:

	Quarte	er E	nded Se	epte	mbe	r 30,	Nine Months Ended ' September 30,					
(Dollar amounts in millions, except per share data)	2016		2015		Vari	iance	2016	2015	Vari	iance		
Reported Amounts												
Sales	\$2,716	5	\$2,686	5	1	%	\$7,890	\$8,181	(4)%		
Cost of sales, exclusive of depreciation and amortization	\$1,533	3	\$1,488		3	%	\$4,382	\$4,534	(3)%		
Gross margin (a)	\$1,183		\$1,198	3	(1)%	\$3,508	\$3,647	(4)%		
As a percent of sales	43.6	%	44.6	%				44.6 %				
Selling, general and administrative	\$291		\$281		4	%	\$873	\$877	—	%		
As a percent of sales	10.7	%	10.5	%				10.7 %				
Depreciation and amortization	\$284		\$276		3	%	\$837	\$831	1	%		
Cost reduction program and other charges (b)	\$100		\$26				\$100	\$172				
Other income (expense) - net	\$11		\$2				\$10	\$—				
Operating profit	\$497		\$594		(16)%	\$1,639	\$1,697	(3)%		
Operating margin	18.3	%	22.1	%			20.8 %	20.7 %				
Interest expense - net	\$43		\$35		23	%	\$152	\$119	28	%		
Effective tax rate	26.4	%	27.9	%			26.8 %	28.5 %				
Income from equity investments	\$10		\$10		—	%	\$31	\$31		%		
Noncontrolling interests	\$(5)	\$(12)	(58)%	\$(25)	\$(35)	(29)%		
Net income - Praxair, Inc.	\$339		\$401		(15)%	\$1,094	\$1,125	(3)%		
Diluted earnings per share	\$1.18		\$1.40		(16)%	\$3.80	\$3.88	(2)%		
Diluted shares outstanding	288,19	95	287,31	1		%	287,727	289,835	(1)%		
Number of employees	26,680)	26,989)			26,680	26,989				
Adjusted Amounts (b)												
Operating profit	\$597		\$620		(4)%	\$1,739	\$1,869	(7)%		
Operating margin	22.0	%	23.1	%			22.0 %	22.8 %				
Interest expense - net	\$43		\$35		23	%	\$136	\$119	14	%		
Effective tax rate	26.9	%	28.0	%			27.1 %	28.0 %				
Noncontrolling interests	\$(10)	\$(12)	(17)%	\$(30)	\$(36)	(17)%		
Net income - Praxair, Inc.	\$405		\$419		(3)%	\$1,170	\$1,255	(7)%		
Diluted earnings per share	\$1.41		\$1.46		(3)%	\$4.07	\$4.33	(6)%		

(a) Gross margin excludes depreciation and amortization expense.

Adjusted amounts are non-GAAP measures which exclude the impact of the cost reduction program and other charges in the 2016 third quarter and the 2015 second and third quarters, the pension settlement charge in the third (b)quarter of 2016 and 2015, and the bond redemption charge in the first quarter of 2016 (see Note 2 and Note 5 to the

condensed consolidated financial statements). A reconciliation of reported amounts to adjusted amounts can be found in the "Non-GAAP Financial Measures" section of this MD&A.

Consolidated Results

In the third quarter, Praxair's sales were \$2,716 million, 1% above the prior-year quarter. Negative currency translation reduced sales by 1%. Excluding this impact, sales were 2% above the third quarter of 2015 due to higher overall pricing which increased sales by 1%, and 1% growth from acquisitions, primarily the acquisition of a European carbon dioxide business completed in the second quarter of 2016. Overall volumes were comparable to the prior-year quarter, as volume growth from new project start-ups primarily in South America, Asia and Europe were offset by lower base business volumes in the Americas, due primarily to weaker manufacturing activity in the United States and Brazil. Reported operating profit of \$497 million, 18.3% of sales, was 16% below \$594 million in the prior-year quarter. Operating profit was reduced by a \$100 million charge related to severance and other cost reduction actions taken in response to weaker underlying industrial activity and a pension settlement charge. Excluding these charges, adjusted operating profit was \$597 million, 22.0% of sales and 4% below the 2015 adjusted third quarter. Excluding 1% negative currency translation, adjusted operating profit was 3% below the prior-year as growth from higher pricing was more than offset by the impact of volumes. The company's adjusted EBITDA margin was strong at 32.8%. Diluted earnings per share ("EPS") was \$1.18, 16% below reported EPS of \$1.40 in the third quarter of 2015. On an adjusted basis, EPS was \$1.41, 3% below the 2015 adjusted EPS of \$1.46, as lower operating profit was partially offset by a lower tax rate.

Outlook

Diluted EPS for the fourth quarter of 2016 is expected to be in the range of \$1.36 to \$1.43 and reported GAAP diluted EPS for the full year of 2016 is expected to be in the range of \$5.17 to \$5.24.

Adjusted diluted EPS for the full year of 2016 is expected to be in the range of \$5.44 to \$5.51 which excludes the impact of a (i) bond redemption charge recorded in the first quarter, and (ii) a pension settlement and cost reduction and other charges recorded in the third quarter. See Notes 2 and 5 to the condensed consolidated financial statements. Full-year capital expenditures are expected to be about \$1.4 billion.

The company's core business is to build, own, and operate industrial gas plants in order to supply atmospheric and process gases to customers. As such, Praxair believes that its backlog is one indicator of future sales growth. At September 30, 2016, Praxair's backlog of 19 large projects under construction was \$1.4 billion. This represents the total estimated capital cost of large plants under construction. These plants will supply customers in the energy, chemical, manufacturing, and electronics markets.

Praxair provides quarterly updates on operating results, material trends that may affect financial performance, and financial earnings guidance via quarterly earnings releases and investor teleconferences. These updates are available on the company's website, www.praxair.com, but are not incorporated herein.

Results of Operations

The changes in consolidated sales and operating profit compared to the prior year are attributable to the following:

	Quarter E 30, 2016 v	-	Nine Mont September vs. 2015					
	% Change	2		% Change	% Change			
	Sales	Operat	itSales Operating Profit					
Factors Contributing to Changes		-	-	-	-			
Volume	%	(7)%	(1)% (6)%			
Price	1 %	4	%	1 % 4	%			
Cost pass-through	%		%	(1)% —	%			
Currency	(1)%	(1)%	(4)% (4)%			
Acquisitions/divestitures	1 %		%	1 % —	%			
Other	%	(12)%	<u>-%</u> 3	%			
Reported	1 %	(16)%	(4)% (3)%			
Add: Cost reduction program and other charges and pension settlement	%	12	%	-% (4)%			
Adjusted	1 %	(4)%	(4)% (7)%			
The following tables provide sales by end-market and distribution	method.							

The following tables provide sales by end-market and distribution method:

	Qua	rter	Endeo	d Se	ptem	Nine Months Ended September 30,									
	% of	f Sal	les		%	Change*	%	of S	ales		% (Change*			
	2016	5	2015	5	<i>//</i> (70 Change		16	2015		10	Jildinge			
Sales by End Markets															
Manufacturing	22	%	23	%	(5)%	23	%	24	%	(5)%			
Metals	17	%	17	%	5	%	17	%	17	%	3	%			
Energy	12	%	12	%	(3)%	11	%	13	%	(6)%			
Chemicals	10	%	10	%	2	%	10	%	10	%	(1)%			
Electronics	8	%	8	%	(1)%	8	%	8	%	4	%			
Healthcare	8	%	8	%	7	%	8	%	8	%	6	%			
Food & Beverage	10	%	9	%	7	%	9	%	8	%	7	%			
Aerospace	3	%	3	%	5	%	3	%	3	%	3	%			
Other	10	%	10	%	(1)%	11	%	9	%	1	%			
	100 % 100 %							100% 100%							

* Excludes impact of currency, natural gas/precious metals cost pass-through and acquisitions/divestitures.

					Nir	ne N	Mon	ths	
	Quarte	r Ende	Ended						
	30,		September						
			30,						
	% of S	ales	%	of S	Sales	5			
	2016		201	6	201	5			
Sales by Distribution Method									
On-Site	29	%	29	%	29	%	29	%	
Merchant	35	%	35	%	35	%	34	%	
Packaged Gas	27	%	28	%	28	%	29	%	
Other	9	%	8	%	8	%	8	%	

100 % 100 % 100% 100%

Sales increased \$30 million, or 1%, for the third quarter versus the respective 2015 period. Higher overall pricing, primarily in North and South America, contributed 1% to sales, and acquisitions, largely in Europe, added an incremental 1% to sales. These increases however were partially offset by negative currency translation impact of 1%. Sales decreased \$291 million, or 4%, for the nine months ended September 30, 2016 versus the respective 2015 period primarily due to negative currency translation impacts of 4%.

Gross margin decreased \$15 million, or 1%, for the third quarter and decreased \$139 million, or 4%, for the nine months ended September 30, 2016 versus the respective 2015 periods, primarily due foreign currency translation impacts. Gross margin as percentage of sales declined to 43.6% from 44.6% for the third quarter and declined to 44.5% from 44.6% for the nine months ended September 30, 2016 versus the respective 2015 periods.

Selling, general and administrative expense ("SG&A") increased \$10 million, or 4%, for the third quarter and decreased \$4 million, or 0%, for the nine months ended September 30, 2016 versus the respective 2015 periods. Currency effects on SG&A for the quarter were flat when compared to the prior year and currency reduced SG&A expense by \$30 million for the nine months ended September 30, 2016 versus the prior year. Excluding currency effects, SG&A increased \$26 million for the nine months ended September 30, 2016 versus the respective 2015 period. In both periods, acquisitions, cost inflation and higher incentive compensation increased SG&A which were partially offset by benefits from cost reduction programs.

Depreciation and amortization expense increased \$8 million, or 3%, for the third quarter and increased \$6 million for the nine months ended September 30, 2016 versus the respective 2015 periods. Currency effects reduced depreciation and amortization expense by \$2 million and \$30 million for the quarter and nine-month periods respectively. These currency decreases were more than offset by higher depreciation primarily due to large project start-ups and acquisitions.

During the third quarter of 2016, Praxair recorded charges of \$100 million related primarily to a cost reduction program (refer to note 2 to the condensed consolidated financial statements). This program is expected to result in annualized pre-tax expense reductions and cash flows increases of approximately \$45 million. During 2015, Praxair recorded charges of \$146 million in the second quarter and \$19 million in the third quarter also related primarily to a cost reduction program (refer to note 2 to the consolidated financial statements included in Praxair's 2015 Annual Report on Form 10-K). The 2015 cost reduction actions are expected to result in annualized pre-tax expense reductions and cash flow increases of approximately \$80 million and, to date, have met expectations excluding any currency translation impacts.

Other income (expense) – net was \$11 million income for the quarter ended September 30, 2016 and \$10 million income for the nine months ended September 30, 2016 primarily due to net gains on asset sales primarily in North America during the third quarter. Other income was \$2 million income and zero for the quarter and nine months ended September 30, 2015 respectively.

Reported operating profit decreased \$97 million, or 16%, for the third quarter versus 2015. During the third quarter of 2016 and 2015 there were charges of \$100 million and \$26 million, respectively, primarily related to cost reduction programs and other charges and pension settlements. Excluding these items, adjusted operating profit decreased \$23 million, or 4%, for the third quarter versus 2015 as the impact of higher pricing was more than offset by volumes and negative currency impacts. Reported operating profit decreased \$58 million, or 3%, for the nine months ended September 30, 2016 versus the prior year. During the nine months ended September 30, 2016 and \$172 million, respectively, primarily related to the cost reduction programs and other charges. Excluding these items, adjusted operating profit decreased \$130 million, or 7%, for the nine months ended September 30, 2016 versus the prior year. Excluding negative currency of 4%, adjusted operating profit decreased 3% as higher pricing was more than offset by lower volumes and higher costs.

Interest expense-net increased \$8 million, or 23%, for the third quarter and increased \$33 million, or 28%, for the nine months ended September 30, 2016 versus the respective 2015 periods. Included within interest expense-net for the nine months ended September 30, 2016 was a \$16 million charge relating to a bond redemption (see Note 5 to the condensed consolidated financial statements) recorded during the first quarter of 2016. Excluding this charge, adjusted

interest expense-net increased \$17 million, or 14% for the nine months ended September 30, 2016 versus the respective 2015 periods. These increases were primarily attributable to higher average interest rates due primarily to extending debt maturities.

The reported effective tax rate ("ETR") for the quarters ended September 30, 2016 and 2015 was 26.4% and 27.9%, respectively. The ETR for the 2016 quarter includes a \$29 million tax benefit related to a pension settlement charge and cost reduction program. The 2015 quarter includes an \$8 million tax benefit related to a pension settlement and cost reduction program and other charges (see Note 2 to the condensed consolidated financial statements). Excluding these impacts, on an adjusted basis the ETR for the 2016 and 2015 quarters was 26.9% and 27.9%, respectively. The lower adjusted ETR in 2016 is due to a \$5 million excess tax benefit on share-based compensation resulting from the adoption of a new accounting standard during the second quarter of the current year (see Note 1 to the condensed consolidated financial statements). The reported ETR for the 2016 period includes a \$35 million tax benefit related to a pension settlement and 26.8% and 28.5%, respectively. The ETR for the 2016 period includes a \$35 million tax benefit related to a pension settlement and cost reduction program and other charges. The 2015 period includes a \$41 million tax benefit related to a pension settlement and cost reduction program and other charges (see Note 2). Excluding these impacts, on an adjusted basis the ETR for the 2016 and 2015 periods was 27.1

% and 28%, respectively. The lower adjusted ETR in 2016 is due to a \$15 million excess tax benefit on share-based compensation from the adoption of a new accounting standard (see Note 1).

Income from equity investments was \$10 million for both the quarters ended September 30, 2016 and 2015 and was \$31 million for both the nine months ended September 30, 2016 and 2015. Praxair's significant sources of equity income are in China, Italy, and the Middle East.

At September 30, 2016, non-controlling interests consisted primarily of non-controlling shareholders' investments in Asia (primarily China) and Europe (primarily Italy). Non-controlling interests decreased \$7 million for the third quarter and decreased \$10 million for the nine months ended September 30, 2016 versus the respective 2015 periods. Non-controlling interest for the third quarter and nine months ended September 30, 2016 both included a reduction of \$5 million related to the current year cost reduction program. The remaining decrease in both periods was primarily attributable to the divestiture of a controlling interest in a U.S. packaged gas business during the fourth quarter of 2015.

Reported Net income-Praxair, Inc. decreased \$62 million, or 15%, for the third quarter versus the respective period in 2015. Included within the third quarter 2016 and 2015 were after-tax and non-controlling interest charges of \$66 million and \$18 million, respectively, related to the cost reduction program and other charges and pension settlements. Excluding these charges, Adjusted Net income-Praxair, Inc decreased \$14 million, or 3%, primarily due to lower adjusted operating profit partially offset by a lower effective tax rate. Reported Net income-Praxair, Inc. decreased \$31 million, or 3%, for the nine months ended September 30, 2016 versus the respective period in 2015. Included within the nine months ended September 30, 2016 and 2015 were after-tax and non-controlling interest charges of \$66 million and \$130 million, respectively, related to the cost reduction program and other charges and pension settlements. In addition, the nine months ended September 30, 2016 included a \$10 million after-tax charge from a bond redemption (see Note 5 to the condensed consolidated financial statements) recorded during the first quarter of 2016. Excluding these charges, adjusted Net income-Praxair, Inc decreased \$85 million, or 7%, for the nine months ended September 30, 2015 primarily due to lower adjusted operating profit partially offset by a lower effective period in 2015 primarily due to lower adjusted operating profit partially offset by a lower effective period in 2015 primarily due to lower adjusted operating profit partially offset by a lower effective tax rate.

Reported Earnings per share of \$1.18 decreased \$0.22, or 16%, for the third quarter versus the comparable period in 2015. Included within the third quarter 2016 and 2015 were charges of \$0.23 and \$0.06, respectively, related to the cost reduction program and other charges and pension settlements. Excluding these charges, Adjusted Earnings per share decreased \$0.05, or 3%, primarily due to lower adjusted net income. Reported Earnings per share of \$3.80 decreased \$0.08, or 2%, for the nine months ended September 30, 2016. Included within the nine months ended September 30, 2016 and 2015 were charges of \$0.23 and \$0.45, respectively, related to the cost reduction program and other charges of \$0.23 and \$0.45, respectively, related to the cost reduction program and other charges and pension settlements. In addition, the nine months ended September 30, 2016 included a \$0.04 charge from a bond redemption (see Note 5 to the condensed consolidated financial statements) recorded during the first quarter of 2016. Excluding these charges, adjusted earnings per share decreased \$0.26, or 6%, primarily due to lower adjusted net income which was partially offset by a reduction in the number of diluted shares outstanding as a result of the company's net repurchases of common stock over the past year.

The number of employees at September 30, 2016 was 26,680, a decrease of 309 employees from September 30, 2015. This decrease primarily reflects the impact of cost reduction programs implemented during the previous year and was partially offset by increases due to acquisitions.

Other Comprehensive Income (Loss)

Other comprehensive income (loss) for the third quarter and nine months ended September 30, 2016 of \$(34) million and \$396 million, respectively, resulted primarily from currency translation adjustments. The translation adjustments

reflect the impact of translating local currency foreign subsidiary financial statements to U.S. dollars. Generally, positive translation adjustments result from the weakening of the U.S. dollar against most major currencies, while negative translation adjustments result from a strengthening of the U.S. dollar. See "Currency" section of the MD&A for exchange rates used for translation purposes and Note 14 to the condensed consolidated financial statements for a summary of the currency translation adjustment component of accumulated other comprehensive income by segment.

Retirement Benefits

The net periodic cost for pension and OPEB plans was \$19 million and \$32 million in the quarters ended September 30, 2016 and 2015, respectively and \$47 million and \$84 million for the nine months ended September 30, 2016 and 2015 respectively. These decreases are due to lower amortization of net actuarial losses as a result of an increase in discount rates, and a change in the approach for measuring service and interest costs by applying specific spot rates along the yield curve rather than a single

weighted-average rate derived from the yield curve (the "spot rate approach"). Refer to the 2015 Annual Report on Form 10-K for a more detailed discussion of the change in approach and the estimated impacts. Segment Discussion

The following summary of sales and operating profit by segment provides a basis for the discussion that follows.

	Quarter 30,	Ended Se	ptem	ber	Nine Months Ended September 30,				
(Dollar amounts in millions)	2016	2015	Var	iance	2016	2015	Var	iance	
SALES									
North America	\$1,431	\$1,463	(2)%	\$4,195	\$4,444	(6)%	
Europe	366	338	8	%	1,041	995	5	%	
South America	378	343	10	%	1,047	1,132	(8)%	
Asia	391	395	(1)%	1,160	1,153	1	%	
Surface Technologies	150	147	2	%	447	457	(2)%	
	\$2,716	\$2,686	1	%	\$7,890	\$8,181	(4)%	
OPERATING PROFIT									
North America	\$363	\$385	(6)%	\$1,071	\$1,152	(7)%	
Europe	72	63	14	%	202	188	7	%	
South America	68	70	(3)%	193	236	(18)%	
Asia	68	77	(12)%	198	215	(8)%	
Surface Technologies	26	25	4	%	75	78	(4)%	
Segment operating profit	597	620	(4)%	1,739	1,869	(7)%	
Cost reduction program and other charges	(100)	(26))		(100)	(172)			
Total operating profit	\$497	\$594	(16)%	\$1,639	\$1,697	(3)%	

North America

North America																			
						(Ou	arte	r Ei	nded	Septe	embe	er 30.		ths Ended				
							Quarter Ended September 30							September 30,					
							201			2015				2016	2015		iance		
Sales								431		\$1,40	53	(2)%	\$4,195	\$4,444	(6))%		
Cost of sales, exclusi	ve of d	eprecia	tion a	and a	mortizati					754				2,150	2,310				
Gross margin						(678	3		709				2,045	2,134				
Operating expenses							162	2		171				514	525				
Depreciation and am	ortizati	on					153	3		153				460	457				
Operating profit							\$30	53		\$385		(6)%	\$1,071	\$1,152	(7))%		
Margin %							25.	4	%	26.3	%			25.5 %	25.9 %				
		0	narte	r End	led Septe	mhe	-r 7	20	Niı	ne Mo	onths	End	ed						
			016 v		-			ю,	Sej	otemb	er 30	0, 20	16						
		2	J10 V	5. 20	15				vs.	2015									
		%	Cha	nge					%	Chang	ge								
		S	ales		Operat	ting	Pro	ofit	Sal	es Oj	perat	ing I	Profit						
Factors Contributing	to Cha	nges																	
Volume		(1)%	%	(7)%			(3)	% (7)%							
Price		1	q	6	3	%			1	% 3		%							
Cost pass-through		(1)%	%		%			(2)	% —	-	%							
Currency		(1)%	%	(1)%			(2)	% (2)%							
Acquisitions/divestit	ures		_ 9	6		%				% —	-	%							
Other			_ 9	6	(1)%				% (1)%							
		(2	2)%	%	(6)%			(6)	% (7)%							
The following tables	provide	e sales	by en	d-ma	rket and	dist	rib	utio	n n	netho	1:								
c	-		-							Ende									
	Quart	ter End	ed Se	ptem	ber 30,	Sep													
	% of	Sales		~ ~	11	% o													
	2016	20	15	% C	Change*	201	6	201	15	% C	nang	e*							
Sales by End Market	s																		
Manufacturing	29	% 29	%	(3)%	30	%	30	%	(5)%								
Metals		% 12	%	(3)%	12)%								
Energy	17	% 18	%	(3)%	17				-)%								
Chemicals		% 9	%)%			10)%								
Electronics		% 5		(5)%			5			%								
Healthcare	7	% 7	%	5	%	7	%	7	%	3	%								
Food & Beverage		% 10	%		%	10			%		%								
Aerospace		% 2)%		%		%		%								
Other		% 8	%	7	%			8			%								
		% 10				100													
* Excludes impact o				gas/p	recious 1					s-thro	ough	and	acaui	sitions/div	estitures.				
		. ,	2	р				e M	-		0								
		Oua	ter E	nded	Septeml														
		30,			- prom			tem	ber										
		,					30,												
			. ~ .					6.0	1										
		% of	Sale	S		ι	/0 C	ot Sa	ales										
		% of 2016			015			of Sa 6											

Sales by Distribution Method

On- Site	29	%	29	%	28 % 28 %
Merchant	39	%	38	%	39 % 38 %
Packaged Gas	31	%	31	%	32 % 32 %
Other	1	%	2	%	1 % 2 %
	100	%	100	%	100% 100%

The North America segment includes Praxair's industrial gases operations in the United States, Canada and Mexico. North America segment sales decreased \$32 million, or 2% in the third quarter and \$249 million, or 6% for the nine-month period as compared to the prior year. For the quarter, excluding currency and cost pass-through impacts, sales were comparable to the prior year. For the nine-month period, excluding currency and cost pass-through impacts, sales were 2% below the prior year due to lower volumes, primarily packaged gases, partially offset by higher pricing. By end-market, lower sales primarily to the manufacturing and upstream energy markets were partially offset by growth in food and beverage and healthcare.

North America segment operating profit decreased \$22 million, or 6% in the third quarter and \$81 million or 7% for the nine-month period as compared to the prior-year due to lower volumes and currency impacts which were partially offset by the impact of higher pricing. Europe

Ĩ				Quar	ter F	Ended	Sept	tembe	r 30,	Nine Months Ended September 30,						
				2016		2015		Varia	nce %	2016		2015	Va	ariance %		
Sales				\$366)	\$338		8	%	\$1,041	l	\$995	5	%		
Cost of sales, exclusive of depre amortization	ciatio	n and		204		195				579		565				
Gross margin				162		143				462		430				
Operating expenses				49		43				145		133				
Depreciation and amortization				41		37				115		109				
Operating profit				\$72		\$63		14	%	\$202		\$188	7	%		
Margin %				19.7	%	18.6	%			19.4	%	18.9 %				
					ľ	Nine N	Iont	hs								
	Quarter Ended September 30, Ended															
	2016	o vs. 201	15		S	Septen	ıber	30,								
					2	2016 v	s. 20)15								
	% C	hange	% Chan	IGE		%	%									
	<i>/U</i> C	nange		ige	Chang	inge										
	Sale	8	Operati	ng Pro	fit S	Sales	erating fit	5								
Factors Contributing to Changes	5															
Volume / Sale of Equipment	(1)%	(7)%	2	2 %		%								
Price		%	2	%	-	_ %	2	%								
Cost pass-through	—	%		%	-	_ %		%								
Currency		%		%	(1)%		%								
Acquisitions/divestitures	9	%	8	%	2	1 %	3	%								
Other		%	11	%	-	_ %	2	%								
	8	%	14	%	5	5 %	7	%								

The following tables provide sales by end-market and distribution method:

	Quarter Ended September					Nine Months Ended						
	30,	30, 5					September 30,					
	% o	f Sa	les		07. C	Change*	%	of S	ales	5	07. (Change*
	201	6	201	5	% C	mange.	201	6	201	5	70 C	Jhange
Sales by End Markets												
Manufacturing	20	%	21	%	(4)%	21	%	22	%	(1)%
Metals	15	%	17	%	(6)%	16	%	17	%	2	%

Energy	5	%	6	%	(11)%	5	%	6	% (10)%
Chemicals	13	%	14	%	2	%	14	%	14	% —	%
Electronics	7	%	7	%		%	7	%	7	% 5	%
Healthcare	10	%	11	%	4	%	11	%	11	% 3	%
Food & Beverage	14	%	11	%	10	%	12	%	10	% 7	%
Aerospace	1	%	1	%	32	%	1	%	1	% 9	%
Other	15	%	12	%	(4)%	13	%	12	% 3	%
	100	%	100	%			100)%	100)%	

* Excludes impact of currency, natural gas/precious metals cost pass-through and acquisitions/divestitures

					Nine	Mo	ont	hs	
	Quarte	r Ende	ed Septe	mber	Ende	ed			
	30,				September				
	% of S	ales			% of	Sal	es		
	2016		2015		2016	2	01	5	
Sales by Distribution Method									
On- Site	18	%	21	%	19 9	% 1	9	%	
Merchant	37	%	34	%	35 9	% 34	4	%	
Packaged Gas	42	%	42	%	42 9	6 4	3	%	
Other	3	%	3	%	4 9	% 4		%	
	100	%	100	%	1009	10	00	%	

Europe segment sales increased by \$28 million, or 8% in the third quarter and \$46 million, or 5% for the nine-month period as compared to the prior year. Excluding the impacts of acquisitions and divestitures, sales decreased 1% for the quarter primarily due to a prior-year sale of equipment; underlying sales were steady with the prior year. Excluding the impact of acquisitions, divestitures and currency, sales grew 2% for the nine-month period due to higher merchant volumes and volume growth from new project start-ups. In addition, acquisitions, primarily a carbon dioxide business largely serving the food and beverage market, contributed growth of 9% and 4% for the quarter and nine-month period, respectively. The increase in the percentage of merchant sales year-over-year is primarily due to the acquisition of the carbon dioxide business. Refer to Note 3 to the condensed consolidated financial statements for additional information.

Europe segment operating profit increased by \$9 million, or 14% in the third quarter and \$14 million, or 7% for the nine-month period as compared to the prior year. For the quarter and nine-month period, the increase in operating profit was primarily due to cost reduction actions, acquisitions and higher pricing. South America

	Quarter	Ended Se	ptember	Nine Months Ended			
	30,			Septembe			
	2016	2015	Variance	2016	2015	Variance	
Sales	\$378	\$343	10 %	\$1,047	\$1,132	(8)%	
Cost of sales, exclusive of depreciation and amortization	225	197		615	637		
Gross margin	153	146		432	495		
Operating expenses	50	43		142	154		
Depreciation and amortization	35	33		97	105		
Operating profit	\$68	\$70	(3)%	\$193	\$236	(18)%	
Margin %	18.0 %	20.4 %		18.4 %	20.8 %		

	-		ded Sept 5. 2015	ember	Nine Months Ended September 30, 2016 v 2015					
	% Change % Change					% ChangeChange				
	Sales Operating Profit S				Sale	es	Operat	ing Profit		
Factors Contributing to Changes										
Volume	2	%	(6)%	1	%	(3)%		
Price	5	%	23	%	4	%	18	%		
Cost pass-through	1	%		%		%		%		
Currency	2	%	1	%	(13)%	(14)%		
Acquisitions/divestitures		%		%		%		%		
Other		%	(21)%		%	(19)%		
	10	%	(3)%	(8)%	(18)%		

The following tables provide sales by end-market and distribution method:

						Nine Months Ended September 30,						
))				%			% of Sales			
	2010	5	2015	5	Cha	nge*	201	6	201	5	Cha	nge*
Sales by End Markets												
Manufacturing	17	%	20	%	(12)%	18	%	21	%	(11)%
Metals	33	%	28	%	25	%	30	%	28	%	12	%
Energy	2	%	2	%		%	2	%	2	%		%
Chemicals	9	%	10	%	(2)%	9	%	9	%		%
Electronics		%		%		%		%		%		%
Healthcare	18	%	18	%	11	%	19	%	18	%	12	%
Food & Beverage	12	%	13	%	9	%	13	%	13	%	11	%
Aerospace		%		%		%		%		%		%
Other	9	%	9	%	(2)%	9	%	9	%	(2)%
	100	%	100	%			100)%	100)%		

* - Excludes impact of currency, natural gas/precious metals cost pass-through and acquisitions/divestitures.

- Excludes impact of curren	icy, nat	urar ge	is/preer	ous m	ctais	co	st p	ass-1	
					Nine	e N	Ion	ths	
	Quarte	r Ende	ed Septe	ember	End	ed			
	30, September								
					30,				
	% of S	ales			% of	f S	ales	5	
	2016		2015		2010	5	201	5	
Sales by Distribution Method									
On- Site	33	%	27	%	30	%	27	%	
Merchant	39	%	42	%	40	%	41	%	
Packaged Gas	26	%	29	%	27	%	29	%	
Other	2	%	2	%	3	%	3	%	
	100	%	100	%	100	%	100)%	

South America segment sales in the third quarter increased \$35 million, or 10%, versus the prior-year quarter. Excluding currency and cost pass-through, sales grew 7% primarily due to higher overall pricing which increased sales by 5% coupled with a 2% increase due to higher volumes primarily attributable to new plant start-ups for metals customers partially offset by weaker sales to the manufacturing end-market. For the nine-month period sales decreased \$85 million, or 8%, from 2015. Excluding currency, sales grew 5% due to higher overall pricing and volumes. Volumes in South America were steady as growth to metals (including project contribution), healthcare and food and beverage end-markets were offset by lower sales to manufacturing due to weak industrial production.

Segment operating profit decreased \$2 million, or 3%, versus the prior-year quarter and decreased \$43 million, or 18%, for the nine-month period year-over-year. Excluding currency translation, operating profit was 4% below the prior-year quarter primarily attributable to higher costs, including inflation, and lower operating profit due to product sales mix, partially offset by higher price. In addition, the current quarter impact includes a benefit from a customer contract settlement. For the nine-month period, operating profit was 4% below the prior year, excluding the effects of negative currency translation, largely for the same reasons discussed above.

Asia

Asia		Quarter Ended Se 30,	ptember	Nine Mon September		
		2016 2015	Variance	2016	2015 Variance	e
Sales		\$391 \$395	(1)%	\$1,160	\$1,153 1 %	
Cost of sales, exclusive of dep	reciation and amortization	255 247		749	725	
Gross margin		136 148			428	
Operating expenses		23 28			84	
Depreciation and amortization		45 43	(10) (1		129	
Operating profit		\$68 \$77	(12)%		\$215 (8)%	
Margin %		17.4 % 19.5 %		17.1 %	18.6 %	
		Nine Months	Ended			
	Quarter Ended Septemb	September 3				
	30, 2016 vs. 2015	vs. 2015				
	% Change % Change	% Chang€ha	inge			
	1 0	Profit Sales Operat	ting Profit			
Factors Contributing to Chang						
Volume	2 % (9) %	· ·)%			
Price	(1)% $(6)%$. , .)%			
Cost pass-through	1 % - %		%			
Currency Acquisitions/divestitures	$\begin{array}{cccccccccccccccccccccccccccccccccccc$. , .)% %			
Other	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		% %			
Other	(1)% $(12)%$)%			
The following tables provide s	. , . , ,	· ·) //			
	Ended September Nine I					
30,	•	nber 30,				
% of Sa						
2016	2015 Change* 2016	2015 Change*				
2010	2013 2010	2013				
Sales by End Markets						
Manufacturing 8 %	. ,	9 % (7)%				
Metals 29 %		30 % 4 %				
Energy 2 %		3 % (7)%				
Chemicals 14 %		12 % 23 %				
Electronics 33 %		32 % 5 %				
Healthcare1%Food & Beverage3%		1 % 10 % 2 % 10 %				
Aerospace — %		2 % 10 % - % - %				
1		$\frac{-1}{11}$ % $\frac{-1}{10}$ %				
	· /	100%				
* - 1 1		11			. . .	

* Excludes impact of currency, natural gas/precious metals cost pass-through and acquisitions/divestitures

	Nine Months
Quarter Ended September	Ended
30,	September
	30,
% of Sales	% of Sales

	2016		2015		2016 2015
Sales by Distribution Method					
On- Site	48	%	51	%	50 % 50 %
Merchant	30	%	30	%	29 % 31 %
Packaged Gas	14	%	13	%	14 % 12 %
Other	8	%	6	%	7 % 7 %
	100	%	100	%	100% 100%

Asia segment sales decreased \$4 million, or 1% in the third quarter as compared to the prior year. Currency translation reduced sales by 2% primarily due to the devaluation of the Chinese yuan and Indian Rupee against the U.S. Dollar. Cost pass-through increased sales by 1%. Volume growth of 2% included new plant start-ups in China serving chemical customers, partially offset by customer turnarounds. Pricing was lower than the prior year by 1%. By end-market, sales growth was strongest to the chemicals and metals end-markets. For the nine-month period, sales increased \$7 million, or 1%, as compared to the prior year largely for the same reasons discussed above. Asia segment operating profit decreased \$9 million, or 12% in the third quarter as compared to the prior year. Excluding negative currency effects, operating profit decreased by 10%. This decrease was primarily attributable to lower volumes and pricing, partially offset by cost reduction actions. Divestitures decreased operating profit by 3% due to the sale of an ownership interest in a majority-owned joint venture in India. The sale did not result in a gain or loss. In addition, the prior year impact included a benefit from a customer contract settlement. For the nine month period, operating profit decreased \$17 million, or 8%, as compared to the prior-year largely for the same reasons discussed above.

Surface Technologies

	Quartar E	Ended Sept	ambar 30	Nine M	onths Ended	
	Quarter I	sided Sept	eniber 50,	September 30,		
	2016	2015	Variance	2016	2015 Variance	
Sales	\$ 150	\$ 147	2 %	\$447	\$457 (2)%	
Cost of sales, exclusive of depreciation and amortization	97	95		290	297	
Gross margin	53	52		157	160	
Operating expenses	17	17		52	51	
Depreciation and amortization	10	10		30	31	
Operating profit	\$ 26	\$ 25	4 %	\$75	\$78 (4)%	
Margin %	17.3 %	17.0 %		16.8 %	17.1 %	

	-	rter Ende 6 vs. 201		tember 30,	Nine Months Ended September 30, 2016 vs. 2015				
	% C	hange	% Ch	ange	% Chan	%			
		-		-	Chang	gChange			
	Sale	s	Opera	ating Profit	Sales	Operating Profit			
Factors Contributing to Changes	s								
Volume/Price	3	%	7	%	(1)%	(8)%			
Cost pass-through	(1)%		%	(1)%	%			
Currency	(1)%	(1)%	(1)%	(1)%			
Acquisitions/divestitures	1	%	—	%	1 %	%			
Other		%	(2)%	-%	5 %			
	2	%	4	%	(2)%	(4)%			

The following table provides sales by end-market:

	Quarter Ended September 30,					Nine Months Ended September 30,						
	% of Sales				% Change*		% of Sales				0 C	Changa*
	2016	5	2015		10 Change		201	6	2015		% Change*	
Sales by End Markets												
Manufacturing	11	%	12	%	(8)%	11	%	12	%	(8)%
Metals	9	%	8	%	17	%	9	%	8	%	15	%
Energy	22	%	24	%	(5)%	23	%	25	%	(8)%
Chemicals	2	%	3	%	2	%	2	%	2	%	(5)%
Electronics	1	%	1	%		%	1	%	1	%		%
Healthcare		%		%	_	%		%		%		%
Food & Beverage	3	%	3	%	4	%	4	%	3	%		%
Aerospace	40	%	37	%	10	%	39	%	36	%	3	%
Other	12	%	12	%	(9)%	11	%	13	%	(14)%
	100	%	100	%			100)%	100)%		

* Excludes impact of currency, natural gas/precious metals cost pass-through and acquisitions/divestitures Surface Technologies segment sales increased \$3 million, or 2% in the quarter versus the prior year. Sales increased 3% due to higher volumes and price, and increased 1% due to acquisitions. Higher volumes and price were primarily driven by strong sales to the aerospace end-market. These increases were partially offset by 1% negative translation impacts and 1% lower cost pass-through. Sales decreased \$10 million, or 2% for the nine-month period as compared to the prior year. Lower volumes, primarily to the energy and manufacturing end markets, decreased sales by 1%.

Surface Technologies segment operating profit increased \$1 million, or 4% in the quarter versus the prior year, increased volumes and price contributed 7%, however was partially offset by 1% negative currency impacts and 2% higher costs year over year. Operating profit decreased \$3 million, or 4% for the nine-month period as compared to the prior year due to lower volumes, partially offset by higher pricing and lower costs.

Effective October 1, 2016 Surface Technologies completed the formation of PG Technologies, LLC ("PGT"), a majority-owned joint venture with GE Aviation ("GE") for the development, support and application of specialized coatings tailored for GE's and CFM International's (a GE joint venture with Safran Aircraft Engines of France) current and future engine models, including the GE9X and LEAP engines. PGT will expand its footprint with a new coatings plant in the southeast United States, which will supplement the services provided to GE.

Currency

The results of Praxair's non-U.S. operations are translated to the company's reporting currency, the U.S. dollar, from the functional currencies. For most foreign operations, Praxair uses the local currency as its functional currency. There is inherent variability and unpredictability in the relationship of these functional currencies to the U.S. dollar and such currency movements may materially impact Praxair's results of operations in any given period.

To help understand the reported results, the following is a summary of the significant currencies underlying Praxair's consolidated results and the exchange rates used to translate the financial statements (rates of exchange expressed in units of local currency per U.S. dollar):

	Percentage of YTD 2016 Consolidated Sales		Exchange F Income Sta		Exchange Rate for Balance Sheet		
			Year-To-D	ate Average	September 30, December 31,		
Currency			2016	2015	2016	2015	
Euro	13	%	0.90	0.90	0.89	0.92	
Brazilian real	11	%	3.53	3.12	3.25	3.90	
Canadian dollar	7	%	1.32	1.26	1.31	1.38	
Chinese yuan	6	%	6.58	6.25	6.67	6.49	
Mexican peso	5	%	18.29	15.54	19.39	17.21	
Korean won	4	%	1,161	1,121	1,101	1,175	
India rupee	3	%	67.10	63.54	66.61	66.15	
Argentine peso	1	%	14.52	8.96	15.31	13.04	
British pound	1	%	0.72	0.65	0.77	0.68	
Norwegian krone	e 1	%	8.40	7.90	7.98	8.84	

Liquidity, Capital Resources and Other Financial Data The following selected cash flow information provides a basis for the discussion that follows: Nine Months Ended (Millions of dollars) September 30. 2016 2015 NET CASH PROVIDED BY (USED FOR): **OPERATING ACTIVITIES** Net income (including noncontrolling interest) \$1,119 \$1,160 Non-cash charges (credits): Add: Depreciation and amortization 837 831 Add: Deferred income taxes 25 (30) Add: Share-based compensation 36 25 Add: Cost reduction program and other charges (a) 93 139 Net income adjusted for non-cash charges 2,055 2,180 Less: Working capital (59) (128) Less: Pension contributions (8)) (13) 59 Other (135) \$1,904 Net cash provided by operating activities \$2,047 **INVESTING ACTIVITIES** Capital expenditures (1,056) (1,154)Acquisitions, net of cash acquired (345) (43) Divestitures and asset sales 41 245 Net cash used for investing activities \$(1,360) \$(952) FINANCING ACTIVITIES Debt increases - net 556 371 Issuances (purchases) of common stock - net (24)) (630) Cash dividends - Praxair, Inc. shareholders (642) (615) Excess tax benefit on share-based compensation 18 _____ Noncontrolling interest transactions and other (122)(44)) Net cash (used for) provided by financing activities \$(232) \$(900) Effect of exchange rate changes on cash and cash equivalents \$25 \$(42) Cash and cash equivalents, end-of-period \$627 \$136 **OTHER FINANCIAL DATA (a)** Debt-to-capital ratio 62.0 % 66.0 % After-tax return on capital ("ROC") 12.1 % 12.5 % Return on Praxair, Inc. shareholder's equity ("ROE") % 32.5 33.3 % Adjusted EBITDA \$2,607 \$2,731 Adjusted EBITDA Margin 33.0 % 33.4 % Debt-to-adjusted EBITDA 2.6 2.5

(a) Non-GAAP measures. See the "Non-GAAP Financial Measures" section for definitions and reconciliations to reported amounts.

Cash Flow from Operations

Cash provided by operations of \$2,047 million for the nine months ended September 30, 2016 increased \$143 million, or 8%, versus 2015. The increase was primarily attributable to lower working capital requirements and favorable changes in other long-term assets and liabilities which were partially offset by lower net income adjusted for non-cash

charges.

Praxair estimates that total 2016 required contributions to its pension plans will be in the area of \$10 million to \$15 million, of which \$8 million has been made through September 30, 2016. At a minimum, Praxair contributes to its pension plans to comply with local regulatory requirements (e.g., ERISA in the United States). Discretionary contributions in excess of the local minimum requirements are made based on many factors, including long-term projections of the plans' funded status, the economic environment, potential risk of overfunding, pension insurance costs and alternative uses of the cash. Changes to these factors can impact the amount and timing of discretionary contributions from year to year.

Investing

Net cash used for investing of \$1,360 million for the nine months ended September 30, 2016 increased \$408 million versus 2015 primarily due to higher acquisitions and lower proceeds from divestiture and asset sales, partially offset by lower capital expenditures.

Capital expenditures for the nine months ended September 30, 2016 were \$1,056 million, \$98 million lower than the prior year. Capital expenditures related primarily to investments in new plant and production equipment for growth and density. Approximately 60% of the capital expenditures were in North America.

Acquisitions for the nine months ended September 30, 2016 were \$345 million, primarily due to the acquisition of a European CO2 business and packaged gases businesses in North America and Europe. Acquisitions in the prior-year period of \$43 million primarily relate to a packaged gases business in North and South America (see Note 3 to the condensed consolidated financial statements).

For the nine months ended September 30, 2016 divestitures and asset sales were \$41 million primarily due to the sale of an ownership interest in a majority-owned joint venture in India. For the nine months ended September 30, 2015 divestitures and asset sales were \$245 million, primarily due to the sale of fixed assets under construction to a customer in the North America energy market.

Financing

Cash used by financing activities was \$232 million for the nine months ended September 30, 2016. Cash dividends of \$642 million were higher than the prior year due to a 5% increase in quarterly dividends per share from \$2.145 to \$2.25. Net repurchases of common stock decreased \$606 million due primarily to fewer treasury share purchases and debt net of increased by \$556 million. Noncontrolling interest transactions and other was \$122 million for the nine months ended September 30, 2016 and primarily included the acquisition of the remaining 34% of Yara Praxair Holding AS in Scandinavia (see Note 14 to the condensed consolidated financial statements).

In February 2016, Praxair repaid \$400 million of 0.75% notes that became due. Also in February 2016, Praxair redeemed \$325 million of 5.20% notes due March 2017 resulting in a \$16 million charge to interest expense (\$10 million after-tax, or \$0.04 per diluted share) (see Note 5 to the condensed consolidated financial statements).

In February 2016, Praxair issued €550 million (\$615 million as of September 30, 2016) of 1.20% Euro-denominated notes due 2024. In addition, Praxair issued \$275 million of 3.20% notes due 2026.

Debt Covenants

Praxair's \$2.5 billion senior unsecured credit facility and long-term debt agreements contain various covenants (refer to Note 11 to the consolidated financial statements of Praxair's 2015 Annual Report on Form 10-K). The only financial covenant requires Praxair not to exceed a maximum 70% leverage ratio, as defined in the agreements. For purposes of the leverage ratio calculation, consolidated shareholders' equity excludes changes in the cumulative foreign currency translation adjustments after June 30, 2011. At September 30, 2016 and December 31, 2015, the actual leverage ratio calculated in accordance with the agreements was 53% and 53%, respectively.

Other Financial Data

Praxair's debt-to-capital ratio was 62.0% at September 30, 2016 versus 66.0% at September 30, 2015. This decrease was primarily attributable to (i) a reduction in net debt of \$129 million; (ii) an increase in equity due to currency

translation impacts on the accumulated other comprehensive income (loss) component as well as increases to equity due to earnings net of dividends declared and (iii) a decrease of \$158 million in redeemable noncontrolling interests primarily due to the acquisition of a 34% stake in a consolidated joint venture.

Table of Contents

After-tax return on capital ("ROC") was 12.1% for the four-quarter trailing period ended September 30, 2016 versus 12.5% for the 2015 period. This decrease is because net operating profit after tax ("NOPAT") has decreased more than capital has decreased, as more fully described throughout the previous MD&A sections.

Return on equity ("ROE") for the four-quarter trailing period ended September 30, 2016 was strong at 33.3% and was 80 basis-points above the prior year.

Adjusted EBITDA decreased \$15 million to \$891 million for the quarter ended September 30, 2016 and decreased \$124 million to \$2,607 million for the nine months ended September 30, 2016 versus prior year periods. These decreases in adjusted EBITDA are primarily due to lower adjusted net income versus the prior year primarily due to negative currency translation impacts and lower volumes.

Debt-to-Adjusted EBITDA was 2.6 and 2.5 for the four-quarter trailing period ended September 30, 2016 and 2015, respectively, primarily due to lower adjusted EBITDA.

See the "Non-GAAP Financial Measures" section below for definitions and reconciliations of these non-GAAP measures to reported GAAP amounts.

Legal Proceedings

See Note 12 to the condensed consolidated financial statements.

Non-GAAP Financial Measures

The following non-GAAP measures are intended to supplement investors' understanding of the company's financial information by providing measures which investors, financial analysts and management use to help evaluate the company's financial leverage, return on net assets employed and operating performance. Special items which the company does not believe to be indicative of on-going business trends are excluded from these calculations so that investors can better evaluate and analyze historical and future business trends on a consistent basis. Definitions of these non-GAAP measures may not be comparable to similar definitions used by other companies and are not a substitute for similar GAAP measures.

The following are the non-GAAP measures presented in the MD&A:

	September 30,		
(Dollar amounts in millions, except per share data)	2016	2015	
Debt-to-capital	62.0	66.0	%
After-tax return on capital	12.1	6 12.5	%
Return on equity	33.3	6 32.5	%
Adjusted EBITDA for the quarter ended	\$891	\$906	
Adjusted EBITDA for the nine months ended	\$2,607	\$2,73	1
Debt-to-adjusted EBITDA	2.6	2.5	

	Outorton En	dad	Nine Months		
	Quarter En		Ended		
	September	50,	September 30,		
2016 Adjusted amounts:*	2016	2015	2016	2015	
Operating profit	\$				