

HUNTSMAN CORPORATION 2016 ANNUAL REPORT

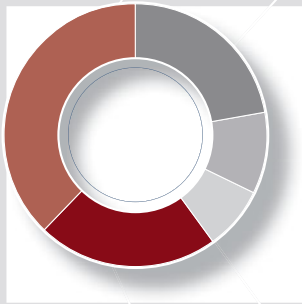
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# HUNTSMAN

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Enriching lives through innovation

We are growing our downstream differentiated businesses and driving improvement in those that are more cyclical.



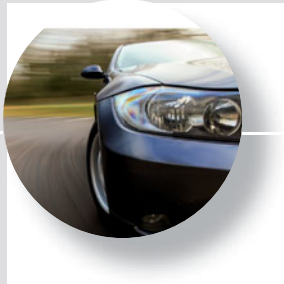
**POLYURETHANES**

We are a global leader in the manufacture of MDI-based polyurethanes used to produce energy-saving insulation; comfort foam for automotive seating, bedding and furniture; adhesives; coatings; elastomers for footwear; and composite wood products.



**PERFORMANCE PRODUCTS**

We manufacture products primarily based on amines, carbonates, surfactants and maleic anhydride. End uses include agrochemicals, oil and gas and alternative energy solutions, home detergents and personal care products, adhesives and coatings, mining, and polyurethane/epoxy curing agents.



**ADVANCED MATERIALS**

Our technologically advanced epoxy, acrylic and polyurethane-based polymer products are replacing traditional materials in aircraft, automobiles and electrical power transmission. Our products are also used in coatings, construction materials, circuit boards and sports equipment.



**TEXTILE EFFECTS**

We are a major global solutions provider for textile dyes, digital inks and chemicals that enhance color and improve performance such as wrinkle resistance, longer lasting fabrics and faster drying properties and the ability to repel water and stains in apparel, home and technical textiles.



**PIGMENTS AND ADDITIVES**

Expected to be spun-off as Venator Materials Corporation. We manufacture and market a broad range of titanium dioxide pigments and performance additives including color pigments, functional additives, timber treatment chemicals and water treatment chemicals. Our pigments and additives add performance and color to thousands of everyday items from paints, inks and cosmetics to plastics, pharmaceuticals and concrete.

**HUNTSMAN**

Enriching lives through innovation

[www.huntsman.com](http://www.huntsman.com)

Huntsman Corporation is a publicly traded global manufacturer and marketer of differentiated chemicals. Our chemical products number in the thousands and are sold worldwide to manufacturers serving a broad and diverse range of consumer and industrial end markets.



**2016 MILESTONES**

We generated \$686 million of free cash flow in 2016.

We strengthened our balance sheet by repaying \$560 million of debt.

In 2016, our MDI EBITDA increased by 9%.

We initiated the process to spin off our Pigments and Additives business, Venator Materials Corporation.

## DEAR FELLOW SHAREHOLDERS

PETER R. HUNTSMAN

Commencing in 2016, we laid out three primary objectives to unlock shareholder value and position our company for long-term sustainable growth: improving free cash flow generation, expanding our downstream differentiated businesses and preparing for the separation of our cyclical titanium dioxide business. During this past year, we delivered on each of these objectives, while at the same time significantly strengthening our balance sheet, expanding our trading multiple and delivering impressive returns to shareholders.

In my letter to shareholders last year, I indicated that I believed that improving our free cash flow generation profile was the single most significant objective we could achieve to create shareholder value. Coming off a year of important restructuring and capital projects, we publicly committed to generate \$350 million free cash flow in 2016. I am pleased to report that we nearly doubled this commitment, delivering a record \$686 million of free cash flow this past year. This impressive cash flow generation allowed us to pay off \$560 million of debt, significantly strengthening our balance sheet. Free cash flow generation remains a focus for us. We anticipate a continuation of our efforts to improve inventory and working capital management and again expect to exceed \$350 million in free cash flow generation in 2017.

During the year, we also made steady progress in our commitment to transform Huntsman into a stronger, less cyclical company through the growth of our differentiated businesses. This focus is showing results. In our key MDI business, where EBITDA grew 9% last year, differentiated MDI volumes grew 6% and represented 85% of MDI EBITDA. We continue to collaborate with our global customers to develop innovative solutions that enhance product performance and business competitiveness. Leading global manufacturers recognize Huntsman as the industry leader through this strategy.

We are also making significant progress in the separation of our titanium dioxide business through a spin-off to be named Venator (a Latin word for hunter—intended in part to acknowledge the Huntsman legacy). We are making excellent progress. Huntsman has recently

received approval from the IRS to retain a 40% economic interest in Venator, which will allow Huntsman to capture the anticipated appreciation in value associated with an improving titanium dioxide cycle. This will enhance our drive to make further reductions of debt while continuing to strengthen our balance sheet. The Venator spin-off by mid-2017 should unlock value for our shareholders. This will be a particularly efficient move, since titanium dioxide prices continue to rebound and Venator will enjoy a leading market position in this arena.

2017 will be a critical and transformative year for Huntsman as we continue to deliver on our commitments to our shareholders and unlock the value within the company. Thank you for your continued support. This should be a very exciting year.

PETER R. HUNTSMAN

President and Chief Executive Officer

February 21, 2017



PETER R. HUNTSMAN

## SPECIAL NOTE TO SHAREHOLDERS

## JON M. HUNTSMAN

It is a privilege to continue to serve as Executive Chairman of the company I founded 47 years ago. Our business has progressed dramatically since then, but as the world continues to change, Huntsman Corporation will continue to adapt and transform itself to effectively compete in the chemical industry. We begin 2017 as a world-class global business with revenues of approximately \$10 billion and a global footprint that is the envy of the industry. By mid-year, we expect to divide into two world class companies—one, a global leader in the titanium dioxide industry on the upswing of its cycle, and the other, a world-class differentiated chemical company with consistent, strong performing businesses.

Last year, Huntsman created significant value for our shareholders as we delivered total shareholder return of over 70%, significantly outperforming the global markets and our industry peers. This is a clear recognition of the quality of our businesses and the strategic goals that we have announced and on which we have delivered. We expect to see strong growth again this year and anticipate an expansion of our EBITDA multiple. Moreover, we anticipate additional value creation through the separation of our Pigments and Additives division.

One of the hallmarks of this great company is its strong leadership. Our management team is headed by Peter Huntsman, a gifted CEO who has steered our company through challenging economic conditions to a position of strength on the doorstep of significant transformation. We have a talented Board of Directors who bring

experience from a variety of leadership positions with the best companies around the world. Our Board remains fully aligned with management as Huntsman pursues and delivers on its strategic and financial goals—generating free cash flow, expanding our downstream differentiated businesses and separating our titanium dioxide business.

As the company's largest shareholder, I can assure you that we will continue our intense focus on creation of shareholder value. We appreciate the confidence and trust that you have shown in our Board, management and the outstanding employees of our company. This is an exciting time to be a Huntsman Corporation shareholder, and I look forward to a year of transformation and value creation with you, our shareholders.

## JON M. HUNTSMAN

Executive Chairman and Founder

February 21, 2017



JON M. HUNTSMAN

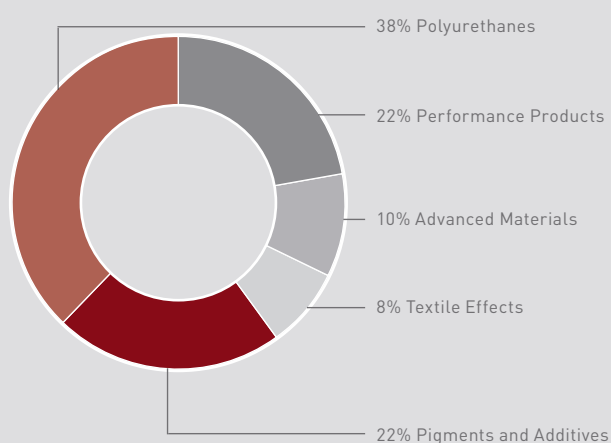
## 2016: AT-A-GLANCE

### FINANCIAL HIGHLIGHTS

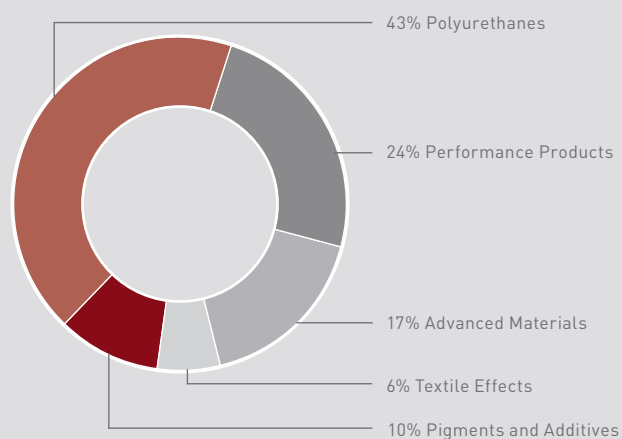
\$ in millions	Year Ended December 31,		
	2016	2015	2014
Revenues	\$9,657	\$10,299	\$11,578
Gross profit	\$1,678	\$ 1,848	\$ 1,919
Interest expense, net	\$ 202	\$ 205	\$ 205
Net income	\$ 357	\$ 126	\$ 345
Adjusted net income <sup>(1)</sup>	\$ 377	\$ 492	\$ 478
Adjusted diluted income per share <sup>(1)</sup>	\$ 1.57	\$ 2.00	\$ 1.94
Adjusted EBITDA <sup>(1)</sup>	\$1,127	\$ 1,221	\$ 1,340
Free cash flow <sup>(1)</sup>	\$ 686	\$ (30)	\$ 99
Capital expenditures <sup>(2)</sup>	\$ 390	\$ 648	\$ 564

\$ in millions	December 31,		
	2016	2015	2014
Total assets	\$9,189	\$ 9,820	\$10,923
Net debt <sup>(3)</sup>	\$3,770	\$ 4,526	\$ 4,251

REVENUES BY DIVISION <sup>(4)</sup>



ADJUSTED EBITDA BY DIVISION <sup>(4)</sup>



(1) For a reconciliation see pages 10–11 of the Financials section.

(2) Net of reimbursements of \$31 million, \$15 million and \$37 million in 2016, 2015 and 2014, respectively.

(3) Net debt calculated as total debt excluding affiliates less cash.

(4) Segment allocation before Corporate and other unallocated items.

# 2016: FINANCIAL REVIEW AND FORM 10-K

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## **DEFINITIONS**

Each capitalized term used without definition in this report has the meaning specified in the Annual Report on Form 10-K for the year ended December 31, 2016, which was filed with the Securities and Exchange Commission on February 15, 2017.



## SELECTED FINANCIAL DATA

The selected historical financial data set forth below presents our historical financial data as of and for the dates and periods indicated. You should read the selected financial data in conjunction with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and accompanying notes.

	Year ended December 31,				
	2016	2015	2014	2013	2012
(in millions, except per share amounts)					
<b>Statements of Operations Data:</b>					
Revenues	\$9,657	\$10,299	\$11,578	\$11,079	\$11,187
Gross profit	1,678	1,848	1,919	1,753	2,034
Restructuring, impairment and plant closing costs	81	302	158	151	92
Operating income	647	405	633	510	845
Income from continuing operations	361	130	353	154	378
Loss from discontinued operations, net of tax(a)	(4)	(4)	(8)	(5)	(7)
Extraordinary gain on the acquisition of a business, net of tax of nil(b)	—	—	—	—	2
Net income	357	126	345	149	373
Net income attributable to Huntsman Corporation	326	93	323	128	363
<b>Basic income (loss) per common share:</b>					
Income from continuing operations attributable to Huntsman Corporation common stockholders	\$ 1.40	\$ 0.40	\$ 1.36	\$ 0.55	\$ 1.55
Loss from discontinued operations attributable to Huntsman Corporation common stockholders, net of tax(a)	(0.02)	(0.02)	(0.03)	(0.02)	(0.03)
Extraordinary gain on the acquisition of a business attributable to Huntsman Corporation common stockholders, net of tax(b)	—	—	—	—	0.01
Net income attributable to Huntsman Corporation common stockholders	<u>\$ 1.38</u>	<u>\$ 0.38</u>	<u>\$ 1.33</u>	<u>\$ 0.53</u>	<u>\$ 1.53</u>
<b>Diluted income (loss) per common share:</b>					
Income from continuing operations attributable to Huntsman Corporation common stockholders	\$ 1.38	\$ 0.40	\$ 1.34	\$ 0.55	\$ 1.53
Loss from discontinued operations attributable to Huntsman Corporation common stockholders, net of tax(a)	(0.02)	(0.02)	(0.03)	(0.02)	(0.03)
Extraordinary gain on the acquisition of a business attributable to Huntsman Corporation common stockholders, net of tax(b)	—	—	—	—	0.01
Net income attributable to Huntsman Corporation common stockholders	<u>\$ 1.36</u>	<u>\$ 0.38</u>	<u>\$ 1.31</u>	<u>\$ 0.53</u>	<u>\$ 1.51</u>
<b>Other Data:</b>					
Depreciation and amortization	\$ 432	\$ 399	\$ 445	\$ 448	\$ 432
Capital expenditures	421	663	601	471	412
Dividends per share	0.50	0.50	0.50	0.50	0.40
<b>Balance Sheet Data (at period end):</b>					
Total assets	\$9,189	\$ 9,820	\$10,923	\$ 9,159	\$ 8,862
Total debt	4,196	4,796	5,127	3,887	3,684
Total liabilities	7,722	8,191	8,972	7,030	6,966

- (a) Loss from discontinued operations represents the operating results and loss on disposal of our former Australian styrenics business, our former U.S. base chemicals business and our former North American polymers business. The U.S. base chemicals business was sold on November 5, 2007 and the North American polymers business was sold on August 1, 2007.
- (b) The extraordinary gain on the acquisition of a business relates to the June 30, 2006 acquisition of our Textile Effects segment.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

### RECENT DEVELOPMENTS

On January 30, 2017, our titanium dioxide manufacturing facility in Pori, Finland experienced fire damage and is currently not operational. The fire brigade responded quickly to extinguish the fire and there were no injuries. We have notified applicable customers and suppliers of this *force majeure* event. We do not currently have an estimated time frame for how long the facility will be off line, but we are committed to repairing the facility as quickly as possible. The Pori facility has a nameplate capacity of 130,000 metric tons, which represents approximately 15% of our total titanium dioxide capacity and approximately 10% of total European titanium dioxide demand. The site is insured for property damage as well as business interruption losses. According to our insurance policies, the respective retention levels (deductibles) for physical damage and business interruption are \$15 million and 60 days, respectively. On February 9, 2017, we received a €50 million (approximately \$52 million) payment from our insurer as an initial partial progress payment towards the overall pending claim.

On October 28, 2016, we filed an initial Form 10 registration statement with the SEC as part of the process to spin off our Pigments and Additives and Textile Effects businesses in a tax-free transaction. On January 17, 2017, we announced that we will retain our Textile Effects business and we amended the Form 10 registration statement. We also announced that the name of the spin-off entity will be Venator Materials Corporation (“Venator”). Venator shares are expected to trade on the New York Stock Exchange under the ticker VNTR after the distribution to our stockholders. The completion of the spin-off is subject to the satisfaction or waiver of a number of conditions, including the registration statement on Form 10 for Venator’s common stock being declared effective by the SEC and certain other conditions described in the information statement included in the Form 10. The ongoing process to separate the Pigments and Additives business is proceeding and is targeted for the second quarter 2017. As noted above, there was fire damage sustained at our titanium dioxide facility in Pori, Finland. The potential impact of this interruption, if any, on the spin date is not yet known.

On December 30, 2016, our Performance Products segment completed the sale of its European surfactants business to Innospec Inc. for \$199 million in cash plus our retention of trade receivables and payables for an enterprise value of \$225 million. Under the terms of the transaction, Innospec acquired our manufacturing facilities located in Saint-Mihiel, France; Castiglione delle Stiviere, Italy; and Barcelona, Spain. The purchase price is subject to the finalization of working capital adjustments. We remain committed to our global surfactants business, including in the U.S. and Australia, where our differentiated surfactants businesses are backward integrated into essential feedstocks. Upon closing the transaction, we entered into supply and long-term tolling arrangements with Innospec in order to continue marketing certain core products strategic to our global agrochemicals, lubes and certain other businesses. In connection with this sale, we recognized a pre-tax gain in the fourth quarter of 2016 of \$98 million.

On December 30, 2016, we made an early repayment of \$260 million on our 2015 extended term loan B facility due 2019 (“2015 Extended Term Loan B”) using proceeds from the sale of the European surfactants business and existing cash.

### OUTLOOK

We expect the following factors to impact our operating segments:

#### **Polyurethanes:**

- Continued focus on downstream MDI differentiation
- Improving MDI demand growth

- Low MTBE margins
- Planned maintenance at Rotterdam production facility

**Performance Products:**

- Amines and maleic anhydride showing signs of recovery
- Margins lower than historical norms
- Planned ethylene oxide maintenance during second half of 2017

**Advanced Materials:**

- Strong aerospace market more than one-third of earnings

**Pigments and Additives:**

- Increasing TiO<sub>2</sub> selling prices
- Impact of fire at Pori, Finland manufacturing facility
- Lawsuit against Rockwood Holdings, Inc. (“Rockwood”) and Albemarle Corporation for fraud and breach of contract related to Augusta facility

In 2017, we expect to spend approximately \$400 million on capital expenditures.

In 2016, our adjusted effective tax rate was 22%. We expect our long term adjusted effective tax rate will be approximately 30%. We believe our 2017 adjusted effective tax rate will be slightly less than the long term rate.

## RESULTS OF OPERATIONS

The following tables set forth our consolidated results of operations for the years ended December 31, 2016, 2015 and 2014 (dollars in millions, except per share amounts).

	Year ended December 31,			Percent Change	
	2016	2015	2014	2016 vs. 2015	2015 vs. 2014
<b>Revenues</b> . . . . .	\$9,657	\$10,299	\$11,578	(6)%	(11)%
<b>Cost of goods sold</b> . . . . .	7,979	8,451	9,659	(6)%	(13)%
<b>Gross profit</b> . . . . .	1,678	1,848	1,919	(9)%	(4)%
Operating expenses . . . . .	1,072	1,142	1,132	(6)%	1%
Restructuring, impairment and plant closing costs . . . . .	81	302	158	(73)%	91%
Spin-off separation expenses . . . . .	18	—	—	NM	—
Other operating income, net . . . . .	(140)	(1)	(4)	NM	(75)%
<b>Operating income</b> . . . . .	647	405	633	60%	(36)%
Interest expense . . . . .	(202)	(205)	(205)	(1)%	—
Equity in income of investment in unconsolidated affiliates . . . . .	5	6	6	(17)%	—
Loss on early extinguishment of debt . . . . .	(3)	(31)	(28)	(90)%	11%
Other income (loss), net . . . . .	1	1	(2)	—	NM
<b>Income from continuing operations before income taxes</b> . . . . .	448	176	404	155%	(56)%
Income tax expense . . . . .	(87)	(46)	(51)	89%	(10)%
<b>Income from continuing operations</b> . . . . .	361	130	353	178%	(63)%
Loss from discontinued operations, net of tax . . . . .	(4)	(4)	(8)	—	(50)%
<b>Net income</b> . . . . .	357	126	345	183%	(63)%
<b>Reconciliation of net income to adjusted EBITDA:</b>					
Net income attributable to noncontrolling interests . . . . .	(31)	(33)	(22)	(6)%	50%
Interest expense . . . . .	202	205	205	(1)%	—
Income tax expense from continuing operations . . . . .	87	46	51	89%	(10)%
Income tax benefit from discontinued operations . . . . .	(2)	(2)	(2)	—	—
Depreciation and amortization . . . . .	432	399	445	8%	(10)%
<b>Other adjustments:</b>					
Business acquisition and integration expenses and purchase accounting adjustments . . . . .	23	53	67		
EBITDA from discontinued operations . . . . .	6	6	10		
(Gain) loss on disposition of businesses/assets . . . . .	(119)	2	(3)		
Loss on early extinguishment of debt . . . . .	3	31	28		
Certain legal settlements and related expenses . . . . .	3	4	3		
Amortization of pension and postretirement actuarial losses . . . . .	65	74	51		
Net plant incident remediation costs . . . . .	1	4	—		
Restructuring, impairment and plant closing and transition costs(4) . . . . .	82	306	162		
Spin-off separation expenses . . . . .	18	—	—		
<b>Adjusted EBITDA(1)</b> . . . . .	<u>\$1,127</u>	<u>\$ 1,221</u>	<u>\$ 1,340</u>		
Net cash provided by operating activities . . . . .	\$1,088	\$ 575	\$ 760	89%	(24)%
Net cash used in investing activities . . . . .	(202)	(600)	(1,606)	(66)%	(63)%
Net cash (used in) provided by financing activities . . . . .	(723)	(562)	1,197	29%	NM
Capital expenditures . . . . .	(421)	(663)	(601)	(37)%	10%

	Year ended ended December 31, 2016			Year ended ended December 31, 2015			Year ended ended December 31, 2014		
	Gross	Tax(3)	Net	Gross	Tax(3)	Net	Gross	Tax(3)	Net
<b>Reconciliation of net income to adjusted net income</b>									
Net income			\$ 357			\$ 126			\$ 345
Net income attributable to noncontrolling interests			(31)			(33)			(22)
Business acquisition and integration expenses and purchase accounting adjustments	\$ 23	\$ (7)	16	\$ 53	\$(13)	40	\$ 67	\$(10)	57
Impact of certain foreign tax credit elections	—	—	—	—	—	—	—	(94)	(94)
Loss from discontinued operations	6	(2)	4	6	(2)	4	10	(2)	8
(Gain) loss on disposition of businesses/assets	(119)	16	(103)	2	—	2	(3)	1	(2)
Loss on early extinguishment of debt	3	(1)	2	31	(11)	20	28	(10)	18
Certain legal settlements and related expenses	3	(1)	2	4	(1)	3	3	—	3
Amortization of pension and postretirement actuarial losses	65	(12)	53	74	(17)	57	51	(10)	41
Net plant incident remediation costs	1	—	1	4	(1)	3	—	—	—
Restructuring, impairment and plant closing and transition costs(4)	82	(19)	63	306	(36)	270	162	(38)	124
Spin-off separation expenses	18	(5)	13	—	—	—	—	—	—
<b>Adjusted net income(2)</b>			<u>\$ 377</u>			<u>\$ 492</u>			<u>\$ 478</u>
Weighted average shares-basic			236.3			242.8			242.1
Weighted average shares-diluted			239.6			245.4			246.0
Net income attributable to Huntsman Corporation per share:									
Basic			\$ 1.38			\$ 0.38			\$ 1.33
Diluted			1.36			0.38			1.31
<b>Other non-GAAP measures:</b>									
Adjusted net income per share(2):									
Basic			\$ 1.60			\$ 2.03			\$ 1.97
Diluted			1.57			2.00			1.94
Capital expenditures, net of reimbursements(5)			\$ (390)			\$ (648)			\$ (564)
Net cash provided by operating activities			\$1,088			\$ 575			\$ 760
Capital expenditures			(421)			(663)			(601)
All other investing activities, excluding acquisition and disposition activities			11			58			(60)
Spin-off separation costs			8			—			—
Free cash flow(6)			<u>\$ 686</u>			<u>\$ (30)</u>			<u>\$ 99</u>

NM—Not meaningful

- (1) Our management uses adjusted EBITDA to assess financial performance. Adjusted EBITDA is defined as net income of Huntsman Corporation before interest, income tax, depreciation and amortization, net income attributable to noncontrolling interests and certain Corporate and other items, as well as eliminating the following adjustments: (a) business acquisition and integration expenses and purchase accounting adjustments; (b) EBITDA from discontinued operations;

(c) (gain) loss on disposition of businesses/assets; (d) loss on early extinguishment of debt; (e) certain legal settlements and related expenses; (f) amortization of pension and postretirement actuarial losses; (g) net plant incident remediation costs; (h) restructuring, impairment, plant closing and transition costs; and (i) spin-off separation expenses. We believe that net income of Huntsman Corporation is the performance measure calculated and presented in accordance with U.S. GAAP that is most directly comparable to adjusted EBITDA.

We believe adjusted EBITDA is useful to investors in assessing the businesses' ongoing financial performance and provides improved comparability between periods through the exclusion of certain items that management believes are not indicative of the businesses' operational profitability and that may obscure underlying business results and trends. However, this measure should not be considered in isolation or viewed as a substitute for net income of Huntsman Corporation, or other measures of performance determined in accordance with U.S. GAAP. Moreover, adjusted EBITDA as used herein is not necessarily comparable to other similarly titled measures of other companies due to potential inconsistencies in the methods of calculation. Our management believes this measure is useful to compare general operating performance from period to period and to make certain related management decisions. Adjusted EBITDA is also used by securities analysts, lenders and others in their evaluation of different companies because it excludes certain items that can vary widely across different industries or among companies within the same industry. For example, interest expense can be highly dependent on a company's capital structure, debt levels and credit ratings. Therefore, the impact of interest expense on earnings can vary significantly among companies. In addition, the tax positions of companies can vary because of their differing abilities to take advantage of tax benefits and because of the tax policies of the various jurisdictions in which they operate. As a result, effective tax rates and tax expense can vary considerably among companies. Finally, companies employ productive assets of different ages and utilize different methods of acquiring and depreciating such assets. This can result in considerable variability in the relative costs of productive assets and the depreciation and amortization expense among companies.

Nevertheless, our management recognizes that there are material limitations associated with the use of adjusted EBITDA in the evaluation of our Company as compared to net income of Huntsman Corporation, which reflects overall financial performance. For example, we have borrowed money in order to finance our operations and interest expense is a necessary element of our costs and ability to generate revenue. Our management compensates for the limitations of using adjusted EBITDA by using this measure to supplement U.S. GAAP results to provide a more complete understanding of the factors and trends affecting the business rather than U.S. GAAP results alone.

In addition to the limitations noted above, adjusted EBITDA excludes items that may be recurring in nature and should not be disregarded in the evaluation of performance. However, we believe it is useful to exclude such items to provide a supplemental analysis of current results and trends compared to other periods because certain excluded items can vary significantly depending on specific underlying transactions or events, and the variability of such items may not relate specifically to ongoing operating results or trends and certain excluded items, while potentially recurring in future periods, may not be indicative of future results. For example, while EBITDA from discontinued operations is a recurring item, it is not indicative of ongoing operating results and trends or future results.

- (2) Adjusted net income is computed by eliminating the after-tax amounts related to the following from net income attributable to Huntsman Corporation: (a) business acquisition and integration expenses and purchase accounting adjustments; (b) impact of certain foreign tax credit elections; (c) loss from discontinued operations; (d) (gain) loss on disposition of businesses/assets; (e) loss on early extinguishment of debt; (f) certain legal settlements and related expenses; (g) amortization of pension and postretirement actuarial losses; (h) net plant incident remediation costs; and

- (i) restructuring, impairment and plant closing and transition costs; (j) spin-off separation expenses. Basic adjusted net income per share excludes dilution and is computed by dividing adjusted net income by the weighted average number of shares outstanding during the period. Adjusted diluted net income per share reflects all potential dilutive common shares outstanding during the period and is computed by dividing adjusted net income by the weighted average number of shares outstanding during the period increased by the number of additional shares that would have been outstanding as dilutive securities. Adjusted net income and adjusted net income per share amounts are presented solely as supplemental information.
- (3) The income tax impacts, if any, of each adjusting item represent a ratable allocation of the total difference between the unadjusted tax expense and the total adjusted tax expense, computed without consideration of any adjusting items using a with and without approach. We do not adjust for changes in tax valuation allowances because we do not believe it provides more meaningful information than is provided under GAAP.
  - (4) Includes costs associated with transition activities relating to the migration of our information system data centers and the transition of our Textile Effects segment's production from Basel, Switzerland to a tolling facility. These transition costs were included in either selling, general and administrative expenses or cost of sales on our consolidated statements of operations.
  - (5) Capital expenditures, net of reimbursements, represent cash paid for capital expenditures less payments received as reimbursements from customers and joint venture partners. During 2016, 2015 and 2014, capital expenditures of \$421 million, \$663 million and \$601 million, respectively, were reimbursed in part by \$31 million, \$15 million and \$37 million, respectively.
  - (6) Management internally uses a free cash flow measure: (a) to evaluate the Company's liquidity, (b) to evaluate strategic investments, (c) to plan stock buyback and dividend levels, and (d) to evaluate the Company's ability to incur and service debt. Free cash flow is not a defined term under U.S. GAAP, and it should not be inferred that the entire free cash flow amount is available for discretionary expenditures. The Company defines free cash flow as cash flows provided by operating activities and used in investing activities, excluding acquisition and disposition activities. Free cash flow is typically derived directly from the Company's consolidated statement of cash flows; however, it may be adjusted for items that affect comparability between periods.

#### **Year Ended December 31, 2016 Compared with Year Ended December 31, 2015**

For the year ended December 31, 2016, net income attributable to Huntsman Corporation was \$326 million on revenues of \$9,657 million, compared with net income attributable to Huntsman Corporation of \$93 million on revenues of \$10,299 million for the same period of 2015. The increase of \$233 million in net income attributable to Huntsman Corporation was the result of the following items:

- Revenues for the year ended December 31, 2016 decreased by \$642 million, or 6%, as compared with the 2015 period. The decrease was primarily due to lower average selling prices in all our segments and lower sales volumes in our Performance Products and Advanced Materials segments. See “—Segment Analysis” below.
- Our gross profit for the year ended December 31, 2016 decreased by \$170 million, or 9%, as compared with the 2015 period. The decrease resulted from lower gross margins in our Polyurethanes, Performance Products and Advanced Materials segments. See “—Segment Analysis” below.
- Our operating expenses for the year ended December 31, 2016 decreased by \$70 million, or 6%, as compared with the 2015 period, primarily related to the impact of translating foreign currency amounts to the U.S. dollar and a decrease in selling, general and administrative expenses as a result of cost savings from restructuring programs within our Pigments and Additives segment.
- Restructuring, impairment and plant closing costs for the year ended December 31, 2016 decreased to \$81 million from \$302 million in the 2015 period. For more information concerning restructuring activities, see “Note 12. Restructuring, Impairment and Plant Closing Costs” to our consolidated financial statements.

- In connection with the proposed spin-off of our Pigments and Additives business, we recorded spin-off separation expenses of \$18 million during 2016. We expect to record additional spin-off separation expenses of approximately \$56 million in 2017.
- Our other operating income, net increased by \$139 million for the year ended December 31, 2016 as compared with 2015, primarily related to a gain on the sale of our European surfactants business in the fourth quarter of 2016. For more information concerning the sale of our European surfactants business, see “Note 3. Business Combinations and Dispositions—Sale of European Surfactants Manufacturing Facilities” to our consolidated financial statements.
- Loss on early extinguishment of debt for the year ended December 31, 2016 decreased to \$3 million from \$31 million in the 2015 period. During 2016, we recorded a loss on early extinguishment of debt of \$3 million primarily related to repayment of our term loan B facilities due 2017 and our term loan C facility due 2016 (“Term Loan C”) as well as voluntary repayments on our 2015 Extended Term Loan B. During 2015, we recorded a loss on early extinguishment of debt of \$30 million primarily related to the redemption of our 8.625% senior subordinated notes due 2021 (“2021 Senior Subordinated Notes”).
- Our income tax expense for the year ended December 31, 2016 increased to \$87 million from \$46 million in the 2015 period. Our tax expense is significantly affected by the mix of income and losses in the tax jurisdictions in which we operate, as impacted by the presence of valuation allowances in certain tax jurisdictions. For further information concerning taxes, see “Note 19. Income Taxes” to our consolidated financial statements.

## Segment Analysis

### Year Ended December 31, 2016 Compared to Year Ended December 31, 2015

	Year ended December 31,		Percent Change (Unfavorable) Favorable
	2016	2015	
<b>Revenues</b>			
Polyurethanes . . . . .	\$3,667	\$ 3,811	(4)%
Performance Products . . . . .	2,126	2,501	(15)%
Advanced Materials . . . . .	1,020	1,103	(8)%
Textile Effects . . . . .	751	804	(7)%
Pigments and Additives . . . . .	2,139	2,160	(1)%
Corporate and eliminations . . . . .	(46)	(80)	NM
Total . . . . .	<u>\$9,657</u>	<u>\$10,299</u>	(6)%
<b>Segment adjusted EBITDA(1)</b>			
Polyurethanes . . . . .	\$ 569	\$ 573	(1)%
Performance Products . . . . .	316	460	(31)%
Advanced Materials . . . . .	223	220	1%
Textile Effects . . . . .	73	63	16%
Pigments and Additives . . . . .	130	61	113%
Corporate and other . . . . .	(184)	(156)	(18)%
Total . . . . .	<u>\$1,127</u>	<u>\$ 1,221</u>	(8)%

NM—Not meaningful

- (1) For more information, including reconciliation of segment adjusted EBITDA to net income of Huntsman Corporation, see “Note 26. Operating Segment Information” to our consolidated financial statements.



Year ended December 31, 2016 vs. 2015

	Average Selling Price(1)			
	Local Currency	Foreign Currency Translation Impact	Mix & Other	Sales Volumes(2)
<b>Period-Over-Period (Decrease) Increase</b>				
Polyurethanes . . . . .	(9)%	(1)%	(5)%	11%
Performance Products . . . . .	(8)%	(1)%	(4)%	(2)%
Advanced Materials . . . . .	(2)%	(2)%	3%	(7)%
Textile Effects . . . . .	(6)%	(3)%	(1)%	3%
Pigments and Additives . . . . .	(4)%	(1)%	—	4%
Total Company . . . . .	(7)%	(1)%	(3)%	5%

Fourth Quarter 2016 vs. Third Quarter 2016

	Average Selling Price(1)			
	Local Currency	Foreign Currency Translation Impact	Mix & Other	Sales Volumes(2)
<b>Period-Over-Period Increase (Decrease)</b>				
Polyurethanes . . . . .	7%	(1)%	(1)%	3%
Performance Products . . . . .	—	—	1%	—
Advanced Materials . . . . .	1%	(1)%	(1)%	1%
Textile Effects . . . . .	1%	(1)%	(1)%	1%
Pigments and Additives . . . . .	3%	(1)%	(2)%	(8)%
Total Company . . . . .	3%	(1)%	—	(1)%

(1) Excludes revenues from tolling arrangements, byproducts and raw materials.

(2) Excludes sales volumes of byproducts and raw materials.

***Polyurethanes***

The decrease in revenues in our Polyurethanes segment for 2016 compared to 2015 was primarily due to lower average selling prices, partially offset by higher sales volumes. MDI average selling prices decreased in response to lower raw material costs. MTBE average selling prices decreased primarily as a result of lower pricing for high octane gasoline. MDI sales volumes increased due to higher demand in the Americas and European regions. PO/MTBE sales volumes increased primarily due to the impact of the prior year planned maintenance outage. The decrease in segment adjusted EBITDA was primarily due to lower MTBE margins, partially offset by higher MDI margins and sales volumes and the prior year planned PO/MTBE maintenance outage of approximately \$90 million.

***Performance Products***

The decrease in revenues in our Performance Products segment for 2016 compared to 2015 was primarily due to lower average selling prices and lower sales volumes. Average selling prices decreased primarily in response to lower raw material costs and competitive market conditions. Sales volumes decreased primarily due to competitive market conditions, softer demand in China and oilfield applications as well as the impact of weather related and other production outages. The decrease in segment adjusted EBITDA was primarily due to lower sales volumes, lower margins in our amines, maleic anhydride and upstream intermediates businesses as well as the impact of weather related and other production outages estimated at approximately \$15 million.

### ***Advanced Materials***

The decrease in revenues in our Advanced Materials segment for 2016 compared to 2015 was due to lower sales volumes and lower average selling prices. Sales volumes decreased primarily in the Americas region, due to competitive pressure and soft demand. Average selling prices decreased in our Asia Pacific and European regions primarily due to price concessions in our electrical, electronic and wind markets and the foreign currency exchange impact of a stronger U.S. dollar against major international currencies. The increase in segment adjusted EBITDA was primarily due to lower fixed costs, partially offset by lower margins as savings from lower raw material costs were offset by lower sales volumes and lower selling prices.

### ***Textile Effects***

The decrease in revenues in our Textile Effects segment for 2016 compared to 2015 was due to lower average selling prices, partially offset by higher sales volumes. Average selling prices decreased primarily due to lower raw material costs and the foreign currency exchange impact of a stronger U.S. dollar against major international currencies. Sales volumes increased in key target countries, mainly in South Asia. The increase in segment adjusted EBITDA was primarily due to higher margins from lower raw material costs and lower selling, general and administrative costs.

### ***Pigments and Additives***

The decrease in revenues in our Pigments and Additives segment for 2016 compared to 2015 was due to lower average selling prices, partially offset by higher sales volumes. Average selling prices decreased primarily as a result of competitive pressure and the foreign currency exchange impact of a stronger U.S. dollar primarily against the euro. Sales volumes increased primarily due to increased end use demand for our titanium dioxide, functional additives and timber treatment products. The increase in segment adjusted EBITDA was primarily due to higher margins resulting from restructuring savings.

### ***Corporate and other***

Corporate and other includes unallocated corporate overhead, unallocated foreign exchange gains and losses, LIFO inventory valuation reserve adjustments, loss on early extinguishment of debt, unallocated restructuring, impairment and plant closing costs, nonoperating income and expense, benzene sales and gains and losses on the disposition of corporate assets. For 2016, adjusted EBITDA from Corporate and other for Huntsman Corporation decreased by \$28 million to a loss of \$184 million from a loss of \$156 million for the same period in 2015. The decrease in adjusted EBITDA from Corporate and other resulted primarily from an increase in LIFO inventory valuation expense, partially offset by an increase in gain from benzene sales.

### **Year Ended December 31, 2015 Compared with Year Ended December 31, 2014**

For the year ended December 31, 2015, net income attributable to Huntsman Corporation was \$93 million on revenues of \$10,299 million, compared with net income attributable to Huntsman Corporation of \$323 million on revenues of \$11,578 million for 2014. The decrease of \$230 million in net income attributable to Huntsman Corporation was the result of the following items:

- Revenues for the year ended December 31, 2015 decreased by \$1,279 million, or 11%, as compared with 2014. The decrease was due principally to lower sales volumes and lower average selling prices in all our segments. See “—Segment Analysis” below.
- Our gross profit for the year ended December 31, 2015 decreased by \$71 million, or 4%, as compared with 2014. The impact on gross profit resulted from lower gross margins in all of our segments, except for our Advanced Materials segment. See “—Segment Analysis” below.

- Our operating expenses increased by \$10 million, or 1%, for the year ended December 31, 2015 as compared with 2014, primarily related to the consolidated expenses of the acquired Rockwood businesses, offset in part by the foreign currency exchange impacts of the strengthening U.S. dollar against other major international currencies.
- Restructuring, impairment and plant closing costs for the year ended December 31, 2015 increased to \$302 million from \$158 million in 2014. For more information concerning restructuring activities, see “Note 12. Restructuring, Impairment and Plant Closing Costs” to our consolidated financial statements.
- Loss on early extinguishment of debt for the year ended December 31, 2015 increased to \$31 million from \$28 million in 2014. During 2015, we recorded a loss on early extinguishment of debt of \$30 million related to the redemption of our 2021 Senior Subordinated Notes. For more information, see “Note 15. Debt—Direct and Subsidiary Debt—Redemption of Notes and Loss on Early Extinguishment of Debt” to our consolidated financial statements.
- Our income tax expense for the year ended December 31, 2015 decreased to \$46 million from \$51 million in 2014. The change in income tax expense is impacted by the benefit in 2015 of generating \$14 million of excess U.S. foreign tax credits and in 2014 of utilizing U.S. foreign tax credits which had been subject to a valuation allowance. Excluding the impact of the U.S. foreign tax credits, our income tax expense decreased by \$97 million as compared with 2014, primarily due to lower pre-tax income and tax impacts of tax only foreign currency exchange losses. Our tax expense is significantly affected by the mix of income and losses in the tax jurisdictions in which we operate, as impacted by the presence of valuation allowances in certain tax jurisdictions. For further information concerning taxes, see “Note 19. Income Taxes” to our consolidated financial statements.

## Segment Analysis

### Year Ended December 31, 2015 Compared to Year Ended December 31, 2014

	Year ended December 31,		Percent Change (Unfavorable) Favorable
	2015	2014	
<b>Revenues</b>			
Polyurethanes . . . . .	\$ 3,811	\$ 5,032	(24)%
Performance Products . . . . .	2,501	3,072	(19)%
Advanced Materials . . . . .	1,103	1,248	(12)%
Textile Effects . . . . .	804	896	(10)%
Pigments and Additives . . . . .	2,160	1,549	39%
Corporate and eliminations . . . . .	(80)	(219)	NM
Total . . . . .	<u>\$10,299</u>	<u>\$11,578</u>	(11)%
<b>Segment adjusted EBITDA(1)</b>			
Polyurethanes . . . . .	\$ 573	\$ 722	(21)%
Performance Products . . . . .	460	473	(3)%
Advanced Materials . . . . .	220	199	11%
Textile Effects . . . . .	63	58	9%
Pigments and Additives . . . . .	61	76	(20)%
Corporate and other . . . . .	(156)	(188)	17%
Total . . . . .	<u>\$ 1,221</u>	<u>\$ 1,340</u>	(9)%

NM—Not meaningful

- (1) For more information, including reconciliation of segment adjusted EBITDA to net income of Huntsman Corporation, see “Note 26. Operating Segment Information” to our consolidated financial statements.

Year ended December 31, 2015 vs. 2014

	Average Selling Price(1)			
	Local Currency	Foreign Currency Translation Impact	Mix & Other(2)	Sales Volumes(3)
<b>Period-Over-Period Increase (Decrease)</b>				
Polyurethanes . . . . .	(12)%	(5)%	3%	(10)%
Performance Products . . . . .	(7)%	(5)%	(3)%	(4)%
Advanced Materials . . . . .	2%	(8)%	(1)%	(5)%
Textile Effects . . . . .	1%	(6)%	2%	(7)%
Pigments and Additives . . . . .	(10)%	(8)%	62%	(5)%
Total Company . . . . .	(8)%	(6)%	10%	(7)%

(1) Excludes revenues from tolling arrangements, byproducts and raw materials.

(2) Includes the impact from the Rockwood Acquisition.

(3) Excludes sales volumes of byproducts and raw materials.

***Polyurethanes***

The decrease in revenues in our Polyurethanes segment for 2015 compared to 2014 was primarily due to a planned maintenance outage at our PO/MTBE facility in Port Neches, Texas that commenced in the first quarter of 2015 and extended into the second quarter of 2015, lower MDI average selling prices and the foreign currency exchange impact of a stronger U.S. dollar against other key currencies. PO/MTBE sales volumes decreased due to the planned maintenance outage at our PO/MTBE facility in Port Neches, Texas. MDI sales volumes decreased slightly due to the market slowdown in China and lower sales into commercial construction in the U.S. PO/MTBE average selling prices decreased following lower pricing for high octane gasoline. MDI average selling prices decreased in response to lower raw material costs and the foreign currency exchange impact of a stronger U.S. dollar against major European currencies. The decrease in segment adjusted EBITDA was due to lower PO/MTBE earnings and the foreign currency exchange impact of a stronger U.S. dollar against the euro. We estimate the reduction to segment adjusted EBITDA resulting from the planned PO/MTBE maintenance outage was approximately \$90 million for 2015.

***Performance Products***

The decrease in revenues in our Performance Products segment for 2015 compared to 2014 was primarily due to lower average selling prices and lower sales volumes. Average selling prices decreased across all product lines primarily in response to lower raw material costs and the foreign currency exchange impact of a stronger U.S. dollar against major European currencies. Sales volumes decreased across most product lines, including the effect of the sale of our European commodity surfactants business in the second quarter of 2014 partially offset by higher toll volumes in our upstream intermediates business. The decrease in segment adjusted EBITDA was primarily due to lower margins on produced ethylene, partially offset by higher amines margins.

***Advanced Materials***

The decrease in revenues in our Advanced Materials segment for 2015 compared to 2014 was due to lower sales volumes and lower average selling prices. Sales volumes decreased globally primarily in our coatings and construction and transportation and industrial markets due to the de-selection of certain business and competitive pressure, partially offset by strong volume growth in our do-it-yourself and wind markets in the Asia Pacific region. Average selling prices increased, in most markets, on a local currency basis in the Americas and Asia Pacific regions due to certain price increase initiatives and our focus on higher value markets; overall this was more than offset by the foreign currency

exchange impact of a stronger U.S. dollar against major international currencies. The increase in segment adjusted EBITDA was primarily due to higher margins, resulting from lower raw material costs, and our focus on higher value business as well as lower fixed costs.

#### *Textile Effects*

The decrease in revenues in our Textile Effects segment for 2015 compared to 2014 was due to lower average selling prices and lower sales volumes. Average selling prices decreased in response to lower raw material costs and the foreign currency exchange impact of a stronger U.S. dollar against major international currencies. Sales volumes decreased primarily due to the de-selection of certain less profitable business and challenging market conditions. The increase in segment adjusted EBITDA was primarily due to lower fixed costs, partially offset by lower margins.

#### *Pigments and Additives*

The increase in revenues in our Pigments and Additives segment for 2015 compared to 2014 was primarily due to the impact of the Rockwood Acquisition. Other than the impact of the Rockwood Acquisition, average selling prices decreased primarily as a result of high titanium dioxide industry inventory levels and the foreign currency exchange impact of a stronger U.S. dollar against major European currencies. Sales volumes decreased primarily as a result of lower end-use demand and the impact of a nitrogen tank explosion owned and operated by a third party at our Uerdingen, Germany facility, which disrupted our manufacturing during the third quarter of 2015. The decrease in segment adjusted EBITDA was primarily due to lower contribution margin for titanium dioxide and the negative impact from the manufacturing disruption at our Uerdingen, Germany facility.

#### *Corporate and other*

Corporate and other includes unallocated corporate overhead, unallocated foreign exchange gains and losses, LIFO inventory valuation reserve adjustments, nonoperating income and expense, benzene sales and gains and losses on the disposition of corporate assets. For 2015, adjusted EBITDA from Corporate and other for Huntsman Corporation increased by \$32 million to a loss of \$156 million from a loss of \$188 million for 2014. The increase in adjusted EBITDA from Corporate and other resulted primarily from an increase in LIFO inventory valuation income and a decrease in unallocated corporate overhead, partially offset by an increase in loss from benzene sales.

### **LIQUIDITY AND CAPITAL RESOURCES**

#### **Cash Flows for Year Ended December 31, 2016 Compared to the Year Ended December 31, 2015**

Net cash provided by operating activities for 2016 and 2015 was \$1,088 million and \$575 million, respectively. The increase in net cash provided by operating activities during 2016 compared with 2015 was primarily attributable to increased operating income as described in “—Results of Operations” above as well as a \$473 million favorable variance in operating assets and liabilities for 2016 as compared with 2015.

Net cash used in investing activities for 2016 and 2015 was \$202 million and \$600 million, respectively. During 2016 and 2015, we paid \$421 million and \$663 million, respectively, for capital expenditures. During 2016 and 2015, we made investments in Louisiana Pigment Company, L.P. (“LPC”) of \$29 million and \$42 million, respectively, and in our BASF Huntsman Shanghai Isocyanate Investment B.V. joint venture of nil and \$12 million, respectively, and received dividends from LPC of \$33 million and \$48 million, respectively. During 2016 and 2015, we paid nil and \$14 million, respectively, for the acquisition of businesses and received proceeds from a purchase price adjustment of nil and \$18 million, respectively, related to the Rockwood Acquisition. During 2016 and 2015, we received proceeds from the sale of businesses and assets of \$208 million and \$1 million, respectively, including proceeds of \$199 million from the sale of our European surfactants business during 2016. During 2015, we received \$66 million from the termination of cross-currency interest rate contracts.

Net cash used in financing activities for 2016 and 2015 was \$723 million and \$562 million, respectively. The increase in net cash used in financing activities was primarily due to an increase in repayments of long-term debt, partially offset by an increase in proceeds from the issuance of long-term debt during the 2016 period as compared to the 2015 period. On April 1, 2016, we entered into our 2016 term loan B facility due 2023 (“2016 Term Loan B”) in an aggregate principal amount of \$550 million. Additionally, on April 1, 2016, we used the net proceeds of the 2016 Term Loan B to repay in full our extended term loan B due 2017, extended term loan B—series 2 due 2017 and our Term Loan C. On both July 22, 2016 and September 30, 2016, we prepaid \$100 million of our 2015 Extended Term Loan B. On December 30, 2016, we made an early repayment of \$260 million on our 2015 Extended Term Loan B using proceeds from the sale of our European surfactants business and existing cash. On March 31, 2015, we issued €300 million (approximately \$326 million) aggregate principal amount of our 4.25% senior notes due April 1, 2025 (“2025 Senior Notes”). On April 17, 2015, we used the net proceeds of this offering to redeem \$289 million (\$294 million carrying value) of our 2021 Senior Subordinated Notes and redeemed the remaining \$195 million (\$198 million carrying value) of our 2021 Senior Subordinated Notes during the third quarter of 2015. During 2015, we repurchased \$100 million of our common stock.

Free cash flow for 2016 and 2015 were cash proceeds of \$686 million and use of cash of \$30 million, respectively. The improvement in free cash flow was attributable to the changes in cash flows from operating and investing activities, excluding merger and acquisition activities.

#### **Cash Flows for Year Ended December 31, 2015 Compared to the Year Ended December 31, 2014**

Net cash provided by operating activities for 2015 and 2014 was \$575 million and \$760 million, respectively. The decrease in net cash provided by operating activities during 2015 compared with 2014 was primarily attributable to lower net income as described in “—Results of Operations” above and a \$24 million unfavorable variance in operating assets and liabilities for 2015 as compared with 2014.

Net cash used in investing activities for 2015 and 2014 was \$600 million and \$1,606 million, respectively. During 2015 and 2014, we paid \$663 million and \$601 million, respectively, for capital expenditures. During 2014, we paid \$1.04 billion for the Rockwood Acquisition, and during 2015 and 2014, we received proceeds from a purchase price adjustment of \$18 million and nil, respectively, related to the Rockwood Acquisition. For further information, see “Note 3. Business Combinations and Dispositions” to our consolidated financial statements. During 2015 and 2014, we made investments in LPC of \$42 million and \$37 million, respectively, in Nanjing Jinling Huntsman New Materials Co., Ltd. of nil and \$62 million, respectively, and in our BASF Huntsman Shanghai Isocyanate Investment B.V. joint venture of \$12 million and \$9 million, respectively, and we received dividends from LPC of \$48 million each. During 2015 and 2014, we received \$1 million and \$15 million, respectively, from the sale of businesses and assets. During 2015 and 2014, we received \$66 million and nil, respectively, from the termination of cross-currency interest rate contracts.

Net cash (used in) provided by financing activities for 2015 and 2014 was \$(562) million and \$1,197 million, respectively. The decrease in net cash provided by financing activities was primarily due to higher net borrowings during 2014, primarily used to fund the Rockwood Acquisition and an increase in repayments of long-term debt in 2015. On March 31, 2015, we issued €300 million (approximately \$326 million) aggregate principal amount of our 2025 Senior Notes. On April 17, 2015, we used the net proceeds of this offering to redeem \$289 million (\$294 million carrying value) of our 2021 Senior Subordinated Notes. In the third quarter of 2015, we redeemed the remaining \$195 million (\$198 million carrying value) of our 2021 Senior Subordinated Notes. During 2015, we repurchased \$100 million of our common stock.

Free cash flow for 2015 and 2014 were a use of cash of \$30 million and cash proceeds of \$99 million, respectively. The decrease in free cash flow was attributable to the changes in cash flows from operating and investing activities, excluding merger and acquisition activities.

### Changes in Financial Condition

The following information summarizes our working capital (dollars in millions):

	December 31, 2016	December 31, 2015	Increase (Decrease)	Percent Change
Cash and cash equivalents . . . . .	\$ 414	\$ 257	\$ 157	61%
Restricted cash . . . . .	11	12	(1)	(8)%
Accounts and notes receivable, net . . . . .	1,435	1,449	(14)	(1)%
Inventories . . . . .	1,344	1,692	(348)	(21)%
Prepaid expenses . . . . .	60	112	(52)	(46)%
Other current assets . . . . .	291	312	(21)	(7)%
Total current assets . . . . .	<u>3,555</u>	<u>3,834</u>	<u>(279)</u>	<u>(7)%</u>
Accounts payable . . . . .	1,102	1,061	41	4%
Accrued liabilities . . . . .	616	686	(70)	(10)%
Current portion of debt . . . . .	60	170	(110)	(65)%
Total current liabilities . . . . .	<u>1,778</u>	<u>1,917</u>	<u>(139)</u>	<u>(7)%</u>
Working capital . . . . .	<u>\$1,777</u>	<u>\$1,917</u>	<u>\$(140)</u>	<u>(7)%</u>

Our working capital decreased by \$140 million as a result of the net impact of the following significant changes:

- The increase in cash and cash equivalents of \$157 million resulted from the matters identified on our consolidated statements of cash flows.
- Inventories decreased by \$348 million primarily due to lower inventory volumes and lower inventory costs.
- Prepaid expenses decreased by \$52 million mainly due to the distribution of employee termination and other restructuring costs that were prefunded during the fourth quarter of 2015.
- Accrued liabilities decreased by \$70 million primarily due to the distribution of prefunded restructuring costs.
- Current portion of debt decreased by \$110 million primarily due to the repayment of \$50 million our Term Loan C during the second quarter of that was recorded as current debt as of December 31, 2015. On April 1, 2016, this debt was refinanced with the 2016 Term Loan B due 2023. In addition, the company has repaid \$47 million under its HPS working capital facility in 2016 that was classified as current as of December 31, 2015.

### Direct and Subsidiary Debt

See “Note 15. Debt—Direct and Subsidiary Debt” to our consolidated financial statements.

### Debt Issuance Costs

See “Note 15. Debt—Debt Issuance Costs” to our consolidated financial statements.

### **Senior Credit Facilities**

See “Note 15. Debt—Senior Credit Facilities” to our consolidated financial statements.

### **Amendment to Credit Agreement**

See “Note 15. Debt—Amendment to Credit Agreement” to our consolidated financial statements.

### **A/R Programs**

See “Note 15. Debt—A/R Programs” to our consolidated financial statements.

### **Notes**

See “Note 15. Debt—Notes” to our consolidated financial statements.

### **Redemption of Notes and Loss on Early Extinguishment of Debt**

See “Note 15. Debt—Redemption of Notes and Loss on Early Extinguishment of Debt” to our consolidated financial statements.

### **Variable Interest Entity Debt**

See “Note 15. Debt—Variable Interest Entity Debt” to our consolidated financial statements.

### **Compliance with Covenants**

See “Note 15. Debt—Compliance with Covenants” to our consolidated financial statements.

### **Maturities**

See “Note 15. Debt—Maturities” to our consolidated financial statements.

### **Short-Term and Long-Term Liquidity**

We depend upon our cash, senior credit facilities (“Senior Credit Facilities”), U.S. accounts receivable securitization program (“U.S. A/R Program”), European accounts receivable securitization program (“EU A/R Program” and collectively with the U.S. A/R Program, “A/R Programs”) and other debt instruments to provide liquidity for our operations and working capital needs. As of December 31, 2016, we had \$1,208 million of combined cash and unused borrowing capacity, consisting of \$425 million in cash and restricted cash, \$628 million in availability under our revolving facility (“Revolving Facility”), and \$155 million in availability under our A/R Programs. Our liquidity can be significantly impacted by various factors. The following matters had, or are expected to have, a significant impact on our liquidity:

- Cash from our accounts receivable and inventory, net of accounts payable, increased by approximately \$304 million for 2016, as reflected in our consolidated statements of cash flows. We expect volatility in our working capital components to continue.
- During 2017, we expect to spend approximately \$400 million on capital expenditures. Our future expenditures include certain EHS maintenance and upgrades, and periodic maintenance and repairs applicable to major units of manufacturing facilities. We expect to fund this spending with cash provided by operations.
- During 2016, we made contributions to our pension and postretirement benefit plans of \$74 million. During 2017, we expect to contribute an additional amount of approximately \$116 million to these plans.



- We are involved in a number of cost reduction programs for which we have established restructuring accruals. As of December 31, 2016, we had \$89 million of accrued restructuring costs from continuing operations, of which \$43 million is classified as current. For further discussion of these plans and the costs involved, see “Note 12. Restructuring, Impairment and Plant Closing costs” to our consolidated financial statements.

Further, we expect to incur additional restructuring charges for recently identified plans for business improvements in our Pigments and Additives segment expected to be completed by the end of 2018. We expect these additional business improvements to provide additional contributions to adjusted EBITDA beginning in 2017.

- The payment of dividends is a business decision made by our Board of Directors from time to time based on our earnings, financial position and prospects, and such other considerations as our Board of Directors considers relevant. Historically, our Board of Directors has declared quarterly cash dividends of \$0.125 per share of common stock. While management currently expects that the Company will continue to pay the quarterly cash dividend, its dividend practice may change at any time.
- In connection with the sale of our European surfactants business, we recognized a pre-tax gain in the fourth quarter of 2016 of \$98 million which was reflected in other operating income, net on the accompanying consolidated statements of operations. For more information, see “Note 3. Business Combination and Dispositions—Sale of European Surfactants Manufacturing Facilities” to our consolidated financial statements.
- On December 30, 2016, we made an early repayment of \$260 million on our 2015 Extended Term Loan B using proceeds from the sale of the European surfactants business and existing cash. See “Note 15. Debt—Direct and Subsidiary Debt—Amendment to the Credit Agreement.”

On both July 22, 2016 and September 30, 2016, Huntsman International prepaid \$100 million of the 2015 Extended Term Loan B. In connection with the \$200 million prepayments on our term loan, we recognized a loss on early extinguishment of debt of \$1 million in the third quarter of 2016. See “Note 15. Debt—Direct and Subsidiary Debt—Senior Credit Facilities” to our consolidated financial statements.

- In connection with the proposed spin-off of our Pigments and Additives business into a separate, publicly traded company, Venator, we anticipate that Venator will enter into new financing arrangements in anticipation of the spin-off. After Venator has entered into its new financing arrangements but immediately prior to separation, it will make a cash distribution to Huntsman International and, at separation, Venator will assume various Huntsman International indebtedness. We anticipate that Venator will fund such cash distribution and will repay such assumed indebtedness with the proceeds of its new financing arrangement.
- During 2017, we expect to spend approximately \$100 million of non-recurring costs related to the proposed spin-off of our Pigments and Additives business, including costs for capital expenditures and financing. For more information see “Note 4. Separation of Pigments and Additives Business” to our consolidated financial statements.
- On November 18, 2016, we entered into a new \$350 million term loan B facility due 2021 (“2021 Term Loan B”) and a new \$1,375 million term loan B facility due 2023 (“2023 Term Loan B”). Proceeds from the new term loans were used to repay in full our 2014 term loan B facility due 2021 (“2014 Term Loan B”) and our 2016 Term Loan B. As a result of this refinancing, we extended \$829 million of term loan maturities from 2021 to 2023 and did not increase our overall indebtedness.

- On January 30, 2017, our titanium dioxide manufacturing facility in Pori, Finland experienced fire damage and is currently not operational. We do not currently have an estimated time frame for how long the facility will be off line, but we are committed to repairing the facility as quickly as possible. The Pori facility has a nameplate capacity of 130,000 metric tons, which represents approximately 15% of our total titanium dioxide capacity and approximately 10% of total European titanium dioxide demand. The site is insured for property damage as well as business interruption losses. According to our insurance policies, the respective retention levels (deductibles) for physical damage and business interruption are \$15 million and 60 days, respectively. On February 9, 2017, we received a €50 million (approximately \$52 million) payment from our insurer as an initial partial progress payment towards the overall pending claim.
- During 2017 we expect to receive a cash benefit of approximately \$90 million related to overpayments of prior year tax payments. We expect to receive this refund in the first half of 2017.

As of December 31, 2016, we had \$60 million classified as current portion of debt, scheduled Senior Credit Facilities amortization payments totaling \$18 million, debt at our variable interest entities of \$14 million, and certain other short-term facilities and scheduled amortization payments totaling \$28 million. Although we cannot provide assurances, we intend to renew, repay or extend the majority of these short-term facilities in the next twelve months.

As of December 31, 2016, we had approximately \$383 million of cash and cash equivalents, including restricted cash, held by our foreign subsidiaries, including our variable interest entities. Additionally, we have material intercompany debt obligations owed to us by our non-U.S. subsidiaries. We intend to use cash held in our foreign subsidiaries to fund our local operations. Nevertheless, we could repatriate cash as dividends or as repayments of intercompany debt. If foreign cash were repatriated as dividends, the dividends could be subject to U.S. federal and state income taxes without any offsetting foreign tax credit relief. At present, we estimate that we will generate sufficient cash in our U.S. operations, together with the payments of intercompany debt if necessary, to meet our cash needs in the U.S and we do not expect to repatriate cash to the U.S. as dividends. Cash held by certain foreign subsidiaries, including our variable interest entities, may also be subject to changing monetary policies of governments, legal restrictions, including those arising from the interests of our partners, which could limit the amounts available for repatriation.

#### **CAPITAL RESOURCES**

We are now commissioning a new production facility in Augusta, Georgia for the synthesis of iron oxide pigments, which we purchased from Rockwood. During commissioning, the facility has experienced delays producing products at the expected specifications and quantities, causing us to question the capabilities of the Augusta technology. Based on the facility's performance during the commissioning process, we have concluded that production capacity at our Augusta facility will be substantially lower than originally anticipated. On February 6, 2017, we filed a lawsuit against Rockwood, Albemarle Corporation (as Rockwood's successor) and certain former Rockwood executives to recover damage for fraud and breach of contract involving the Augusta technology.

## Contractual Obligations and Commercial Commitments

Our obligations under long-term debt (including the current portion), lease agreements and other contractual commitments as of December 31, 2016 are summarized below (dollars in millions):

	<u>2017</u>	<u>2018 - 2019</u>	<u>2020 - 2021</u>	<u>After 2021</u>	<u>Total</u>
Long-term debt, including current portion . . . . .	\$ 60	\$ 611	\$1,538	\$1,986	\$ 4,195
Interest(1) . . . . .	191	358	276	122	947
Operating leases(2) . . . . .	82	138	113	177	510
Purchase commitments(3) . . . . .	<u>1,636</u>	<u>1,579</u>	<u>338</u>	<u>1,063</u>	<u>4,616</u>
Total(4)(5) . . . . .	<u>\$1,969</u>	<u>\$2,686</u>	<u>\$2,265</u>	<u>\$3,348</u>	<u>\$10,268</u>

- (1) Interest calculated using interest rates as of December 31, 2016 and contractual maturity dates assuming no refinancing or extension of debt instruments.
- (2) Future minimum lease payments have not been reduced by minimum sublease rentals of \$2 million due in the future under noncancelable subleases.
- (3) We have various purchase commitments extending through 2029 for materials, supplies and services entered into in the ordinary course of business. Included in the purchase commitments table above are contracts which require minimum volume purchases that extend beyond one year or are renewable annually and have been renewed for 2017. Certain contracts allow for changes in minimum required purchase volumes in the event of a temporary or permanent shutdown of a facility. To the extent the contract requires a minimum notice period, such notice period has been included in the above table. The contractual purchase price for substantially all of these contracts is variable based upon market prices, subject to annual negotiations. We have estimated our contractual obligations by using the terms of our current pricing for each contract. We also have a limited number of contracts which require a minimum payment even if no volume is purchased. We believe that all of our purchase obligations will be utilized in our normal operations. For the years ended December 31, 2016, 2015 and 2014, we made minimum payments of \$2 million, nil and nil, respectively, under such take or pay contracts without taking the product.
- (4) Totals do not include commitments pertaining to our pension and other postretirement obligations. Our estimated future contributions to our pension and postretirement plans are as follows (dollars in millions):

	<u>2017</u>	<u>2018 - 2019</u>	<u>2020 - 2021</u>	<u>5-Year Average Annual</u>
Pension plans . . . . .	\$108	\$222	\$231	\$107
Other postretirement obligations . . . . .	8	16	16	8

- (5) The above table does not reflect expected tax payments and unrecognized tax benefits due to the inability to make reasonably reliable estimates of the timing and amount of payments. For additional discussion on unrecognized tax benefits, see “Note 19. Income Taxes” to our consolidated financial statements.

## Off-Balance Sheet Arrangements

No off-balance sheet arrangements exist at this time.

## **RESTRUCTURING, IMPAIRMENT AND PLANT CLOSING COSTS**

Since the Rockwood Acquisition, our Pigments and Additives segment has been involved in a cost reduction program expected to reduce costs by approximately \$140 million and improve its global competitiveness. In addition, we have announced a capacity reduction at our titanium dioxide manufacturing facility in Calais, France expected to generate approximately \$35 million of annual savings. The cost savings from this cost reduction program were achieved during the first half of 2016. Further, we expect to incur additional restructuring charges for recently identified plans for business improvements in our Pigments and Additives segment expected to be completed by the end of 2018. We expect these additional business improvements to provide additional contributions to adjusted EBITDA beginning in 2017.

For further discussion of these and other restructuring plans and the costs involved, see “Note 12. Restructuring, Impairment and Plant Closing Costs” to our consolidated financial statements.

## **LEGAL PROCEEDINGS**

For a discussion of legal proceedings, see “Note 20. Commitments and Contingencies—Legal Matters” to our consolidated financial statements.

## **ENVIRONMENTAL, HEALTH AND SAFETY MATTERS**

We are subject to extensive environmental regulations, which may impose significant additional costs on our operations in the future. While we do not expect any of these enactments or proposals to have a material adverse effect on us in the near term, we cannot predict the longer-term effect of any of these regulations or proposals on our future financial condition. For a discussion of environmental, health and safety matters, see “Note 21. Environmental, Health and Safety Matters” to our consolidated financial statements.

## **RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS**

For a discussion of recently issued accounting pronouncements, see “Note 2. Summary of Significant Accounting Policies—Recently Issued Accounting Pronouncements” to our consolidated financial statements.

## **CRITICAL ACCOUNTING POLICIES**

The preparation of financial statements and related disclosures in conformity with U.S. GAAP requires management to make judgments, estimates and assumptions that affect the reported amounts in our consolidated financial statements. Our significant accounting policies are summarized in “Note 2. Summary of Significant Accounting Policies” to our consolidated financial statements. Summarized below are our critical accounting policies:

### **Employee Benefit Programs**

We sponsor several contributory and non-contributory defined benefit plans, covering employees primarily in the U.S., the U.K., The Netherlands, Belgium and Switzerland, but also covering employees in a number of other countries. We fund the material plans through trust arrangements (or local equivalents) where the assets are held separately from us. We also sponsor unfunded postretirement plans which provide medical and, in some cases, life insurance benefits covering certain employees in the U.S., Canada and South Africa. Amounts recorded in our consolidated financial statements are recorded based upon actuarial valuations performed by various independent actuaries. Inherent in these valuations are numerous assumptions regarding expected long-term rates of return on plan assets, discount rates, compensation increases, mortality rates and health care cost trends. These

assumptions are described in “Note 18. Employee Benefit Plans” to our consolidated financial statements.

Management, with the advice of actuaries, uses judgment to make assumptions on which our employee pension and postretirement benefit plan obligations and expenses are based. The effect of a 1% change in three key assumptions is summarized as follows (dollars in millions):

<u>Assumptions</u>	<u>Statement of Operations(1)</u>	<u>Balance Sheet Impact(2)</u>
Discount rate		
—1% increase . . . . .	\$(37)	\$(588)
—1% decrease . . . . .	48	662
Expected long-term rates of return on plan assets		
—1% increase . . . . .	(37)	—
—1% decrease . . . . .	37	—
Rate of compensation increase		
—1% increase . . . . .	11	83
—1% decrease . . . . .	(11)	(72)

(1) Estimated increase (decrease) on 2016 net periodic benefit cost

(2) Estimated increase (decrease) on December 31, 2016 pension and postretirement liabilities and accumulated other comprehensive loss

### Goodwill

We test our goodwill for impairment at least annually (at the beginning of the third quarter) and when events and circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount. Goodwill has been assigned to reporting units for purposes of impairment testing. Approximately 69% of our goodwill balance relates to our Advanced Materials reporting unit. The remaining goodwill relates to three other reporting units.

Fair value is estimated using the market approach, as well as the income approach based on discounted cash flow projections. The estimated fair values of our reporting units are dependent on several significant assumptions including, among others, market information, operating results, earnings projections and anticipated future cash flows.

We tested goodwill for impairment at the beginning of the third quarter of 2016 as part of the annual impairment testing procedures and determined that no goodwill impairment existed. Our most recent fair value determination resulted in an amount that exceeded the carrying amounts of all reporting units by a significant margin.

### Income Taxes

We use the asset and liability method of accounting for income taxes. Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial and tax reporting purposes. We evaluate deferred tax assets to determine whether it is more likely than not that they will be realized. Valuation allowances are reviewed on a tax jurisdiction basis to analyze whether there is sufficient positive or negative evidence to support a change in judgment about the realizability of the related deferred tax assets for each jurisdiction. These conclusions require significant judgment. In evaluating the objective evidence that historical results provide, we consider the cyclicity of businesses and cumulative income or losses during the applicable period. Cumulative losses incurred over the period limits our ability to consider other subjective evidence such as our projections for the future. Changes in expected future income in applicable

jurisdictions could affect the realization of deferred tax assets in those jurisdictions. As of December 31, 2016, we had total valuation allowances of \$757 million. See “Note 19. Income Taxes” to our consolidated financial statements for more information regarding our valuation allowances.

For non-U.S. entities that were not treated as branches for U.S. tax purposes, we do not provide for income taxes on the undistributed earnings of these subsidiaries that are reinvested and, in the opinion of management, will continue to be reinvested indefinitely. We have material intercompany debt obligations owed by our non-U.S. subsidiaries to the U.S. We do not intend to repatriate earnings to the U.S. via dividend based on estimates of future domestic cash generation, combined with the ability to return cash to the U.S. through payments of intercompany debt owed by our non-U.S. subsidiaries to the U.S. To the extent that cash is required in the U.S., rather than repatriate earnings to the U.S. via dividend we will utilize our intercompany debt. If any earnings were repatriated via dividend, we may need to accrue and pay taxes on the distributions. As discussed in “Note 19. Income Taxes” to our consolidated financial statements, we made a distribution of a portion of our earnings in 2015 when the amount of foreign tax credits associated with the distribution was greater than the amount of tax otherwise due. The undistributed earnings of foreign subsidiaries with positive earnings that are deemed to be permanently invested were approximately \$390 million at December 31, 2016. It is not practicable to determine the unrecognized deferred tax liability on those earnings because of the significant assumptions necessary to compute the tax.

Accounting for uncertainty in income taxes prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. The application of income tax law is inherently complex. We are required to determine if an income tax position meets the criteria of more-likely-than-not to be realized based on the merits of the position under tax law, in order to recognize an income tax benefit. This requires us to make significant judgments regarding the merits of income tax positions and the application of income tax law. Additionally, if a tax position meets the recognition criteria of more-likely-than-not we are required to make judgments and apply assumptions in order to measure the amount of the tax benefits to recognize. These judgments are based on the probability of the amount of tax benefits that would be realized if the tax position was challenged by the taxing authorities. Interpretations and guidance surrounding income tax laws and regulations change over time. As a consequence, changes in assumptions and judgments can materially affect amounts recognized in our consolidated financial statements.

### **Long-Lived Assets**

The useful lives of our property, plant and equipment are estimated based upon our historical experience, engineering estimates and industry information and are reviewed when economic events indicate that we may not be able to recover the carrying value of the assets. The estimated lives of our property range from 3 to 50 years and depreciation is recorded on the straight-line method. Inherent in our estimates of useful lives is the assumption that periodic maintenance and an appropriate level of annual capital expenditures will be performed. Without on-going capital improvements and maintenance, the productivity and cost efficiency declines and the useful lives of our assets would be shorter.

Management uses judgment to estimate the useful lives of our long-lived assets. At December 31, 2016, if the estimated useful lives of our property, plant and equipment had either been one year greater or one year less than their recorded lives, then depreciation expense for 2016 would have been approximately \$35 million less or \$41 million greater, respectively.

We are required to evaluate the carrying value of our long-lived tangible and intangible assets whenever events indicate that such carrying value may not be recoverable in the future or when management’s plans change regarding those assets, such as idling or closing a plant. We evaluate

impairment by comparing undiscounted cash flows of the related asset groups that are largely independent of the cash flows of other asset groups to their carrying values. Key assumptions in determining the future cash flows include the useful life, technology, competitive pressures, raw material pricing and regulations. In connection with our asset evaluation policy, we reviewed all of our long-lived assets for indicators that the carrying value may not be recoverable. During 2016, we recorded an impairment charge of \$1 million related to the impairment of our Pigments and Additives South African asset group. See “Note 12. Restructuring, Impairment and Plant Closing Costs” to our consolidated financial statements.

### **Restructuring and Plant Closing Costs**

We have recorded restructuring charges in recent periods in connection with closing certain plant locations, workforce reductions and other cost savings programs in each of our business segments. These charges are recorded when management has committed to a plan and incurred a liability related to the plan. Estimates for plant closing costs include the write-off of the carrying value of the plant, any necessary environmental and/or regulatory costs, contract termination and demolition costs. Estimates for workforce reductions and other costs savings are recorded based upon estimates of the number of positions to be terminated, termination benefits to be provided and other information, as necessary. Management evaluates the estimates on a quarterly basis and will adjust the reserve when information indicates that the estimate is above or below the currently recorded estimate. For further discussion of our restructuring activities, see “Note 12. Restructuring, Impairment and Plant Closing Costs” to our consolidated financial statements.

### **Contingent Loss Accruals**

Environmental remediation costs for our facilities are accrued when it is probable that a liability has been incurred and the amount can be reasonably estimated. Estimates of environmental reserves require evaluating government regulation, available technology, site-specific information and remediation alternatives. We accrue an amount equal to our best estimate of the costs to remediate based upon the available information. The extent of environmental impacts may not be fully known and the processes and costs of remediation may change as new information is obtained or technology for remediation is improved. Our process for estimating the expected cost for remediation considers the information available, technology that can be utilized and estimates of the extent of environmental damage. Adjustments to our estimates are made periodically based upon additional information received as remediation progresses. For further information, see “Note 21. Environmental, Health and Safety Matters” to our consolidated financial statements.

We are subject to legal proceedings and claims arising out of our business operations. We routinely assess the likelihood of any adverse outcomes to these matters, as well as ranges of probable losses. A determination of the amount of the reserves required, if any, for these contingencies is made after analysis of each known claim. We have an active risk management program consisting of numerous insurance policies secured from many carriers. These policies often provide coverage that is intended to minimize the financial impact, if any, of the legal proceedings. The required reserves may change in the future due to new developments in each matter. For further information, see “Note 20. Commitments and Contingencies—Legal Matters” to our consolidated financial statements.

## QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to market risks, such as changes in interest rates, foreign exchange rates and commodity prices. From time to time, we enter into transactions, including transactions involving derivative instruments, to manage certain of these exposures. We also hedge our net investment in certain European operations. Changes in the fair value of the hedge in the net investment of certain European operations are recorded in accumulated other comprehensive loss.

### INTEREST RATE RISKS

Through our borrowing activities, we are exposed to interest rate risk. Such risk arises due to the structure of our debt portfolio, including the mix of fixed and floating interest rates. Actions taken to reduce interest rate risk include managing the mix and rate characteristics of various interest bearing liabilities, as well as entering into interest rate derivative instruments.

From time to time, we may purchase interest rate swaps and/or other derivative instruments to reduce the impact of changes in interest rates on our floating-rate long-term debt. Under interest rate swaps, we agree with other parties to exchange, at specified intervals, the difference between fixed-rate and floating-rate interest amounts calculated by reference to an agreed notional principal amount.

We have entered into several interest rate contracts to hedge the variability caused by monthly changes in cash flow due to associated changes in LIBOR under our Senior Credit Facilities. As of December 31, 2016 and December 31, 2015, we had \$100 million notional value of interest rate hedges with a fixed rate of 2.5%. These swaps are designated as cash flow hedges and the effective portion of the changes in the fair value of the swaps are recorded in other comprehensive loss. The fair value of these hedges on December 31, 2016 and December 31, 2015 was \$1 million and \$2 million, respectively, and was recorded as other current liabilities on our consolidated balance sheets. These hedges will expire in April 2017. For the years ended December 31, 2016 and 2015, the changes in accumulated other comprehensive loss associated with these cash flow hedging activities were gains of approximately \$2 million and \$1 million, respectively.

Beginning in 2009, AAC entered into a 12-year floating to fixed interest rate contract providing for a receipt of LIBOR interest payments for a fixed payment of 5.02%. In connection with the consolidation of AAC as of July 1, 2010, the interest rate contract is now included in our consolidated results. See “Note 8. Variable Interest Entities” to our consolidated financial statements. The notional amount of the swap as of December 31, 2016 was \$18 million, and the interest rate contract is not designated as a cash flow hedge. As of December 31, 2016 and 2015, the fair value of the swap was \$1 million and \$2 million, respectively, and was recorded as other noncurrent liabilities on our consolidated balance sheets. For 2016 and 2015, we recorded a reduction of interest expense of \$1 million each due to changes in fair value of the swap.

During 2017, accumulated other comprehensive loss of nil is expected to be reclassified to earnings. The actual amount that will be reclassified to earnings over the next twelve months may vary from this amount due to changing market conditions. We would be exposed to credit losses in the event of nonperformance by a counterparty to our derivative financial instruments. We anticipate, however, that the counterparties will be able to fully satisfy their obligations under the contracts. Market risk arises from changes in interest rates.

### FOREIGN EXCHANGE RATE RISK

Our cash flows and earnings are subject to fluctuations due to exchange rate variation. Our revenues and expenses are denominated in various currencies. We enter into foreign currency derivative instruments to minimize the short-term impact of movements in foreign currency rates. Where practicable, we generally net multicurrency cash balances among our subsidiaries to help reduce



exposure to foreign currency exchange rates. Certain other exposures may be managed from time to time through financial market transactions, principally through the purchase of spot or forward foreign exchange contracts (generally with maturities of three months or less). We do not hedge our currency exposures in a manner that would eliminate the effect of changes in exchange rates on our cash flows and earnings. As of both December 31, 2016 and 2015, we had approximately \$176 million notional amount (in U.S. dollar equivalents) outstanding in foreign currency contracts with a term of approximately one month.

In November 2014, we entered into two five year cross-currency interest rate contracts and one eight year cross-currency interest rate contract to swap an aggregate notional \$200 million for an aggregate notional €161 million. The swap is designated as a hedge of net investment for financial reporting purposes. Under the cross-currency interest rate contract, we will receive fixed U.S. dollar payments of \$5 million semiannually on May 15 and November 15 (equivalent to an annual rate of 5.125%) and make interest payments of approximately €3 million (equivalent to an annual rate of approximately 3.6%). As of December 31, 2016, the fair value of this swap was \$29 million and was recorded in noncurrent assets.

In March 2010, we entered into three five year cross-currency interest rate contracts to swap an aggregate notional \$350 million for an aggregate notional €255 million. This swap was designated as a hedge of net investment for financial reporting purposes. During the three months ended March 31, 2015, we terminated these cross-currency interest rate contracts and received \$66 million in payments from the counterparties.

A portion of our debt is denominated in euros. We also finance certain of our non-U.S. subsidiaries with intercompany loans that are, in many cases, denominated in currencies other than the entities' functional currency. We manage the net foreign currency exposure created by this debt through various means, including cross-currency swaps, the designation of certain intercompany loans as permanent loans because they are not expected to be repaid in the foreseeable future and the designation of certain debt and swaps as net investment hedges.

Foreign currency transaction gains and losses on intercompany loans that are not designated as permanent loans are recorded in earnings. Foreign currency transaction gains and losses on intercompany loans that are designated as permanent loans are recorded in other comprehensive (loss) income. From time to time, we review such designation of intercompany loans.

We review our non-U.S. dollar denominated debt and derivative instruments to determine the appropriate amounts designated as hedges. As of December 31, 2016, we have designated approximately €651 million (approximately \$677 million) of euro-denominated debt and cross-currency interest rate contracts as a hedge of our net investment. For the years ended December 31, 2016, 2015 and 2014, the amount of gain recognized on the hedge of our net investment was \$27 million, \$68 million and \$97 million, respectively, and was recorded in other comprehensive (loss) income.

## **COMMODITY PRICES RISK**

Inherent in our business is exposure to price changes for several commodities. However, our exposure to changing commodity prices is somewhat limited since the majority of our raw materials are acquired at posted or market related prices, and sales prices for many of our finished products are at market related prices which are largely set on a monthly or quarterly basis in line with industry practice. Consequently, we do not generally hedge our commodity exposures. For further information, see "Note 16. Derivative Instruments and Hedging Activities—Commodity Prices Risk" to our consolidated financial statements.

## CONTROLS AND PROCEDURES

### EVALUATION OF DISCLOSURE CONTROLS AND PROCEDURES

Our management, with the participation of our chief executive officer and chief financial officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of December 31, 2016. Based on this evaluation, our chief executive officer and chief financial officer have concluded that, as of December 31, 2016, our disclosure controls and procedures were effective, in that they ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is (1) recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and (2) accumulated and communicated to our management, including our chief executive officer and chief financial officer, as appropriate to allow timely decisions regarding required disclosure.

### CHANGES IN INTERNAL CONTROL OVER FINANCIAL REPORTING

No changes to our internal control over financial reporting occurred during the quarter ended December 31, 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act).

### MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Management is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control framework and processes are designed to provide reasonable assurance to management and our Board of Directors regarding the reliability of financial reporting and the preparation of our consolidated financial statements in accordance with accounting principles generally accepted in the United States of America.

Our internal control over financial reporting includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of our Company;
- provide reasonable assurance that transactions are recorded properly to allow for the preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures are being made only in accordance with authorizations of management and Directors of our Company;
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our consolidated financial statements; and
- provide reasonable assurance as to the detection of fraud.

Because of its inherent limitations, a system of internal control over financial reporting can provide only reasonable assurance and may not prevent or detect misstatements. Further, because of changing conditions, effectiveness of internal control over financial reporting may vary over time.

Our management assessed the effectiveness of our internal control over financial reporting and concluded that, as of December 31, 2016, such internal control is effective. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control—Integrated Framework (2013)* (“COSO”).

Our independent registered public accountants, Deloitte & Touche LLP, with direct access to our Board of Directors through our Audit Committee, have audited our consolidated financial statements prepared by us and have issued attestation reports on internal control over financial reporting for our Company.

**MANAGEMENT’S PROCESS TO ASSESS THE EFFECTIVENESS OF  
INTERNAL CONTROL OVER FINANCIAL REPORTING**

To comply with the requirements of Section 404 of the Sarbanes-Oxley Act of 2002, we completed a comprehensive compliance process to evaluate our internal control over financial reporting for our Company. We involved employees at all levels of our Company during 2016 in training, performing and evaluating our internal controls.

Our management’s conclusion on the effectiveness of internal control over financial reporting is based on a comprehensive evaluation and analysis of the five elements of COSO. Our management considered information from multiple sources as the basis its conclusion—including self-assessments of the control activities within each work process, assessments of division-level and entity-level controls and internal control attestations from key external service providers, as well as from key management. In addition, our internal control processes contain self-monitoring mechanisms, and proactive steps are taken to correct deficiencies as they are identified. We also maintain an internal auditing program that independently assesses the effectiveness of internal control over financial reporting within each of the five COSO elements.

/s/ PETER R. HUNTSMAN

Peter R. Huntsman  
*President and Chief Executive Officer*

February 15, 2017

/s/ SEAN DOUGLAS

Sean Douglas  
*Executive Vice President and Chief Financial Officer*

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of  
Huntsman Corporation and subsidiaries

We have audited the internal control over financial reporting of Huntsman Corporation and subsidiaries (the “Company”) as of December 31, 2016, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company’s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company’s internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company’s internal control over financial reporting is a process designed by, or under the supervision of, the company’s principal executive and principal financial officers, or persons performing similar functions, and effected by the company’s board of directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on the criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements as of and for the year ended December 31, 2016 of the Company and our report dated February 15, 2017 expressed an unqualified opinion on those financial statements.

/s/ DELOITTE & TOUCHE LLP

Houston, Texas  
February 15, 2017

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of  
Huntsman Corporation and subsidiaries

We have audited the accompanying consolidated balance sheets of Huntsman Corporation and subsidiaries (the “Company”) as of December 31, 2016 and 2015, and the related consolidated statements of operations, comprehensive loss, equity, and cash flows for each of the three years in the period ended December 31, 2016. These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of Huntsman Corporation and subsidiaries as of December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company’s internal control over financial reporting as of December 31, 2016, based on the criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 15, 2017 expressed an unqualified opinion on the Company’s internal control over financial reporting.

/s/ DELOITTE & TOUCHE LLP

Houston, Texas  
February 15, 2017

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED BALANCE SHEETS**  
(In Millions, Except Share and Per Share Amounts)

	<b>December 31, 2016</b>	<b>December 31, 2015</b>
<b>ASSETS</b>		
<b>Current assets:</b>		
Cash and cash equivalents(a) . . . . .	\$ 414	\$ 257
Restricted cash(a) . . . . .	11	12
Accounts and notes receivable (net of allowance for doubtful accounts of \$27 and \$26, respectively), (\$437 and \$438 pledged as collateral, respectively)(a) . . . . .	1,402	1,420
Accounts receivable from affiliates . . . . .	33	29
Inventories(a) . . . . .	1,344	1,692
Prepaid expenses . . . . .	60	112
Other current assets(a) . . . . .	291	312
<b>Total current assets</b> . . . . .	<b>3,555</b>	<b>3,834</b>
Property, plant and equipment, net(a) . . . . .	4,212	4,446
Investment in unconsolidated affiliates . . . . .	332	347
Intangible assets, net(a) . . . . .	66	86
Goodwill . . . . .	121	116
Deferred income taxes . . . . .	396	418
Other noncurrent assets(a) . . . . .	507	573
<b>Total assets</b> . . . . .	<b>\$ 9,189</b>	<b>\$ 9,820</b>
<b>LIABILITIES AND EQUITY</b>		
<b>Current liabilities:</b>		
Accounts payable(a) . . . . .	\$ 1,071	\$ 1,034
Accounts payable to affiliates . . . . .	31	27
Accrued liabilities(a) . . . . .	616	686
Current portion of debt(a) . . . . .	60	170
<b>Total current liabilities</b> . . . . .	<b>1,778</b>	<b>1,917</b>
Long-term debt(a) . . . . .	4,135	4,625
Notes payable to affiliates . . . . .	1	1
Deferred income taxes . . . . .	427	422
Other noncurrent liabilities(a) . . . . .	1,381	1,226
<b>Total liabilities</b> . . . . .	<b>7,722</b>	<b>8,191</b>
<b>Commitments and contingencies (Notes 20 and 21)</b>		
<b>Equity</b>		
<b>Huntsman Corporation stockholders' equity:</b>		
Common stock \$0.01 par value, 1,200,000,000 shares authorized, 250,802,175 and 249,483,541 issued and 236,370,347 and 237,080,026 outstanding in 2016 and 2015, respectively . . . . .	3	3
Additional paid-in capital . . . . .	3,447	3,407
Treasury stock, 12,607,223 and 11,162,454 shares in 2016 and 2015, respectively . . . . .	(150)	(135)
Unearned stock-based compensation . . . . .	(17)	(17)
Accumulated deficit . . . . .	(325)	(528)
Accumulated other comprehensive loss . . . . .	(1,671)	(1,288)
<b>Total Huntsman Corporation stockholders' equity</b> . . . . .	<b>1,287</b>	<b>1,442</b>
Noncontrolling interests in subsidiaries . . . . .	180	187
<b>Total equity</b> . . . . .	<b>1,467</b>	<b>1,629</b>
<b>Total liabilities and equity</b> . . . . .	<b>\$ 9,189</b>	<b>\$ 9,820</b>

(a) At December 31, 2016 and December 31, 2015, respectively, \$25 and \$34 of cash and cash equivalents, \$10 and \$12 of restricted cash, \$27 and \$26 of accounts and notes receivable (net), \$46 and \$54 of inventories, \$5 each of other current assets, \$284 and \$307 of property, plant and equipment (net), \$31 and \$36 of intangible assets (net), \$37 and \$38 of other noncurrent assets, \$90 and \$82 of accounts payable, \$34 and \$27 of accrued liabilities, \$14 and \$15 of current portion of debt, \$114 and \$137 of long-term debt, and \$76 and \$54 of other noncurrent liabilities from consolidated variable interest entities are included in the respective Balance Sheet captions above. See "Note 8. Variable Interest Entities."

See accompanying notes to consolidated financial statements.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
(In Millions, Except Per Share Amounts)

	Year ended December 31,		
	2016	2015	2014
<b>Revenues:</b>			
Trade sales, services and fees, net . . . . .	\$9,526	\$10,168	\$11,317
Related party sales . . . . .	131	131	261
<b>Total revenues</b> . . . . .	9,657	10,299	11,578
<b>Cost of goods sold</b> . . . . .	7,979	8,451	9,659
<b>Gross profit</b> . . . . .	1,678	1,848	1,919
<b>Operating expenses:</b>			
Selling, general and administrative . . . . .	920	982	974
Research and development . . . . .	152	160	158
Restructuring, impairment and plant closing costs . . . . .	81	302	158
Spin-off separation expenses . . . . .	18	—	—
Other operating income, net . . . . .	(140)	(1)	(4)
Total expenses . . . . .	1,031	1,443	1,286
<b>Operating income</b> . . . . .	647	405	633
Interest expense . . . . .	(202)	(205)	(205)
Equity in income of investment in unconsolidated affiliates . . . . .	5	6	6
Loss on early extinguishment of debt . . . . .	(3)	(31)	(28)
Other income (loss), net . . . . .	1	1	(2)
<b>Income from continuing operations before income taxes</b> . . . . .	448	176	404
Income tax expense . . . . .	(87)	(46)	(51)
<b>Income from continuing operations</b> . . . . .	361	130	353
Loss from discontinued operations . . . . .	(4)	(4)	(8)
<b>Net income</b> . . . . .	357	126	345
Net income attributable to noncontrolling interests . . . . .	(31)	(33)	(22)
<b>Net income attributable to Huntsman Corporation</b> . . . . .	\$ 326	\$ 93	\$ 323

(continued)

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF OPERATIONS (Continued)**  
(In Millions, Except Per Share Amounts)

	<u>Year ended December 31,</u>		
	<u>2016</u>	<u>2015</u>	<u>2014</u>
<b>Basic income (loss) per share:</b>			
Income from continuing operations attributable to Huntsman Corporation common stockholders . . . . .	\$ 1.40	\$ 0.40	\$ 1.36
Loss from discontinued operations attributable to Huntsman Corporation common stockholders, net of tax . . . . .	<u>(0.02)</u>	<u>(0.02)</u>	<u>(0.03)</u>
Net income attributable to Huntsman Corporation common stockholders . . .	<u>\$ 1.38</u>	<u>\$ 0.38</u>	<u>\$ 1.33</u>
Weighted average shares . . . . .	<u>236.3</u>	<u>242.8</u>	<u>242.1</u>
<b>Diluted income (loss) per share:</b>			
Income from continuing operations attributable to Huntsman Corporation common stockholders . . . . .	\$ 1.38	\$ 0.40	\$ 1.34
Loss from discontinued operations attributable to Huntsman Corporation common stockholders, net of tax . . . . .	<u>(0.02)</u>	<u>(0.02)</u>	<u>(0.03)</u>
Net income attributable to Huntsman Corporation common stockholders . . .	<u>\$ 1.36</u>	<u>\$ 0.38</u>	<u>\$ 1.31</u>
Weighted average shares . . . . .	<u>239.6</u>	<u>245.4</u>	<u>246.0</u>
<b>Amounts attributable to Huntsman Corporation common stockholders:</b>			
Income from continuing operations . . . . .	\$ 330	\$ 97	\$ 331
Loss from discontinued operations, net of tax . . . . .	<u>(4)</u>	<u>(4)</u>	<u>(8)</u>
Net income . . . . .	<u>\$ 326</u>	<u>\$ 93</u>	<u>\$ 323</u>
<b>Dividends per share</b> . . . . .	<u>\$ 0.50</u>	<u>\$ 0.50</u>	<u>\$ 0.50</u>

See accompanying notes to consolidated financial statements.



**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS**  
(In Millions)

	<u>Year ended December 31,</u>		
	<u>2016</u>	<u>2015</u>	<u>2014</u>
<b>Net income</b> .....	\$ 357	\$ 126	\$ 345
<b>Other comprehensive loss, net of tax:</b>			
Foreign currency translations adjustments .....	(171)	(313)	(221)
Pension and other postretirement benefits adjustments .....	(219)	66	(271)
Other, net .....	(1)	7	1
<b>Other comprehensive loss, net of tax</b> .....	<u>(391)</u>	<u>(240)</u>	<u>(491)</u>
<b>Comprehensive loss</b> .....	(34)	(114)	(146)
Comprehensive income attributable to noncontrolling interests .....	<u>(23)</u>	<u>(28)</u>	<u>(7)</u>
<b>Comprehensive loss attributable to Huntsman Corporation</b> .....	<u>\$ (57)</u>	<u>\$(142)</u>	<u>\$(153)</u>

See accompanying notes to consolidated financial statements.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF EQUITY**  
(In Millions, Except Share Amounts)

	Huntsman Corporation Stockholders' Equity								Total equity
	Shares Common stock	Common stock	Additional paid-in capital	Treasury stock	Unearned stock-based compensation	Accumulated deficit	Accumulated other comprehensive loss	Noncontrolling interests in subsidiaries	
Beginning balance, January 1, 2014	240,401,442	2	3,305	(50)	(13)	(687)	(577)	149	2,129
Net income	—	—	—	—	—	323	—	22	345
Other comprehensive loss	—	—	—	—	—	—	(476)	(15)	(491)
Issuance of nonvested stock awards	—	—	15	—	(15)	—	—	—	—
Vesting of stock awards	1,018,050	—	7	—	—	—	—	—	7
Recognition of stock-based compensation	—	—	10	—	14	—	—	—	24
Repurchase and cancellation of stock awards	(302,200)	—	—	—	—	(7)	—	—	(7)
Stock options exercised	2,299,687	1	47	—	—	—	—	—	48
Dividends paid to noncontrolling interests	—	—	—	—	—	—	—	(4)	(4)
Excess tax benefit related to stock-based compensation	—	—	1	—	—	—	—	—	1
Accrued and unpaid dividends	—	—	—	—	—	(1)	—	—	(1)
Cash received for a noncontrolling interest of a subsidiary	—	—	—	—	—	—	—	5	5
Acquisition of a business	—	—	—	—	—	—	—	16	16
Dividends declared on common stock	—	—	—	—	—	(121)	—	—	(121)
<b>Balance, December 31, 2014</b>	<b>243,416,979</b>	<b>3</b>	<b>3,385</b>	<b>(50)</b>	<b>(14)</b>	<b>(493)</b>	<b>(1,053)</b>	<b>173</b>	<b>1,951</b>
Net income	—	—	—	—	—	93	—	33	126
Other comprehensive loss	—	—	—	—	—	—	(235)	(5)	(240)
Issuance of nonvested stock awards	—	—	19	—	(19)	—	—	—	—
Vesting of stock awards	1,037,743	—	7	—	—	—	—	—	7
Recognition of stock-based compensation	—	—	10	—	16	—	—	—	26
Repurchase and cancellation of stock awards	(304,340)	—	—	—	—	(7)	—	—	(7)
Stock options exercised	48,572	—	1	—	—	—	—	—	1
Dividends paid to noncontrolling interests	—	—	—	—	—	—	—	(14)	(14)
Excess tax benefit related to stock-based compensation	—	—	1	—	—	—	—	—	1
Cash paid for noncontrolling interest	—	—	(1)	—	—	—	—	—	(1)
Treasury stock repurchased	(7,118,928)	—	(15)	(85)	—	—	—	—	(100)
Dividends declared on common stock	—	—	—	—	—	(121)	—	—	(121)
<b>Balance, December 31, 2015</b>	<b>237,080,026</b>	<b>3</b>	<b>3,407</b>	<b>(135)</b>	<b>(17)</b>	<b>(528)</b>	<b>(1,288)</b>	<b>187</b>	<b>1,629</b>
Net income	—	—	—	—	—	326	—	31	357
Other comprehensive income	—	—	—	—	—	—	(383)	(8)	(391)
Issuance of nonvested stock awards	—	—	16	—	(16)	—	—	—	—
Vesting of stock awards	914,081	—	2	—	—	—	—	—	2
Recognition of stock-based compensation	—	—	9	—	16	—	—	—	25
Repurchase and cancellation of stock awards	(256,468)	—	—	—	—	(3)	—	—	(3)
Stock options exercised	77,477	—	1	—	—	—	—	—	1
Dividends paid to noncontrolling interests	—	—	—	—	—	—	—	(30)	(30)
Excess tax benefit related to stock-based compensation	—	—	(3)	—	—	—	—	—	(3)
Treasury stock repurchased	(1,444,769)	—	15	(15)	—	—	—	—	—
Dividends declared on common stock	—	—	—	—	—	(120)	—	—	(120)
<b>Balance, December 31, 2016</b>	<b>236,370,347</b>	<b>\$3</b>	<b>\$3,447</b>	<b>\$(150)</b>	<b>\$(17)</b>	<b>\$(325)</b>	<b>\$(1,671)</b>	<b>\$180</b>	<b>\$1,467</b>

See accompanying notes to consolidated financial statements.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(In Millions)

	Year ended December 31,		
	2016	2015	2014
<b>Operating Activities:</b>			
Net income . . . . .	\$ 357	\$ 126	\$ 345
Adjustments to reconcile net income to net cash provided by operating activities:			
Equity in income of investment in unconsolidated affiliates . . . . .	(5)	(6)	(6)
Depreciation and amortization . . . . .	432	399	445
Provision for losses on accounts receivable . . . . .	2	1	—
(Gain) loss on disposal of businesses/assets, net . . . . .	(117)	4	4
Loss on early extinguishment of debt . . . . .	3	31	28
Noncash interest expense . . . . .	15	11	11
Noncash restructuring and impairment charges . . . . .	5	112	37
Deferred income taxes . . . . .	15	(25)	(51)
Noncash (gain) loss on foreign currency transactions . . . . .	(5)	7	15
Stock-based compensation . . . . .	34	30	28
Portion of insurance proceeds representing cash provided by investing activities . . . . .	(8)	—	—
Other, net . . . . .	5	3	(2)
Changes in operating assets and liabilities, net of effects of acquisitions:			
Accounts and notes receivable . . . . .	(35)	121	2
Inventories . . . . .	283	179	(20)
Prepaid expenses . . . . .	6	(52)	(2)
Other current assets . . . . .	8	(64)	(44)
Other noncurrent assets . . . . .	35	(98)	(44)
Accounts payable . . . . .	56	(157)	86
Accrued liabilities . . . . .	65	(9)	11
Other noncurrent liabilities . . . . .	(63)	(38)	(83)
<b>Net cash provided by operating activities . . . . .</b>	<b>1,088</b>	<b>575</b>	<b>760</b>
<b>Investing Activities:</b>			
Capital expenditures . . . . .	(421)	(663)	(601)
Insurance proceeds for recovery of property damage . . . . .	8	—	—
Cash received from unconsolidated affiliates . . . . .	33	48	51
Investment in unconsolidated affiliates . . . . .	(30)	(54)	(108)
Acquisition of businesses, net of cash acquired . . . . .	—	(14)	(960)
Cash received from purchase price adjustment for business acquired . . . . .	—	18	—
Proceeds from sale of businesses/assets . . . . .	208	1	15
Cash received from termination of cross-currency interest rate contracts . . . . .	—	66	—
Change in restricted cash . . . . .	1	(3)	—
Other, net . . . . .	(1)	1	(3)
<b>Net cash used in investing activities . . . . .</b>	<b>(202)</b>	<b>(600)</b>	<b>(1,606)</b>

(continued)

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS (Continued)**  
(In Millions)

	Year ended December 31,		
	2016	2015	2014
<b>Financing Activities:</b>			
Net repayments under revolving loan facilities . . . . .	\$ —	\$ (1)	\$ (1)
Net repayments on overdraft facilities . . . . .	(1)	(8)	(5)
Repayments of short-term debt . . . . .	(56)	—	(8)
Borrowings on short-term debt . . . . .	10	12	15
Repayments of long-term debt . . . . .	(1,070)	(604)	(418)
Proceeds from issuance of long-term debt . . . . .	559	326	1,792
Repayments of notes payable . . . . .	(33)	(33)	(34)
Borrowings on notes payable . . . . .	31	34	33
Debt issuance costs paid . . . . .	(9)	(8)	(67)
Call premiums related to early extinguishment of debt . . . . .	(1)	(35)	(24)
Contingent consideration paid for acquisition . . . . .	—	(4)	(6)
Dividends paid to common stockholders . . . . .	(120)	(121)	(121)
Dividends paid to noncontrolling interests . . . . .	(30)	(14)	(4)
Repurchase and cancellation of stock awards . . . . .	(3)	(7)	(7)
Proceeds from issuance of common stock . . . . .	1	1	47
Repurchase of common stock . . . . .	—	(100)	—
Excess tax benefit related to stock-based compensation . . . . .	—	1	1
Other, net . . . . .	(1)	(1)	4
<b>Net cash (used in) provided by financing activities . . . . .</b>	<b>(723)</b>	<b>(562)</b>	<b>1,197</b>
Effect of exchange rate changes on cash . . . . .	(6)	(16)	(11)
Increase (decrease) in cash and cash equivalents . . . . .	157	(603)	340
Cash and cash equivalents at beginning of period . . . . .	257	860	520
Cash and cash equivalents at end of period . . . . .	<u>\$ 414</u>	<u>\$ 257</u>	<u>\$ 860</u>
<b>Supplemental cash flow information:</b>			
Cash paid for interest . . . . .	\$ 205	\$ 225	\$ 208
Cash paid for income taxes . . . . .	40	126	165

As of December 31, 2016, 2015 and 2014, the amount of capital expenditures in accounts payable was \$81 million, \$79 million and \$88 million, respectively.

See accompanying notes to consolidated financial statements.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**1. GENERAL**

**DEFINITIONS**

For convenience in this report, the terms “Company,” “our” or “we” may be used to refer to Huntsman Corporation and, unless the context otherwise requires, its subsidiaries and predecessors. Any references to our “Company” “we” “us” or “our” as of a date prior to October 19, 2004 (the date of our Company’s formation) are to Huntsman Holdings, LLC and its subsidiaries (including their respective predecessors). In this report, “Huntsman International” refers to Huntsman International LLC (our 100% owned subsidiary) and, unless the context otherwise requires, its subsidiaries; “AAC” refers to Arabian Amines Company, our consolidated manufacturing joint venture with the Zamil Group; “HPS” refers to Huntsman Polyurethanes Shanghai Ltd. (our consolidated splitting joint venture with Shanghai Chlor-Alkali Chemical Company, Ltd); “Sasol-Huntsman” refers to Sasol-Huntsman GmbH and Co. KG (our consolidated joint venture with Sasol that owns and operates a maleic anhydride facility in Moers, Germany); and “SLIC” refers to Shanghai Liengheng Isocyanate Company (our unconsolidated manufacturing joint venture with BASF and three Chinese chemical companies).

In this report, we may use, without definition, the common names of competitors or other industry participants. We may also use the common names or abbreviations for certain chemicals or products. Each capitalized term used without definition in this report has the meaning specified in the Annual Report on Form 10-K for the year ended December 31, 2016, which was filed with the Securities and Exchange Commission on February 15, 2017.

**DESCRIPTION OF BUSINESS**

We are a global manufacturer of differentiated organic chemical products and of inorganic chemical products. Our products comprise a broad range of chemicals and formulations, which we market globally to a diversified group of consumer and industrial customers. Our products are used in a wide range of applications, including those in the adhesives, aerospace, automotive, construction products, personal care and hygiene, durable and non-durable consumer products, digital inks, electronics, medical, packaging, paints and coatings, power generation, refining, synthetic fiber, textile chemicals and dye industries. We are a leading global producer in many of our key product lines, including MDI, amines, surfactants, maleic anhydride, epoxy-based polymer formulations, textile chemicals, dyes, titanium dioxide and color pigments.

We operate in five segments: Polyurethanes, Performance Products, Advanced Materials, Textile Effects and Pigments and Additives. Our Polyurethanes, Performance Products, Advanced Materials and Textile Effects segments produce differentiated organic chemical products and our Pigments and Additives segment produces inorganic chemical products. In a series of transactions beginning in 2006, we sold or shutdown substantially all of our Australian styrenics operations and our North American polymers and base chemicals operations. We report the results of these businesses as discontinued operations.

**COMPANY**

Our Company, a Delaware corporation, was formed in 2004 to hold the Huntsman businesses. Jon M. Huntsman founded the predecessor to our Company in 1970 as a small packaging company. Since then, we have grown through a series of acquisitions and now own a global portfolio of businesses.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**1. GENERAL (Continued)**

Currently, we operate all of our businesses through Huntsman International, our 100% owned subsidiary. Huntsman International is a Delaware limited liability company and was formed in 1999.

**RECENT DEVELOPMENTS**

On January 30, 2017, our titanium dioxide manufacturing facility in Pori, Finland experienced fire damage and is currently not operational. The fire brigade responded quickly to extinguish the fire and there were no injuries. We have notified applicable customers and suppliers of this *force majeure* event. We do not currently have an estimated time frame for how long the facility will be off line, but we are committed to repairing the facility as quickly as possible. The Pori facility has a nameplate capacity of 130,000 metric tons, which represents approximately 15% of our total titanium dioxide capacity and approximately 10% of total European titanium dioxide demand. The site is insured for property damage as well as business interruption losses. According to our insurance policies, the respective retention levels (deductibles) for physical damage and business interruption are \$15 million and 60 days, respectively. On February 9, 2017, we received a €50 million (approximately \$52 million) payment from our insurer as an initial partial progress payment towards the overall pending claim.

On October 28, 2016, we filed an initial Form 10 registration statement with the SEC as part of the process to spin off our Pigments and Additives and Textile Effects businesses in a tax-free transaction. On January 17, 2017, we announced that we will retain our Textile Effects business and we amended the Form 10 registration statement. For further information, see “Note 4. Separation of Pigments and Additives Business.”

On December 30, 2016, our Performance Products segment completed the sale of its European surfactants business to Innospec Inc. for \$199 million in cash plus our retention of trade receivables and payables for an enterprise value of \$225 million. For further information, see “Note 3. Business Combinations and Dispositions—Sale of European Surfactants Manufacturing Facilities.”

On December 30, 2016, we made an early repayment of \$260 million on our 2015 Extended Term Loan B using proceeds from the sale of the European surfactants business and existing cash. For further information, see “Note 15. Direct and Subsidiary Debt—Senior Credit Facilities.”

**2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

**ASSET RETIREMENT OBLIGATIONS**

We accrue for asset retirement obligations, which consist primarily of landfill capping, closure and post-closure costs, asbestos abatement costs, demolition and removal costs and leasehold remediation costs, in the period in which the obligations are incurred. Asset retirement obligations are accrued at estimated fair value. When the liability is initially recorded, we capitalize the cost by increasing the carrying amount of the related long-lived asset. Over time, the liability is accreted to its estimated settlement value and the capitalized cost is depreciated over the useful life of the related asset. Upon settlement of the liability, we will recognize a gain or loss for any difference between the settlement amount and the liability recorded.

**CARRYING VALUE OF LONG-LIVED ASSETS**

We review long-lived assets and all amortizable intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of these assets may not be recoverable.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)**

Recoverability is based upon current and anticipated undiscounted cash flows, and we recognize an impairment when such estimated cash flows are less than the carrying value of the asset. Measurement of the amount of impairment, if any, is based upon the difference between carrying value and fair value. Fair value is generally estimated by discounting estimated future cash flows using a discount rate commensurate with the risks involved or selling price of assets held for sale. See “Note 12. Restructuring, Impairment and Plant Closing Costs.”

**CASH AND CASH EQUIVALENTS**

We consider cash in checking accounts and cash in short-term highly liquid investments with remaining maturities of three months or less at the date of purchase, to be cash and cash equivalents. Cash flows from discontinued operations are not presented separately in our consolidated statements of cash flows.

**COST OF GOODS SOLD**

We classify the costs of manufacturing and distributing our products as cost of goods sold. Manufacturing costs include variable costs, primarily raw materials and energy, and fixed expenses directly associated with production. Manufacturing costs also include, among other things, plant site operating costs and overhead (including depreciation), production planning and logistics costs, repair and maintenance costs, plant site purchasing costs, and engineering and technical support costs. Distribution, freight and warehousing costs are also included in cost of goods sold.

**DERIVATIVES AND HEDGING ACTIVITIES**

All derivatives, whether designated in hedging relationships or not, are recorded on our balance sheet at fair value. If the derivative is designated as a fair value hedge, the changes in the fair value of the derivative and the hedged items are recognized in earnings. If the derivative is designated as a cash flow hedge, changes in the fair value of the derivative are recorded in accumulated other comprehensive loss, to the extent effective, and will be recognized in the income statement when the hedged item affects earnings. Changes in the fair value of the hedge in the net investment of certain international operations are recorded in other comprehensive income (loss), to the extent effective. The effectiveness of a cash flow hedging relationship is established at the inception of the hedge, and after inception we perform effectiveness assessments at least every three months. A derivative designated as a cash flow hedge is determined to be effective if the change in value of the hedge divided by the change in value of the hedged item is within a range of 80% to 125%. Hedge ineffectiveness in a cash flow hedge occurs only if the cumulative gain or loss on the derivative hedging instrument exceeds the cumulative change in the expected future cash flows on the hedged transaction. For a derivative that does not qualify or has not been designated as a hedge, changes in fair value are recognized in earnings.

**ENVIRONMENTAL EXPENDITURES**

Environmental related restoration and remediation costs are recorded as liabilities when site restoration and environmental remediation and clean-up obligations are either known or considered probable and the related costs can be reasonably estimated. Other environmental expenditures that are

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)**

principally maintenance or preventative in nature are recorded when expended and incurred and are expensed or capitalized as appropriate. See “Note 21. Environmental, Health and Safety Matters.”

**FOREIGN CURRENCY TRANSLATION**

The accounts of our operating subsidiaries outside of the U.S., unless they are operating in highly inflationary economic environments, consider the functional currency to be the currency of the economic environment in which they operate. Accordingly, assets and liabilities are translated at rates prevailing at the balance sheet date. Revenues, expenses, gains and losses are translated at a weighted average rate for the period. Cumulative translation adjustments are recorded to equity as a component of accumulated other comprehensive loss.

If a subsidiary operates in an economic environment that is considered to be highly inflationary (100% cumulative inflation over a three-year period), the U.S. dollar is considered to be the functional currency and gains and losses from remeasurement to the U.S. dollar from the local currency are included in the statement of operations. Where a subsidiary’s operations are effectively run, managed, financed and contracted in U.S. dollars, such as certain finance subsidiaries outside of the U.S., the U.S. dollar is considered to be the functional currency.

Foreign currency transaction gains and losses are recorded in other operating income, net in our consolidated statements of operations and were net (gains) losses of \$(5) million, \$7 million and \$15 million for the years ended December 31, 2016, 2015 and 2014, respectively.

**INCOME TAXES**

We use the asset and liability method of accounting for income taxes. Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial and tax reporting purposes. We evaluate deferred tax assets to determine whether it is more likely than not that they will be realized. Valuation allowances are reviewed on a tax jurisdiction basis to analyze whether there is sufficient positive or negative evidence to support a change in judgment about the realizability of the related deferred tax assets for each jurisdiction. These conclusions require significant judgment. In evaluating the objective evidence that historical results provide, we consider the cyclicity of businesses and cumulative income or losses during the applicable period. Cumulative losses incurred over the period limits our ability to consider other subjective evidence such as our projections for the future. Changes in expected future income in applicable jurisdictions could affect the realization of deferred tax assets in those jurisdictions.

We do not provide for income taxes or benefits on the undistributed earnings of our non-U.S. subsidiaries that are reinvested and, in the opinion of management, will continue to be reinvested indefinitely.

Accounting for uncertainty in income taxes prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. The application of income tax law is inherently complex. We are required to determine if an income tax position meets the criteria of more-likely-than-not to be realized based on the merits of the position under tax law, in order to recognize an income tax benefit. This requires us to make significant judgments regarding the merits of income tax positions and the application of income tax law. Additionally, if a tax position meets the recognition criteria of more-likely-than-not we



**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)**

are required to make judgments and apply assumptions to measure the amount of the tax benefits to recognize. These judgments are based on the probability of the amount of tax benefits that would be realized if the tax position was challenged by the taxing authorities. Interpretations and guidance surrounding income tax laws and regulations change over time. As a consequence, changes in assumptions and judgments can materially affect amounts recognized in our consolidated financial statements.

**INTANGIBLE ASSETS AND GOODWILL**

Intangible assets are stated at cost (fair value at the time of acquisition) and are amortized using the straight-line method over the estimated useful lives or the life of the related agreement as follows:

Patents and technology . . . . .	5 - 30 years
Trademarks . . . . .	9 - 30 years
Licenses and other agreements . . . . .	5 - 15 years
Other intangibles . . . . .	5 - 15 years

Goodwill represents costs in excess of fair values assigned to the underlying net assets of acquired businesses. Goodwill is not subject to any method of amortization, but is tested for impairment annually (at the beginning of the third quarter) and when events and circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount. When the fair value is less than the carrying value of the related reporting unit, we are required to reduce the amount of goodwill through a charge to earnings. Fair value is estimated using the market approach, as well as the income approach based on discounted cash flow projections. Goodwill has been assigned to reporting units for purposes of impairment testing. The net change in goodwill during 2016 of \$5 million was due to the addition of goodwill of approximately \$5 million from the finalization of the accounting for an acquisition, partially offset by less than \$1 million of changes in foreign currency exchange rates.

**INVENTORIES**

Inventories are stated at the lower of cost or market, with cost determined using LIFO, first-in first-out, and average costs methods for different components of inventory.

**LEGAL COSTS**

We expense legal costs, including those legal costs incurred in connection with a loss contingency, as incurred.

**NET INCOME PER SHARE ATTRIBUTABLE TO HUNTSMAN CORPORATION**

Basic income per share excludes dilution and is computed by dividing net income attributable to Huntsman Corporation common stockholders by the weighted average number of shares outstanding during the period. Diluted income per share reflects all potential dilutive common shares outstanding during the period and is computed by dividing net income available to Huntsman Corporation common stockholders by the weighted average number of shares outstanding during the period increased by the number of additional shares that would have been outstanding as dilutive securities.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)**

Basic and diluted income per share is determined using the following information (in millions):

	Year Ended December 31,		
	2016	2015	2014
<b>Numerator:</b>			
<b>Basic and diluted income from continuing operations:</b>			
Income from continuing operations attributable to			
Huntsman Corporation . . . . .	\$ 330	\$ 97	\$ 331
<b>Basic and diluted net income:</b>			
Net income attributable to Huntsman Corporation . . . . .	\$ 326	\$ 93	\$ 323
<b>Shares (denominator):</b>			
Weighted average shares outstanding . . . . .	236.3	242.8	242.1
Dilutive securities:			
Stock-based awards . . . . .	3.3	2.6	3.9
Total weighted average shares outstanding, including dilutive shares . . . . .	239.6	245.4	246.0

Additional stock-based awards of 5.7 million, 6.1 million and 1.0 million weighted average equivalent shares of stock were outstanding during the years ended December 31, 2016, 2015 and 2014, respectively. However, these stock-based awards were not included in the computation of diluted earnings per share for the respective periods mentioned because the effect would be anti-dilutive.

**OTHER NONCURRENT ASSETS**

Other noncurrent assets consist primarily of capitalized turnover costs, spare parts, deposits, catalyst assets and investments in available-for-sale securities.

**PRINCIPLES OF CONSOLIDATION**

Our consolidated financial statements include the accounts of our wholly owned and majority owned subsidiaries and any variable interest entities for which we are the primary beneficiary. All intercompany accounts and transactions have been eliminated.

**PROPERTY, PLANT AND EQUIPMENT**

Property, plant and equipment is stated at cost less accumulated depreciation. Depreciation is computed using the straight-line method over the estimated useful lives or lease term as follows:

Buildings and equipment . . . . .	5 - 50 years
Plant and equipment . . . . .	3 - 30 years
Furniture, fixtures and leasehold improvements . . . . .	5 - 20 years

Interest expense capitalized as part of plant and equipment was \$18 million, \$22 million and \$16 million for the years ended December 31, 2016, 2015 and 2014, respectively.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)**

Periodic maintenance and repairs applicable to major units of manufacturing facilities (a “turnaround”) are accounted for on the deferral basis by capitalizing the costs of the turnaround within noncurrent assets and amortizing the costs over the estimated period until the next turnaround. Normal maintenance and repairs of plant and equipment are charged to expense as incurred. Renewals, betterments and major repairs that materially extend the useful life of the assets are capitalized, and the assets replaced, if any, are retired.

**REVENUE RECOGNITION**

We generate substantially all of our revenues through sales in the open market and long-term supply agreements. We recognize revenue when it is realized or realizable and earned. Revenue for product sales is recognized when a sales arrangement exists, risk and title to the product transfer to the customer, collectability is reasonably assured and pricing is fixed or determinable. The transfer of risk and title to the product to the customer usually occurs at the time shipment is made.

**SECURITIZATION OF ACCOUNTS RECEIVABLE**

Under our A/R Programs, we grant an undivided interest in certain of our trade receivables to a U.S. special purpose entity (“U.S. SPE”) and a European special purpose entity (“EU SPE”). This undivided interest serves as security for the issuance of debt. The A/R Programs provide for financing in both U.S. dollars and euros. The amounts outstanding under our A/R Programs are accounted for as secured borrowings. See “Note 15. Debt—Direct and Subsidiary Debt—A/R Programs.”

**STOCK-BASED COMPENSATION**

We measure the cost of employee services received in exchange for an award of equity instruments based on the grant-date fair value of the award. That cost will be recognized over the period during which the employee is required to provide services in exchange for the award. See “Note 23. Stock-Based Compensation Plan.”

**USE OF ESTIMATES**

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

**RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS**

**Accounting Pronouncements Adopted During 2016**

In January 2015, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2015-01, *Income Statement—Extraordinary and Unusual Items (Subtopic 225-20): Simplifying Income Statement Presentation by Eliminating the Concept of Extraordinary Items*, eliminating from U.S. GAAP the concept of extraordinary items. Reporting entities will no longer have to assess whether a particular event or transaction event is extraordinary. The amendments in this ASU are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15,

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)**

2015. We adopted the amendments in this ASU effective January 1, 2016, and the initial adoption of the amendments in this ASU did not have a significant impact on our consolidated financial statements.

In February 2015, the FASB issued ASU No. 2015-02, *Consolidation (Topic 810): Amendments to the Consolidation Analysis*. The amendments in this ASU change the analysis that a reporting entity must perform to determine whether it should consolidate certain types of legal entities by placing more emphasis on risk of loss when determining a controlling financial interest. These amendments affect areas specific to limited partnerships and similar legal entities, evaluating fees paid to a decision maker or service provider as a variable interest, the effects of both fee arrangements and related parties on the primary beneficiary determination and certain investment funds. The amendments in this ASU are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2015. We adopted the amendments in this ASU effective January 1, 2016, and the initial adoption of the amendments in this ASU did not have a significant impact on our consolidated financial statements.

In April 2015, the FASB issued ASU No. 2015-05, *Intangibles—Goodwill and Other—Internal-Use Software (Subtopic 350-40): Customer's Accounting for Fees Paid in a Cloud Computing Arrangement*. The amendments in this ASU provide guidance that will help entities evaluate the accounting for fees paid by a customer in a cloud computing arrangement, including whether a cloud computing arrangement includes a software license. If a cloud computing arrangement includes a software license, then the customer should account for the software license consistent with the acquisition of other software licenses; otherwise, the customer should account for the arrangement as a service contract. The amendments in this ASU are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2015. We adopted the amendments in this ASU effective January 1, 2016, and the initial adoption of the amendments in this ASU did not have a significant impact on our consolidated financial statements.

**Accounting Pronouncements Pending Adoption in Future Periods**

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*, outlining a single comprehensive model for entities to use in accounting for revenues arising from contracts with customers and supersedes most current revenue recognition guidance. In August 2015, the FASB issued ASU No. 2015-14, *Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date*, deferring the effective date of ASU No. 2014-09 for all entities by one year. Further, in March 2016, the FASB issued ASU No. 2016-08, *Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations (Reporting Revenue Gross versus Net)*, clarifying the implementation guidance on principal versus agent considerations, in April 2016, the FASB issued ASU No. 2016-10, *Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing*, clarifying the implementation guidance on identifying performance obligations in a contract and determining whether an entity's promise to grant a license provides a customer with either a right to use the entity's intellectual property (which is satisfied at a point in time) or a right to access the entity's intellectual property (which is satisfied over time), in May 2016, the FASB issued ASU No. 2016-12, *Revenue from Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients*, providing clarifications and practical expedients for certain narrow aspects in Topic 606, and in December 2016, the FASB issued ASU 2016-20, *Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers*. The amendments in these ASUs are effective for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period. The amendments in ASU No. 2014-09, ASU No. 2016-08,

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)**

ASU No. 2016-10, ASU No. 2016-12 and ASU No. 2016-20 should be applied retrospectively, and early application is permitted. We are currently performing the analysis identifying areas that will be impacted by the adoption of the amendments in ASU No. 2014-09, ASU No. 2016-08, ASU No. 2016-10, ASU No. 2016-12 and ASU No. 2016-20 on our consolidated financial statements. At this time, we believe the key impact of the standard will be on our accounting for revenues from intellectual property licensing contracts which is not a material revenue stream to our consolidated financial statements. The standard will be adopted in our fiscal year 2018 and we have not yet determined the transition method.

In July 2015, the FASB issued ASU No. 2015-11, *Inventory (Topic 330): Simplifying the Measurement of Inventory*. The amendments in this ASU do not apply to inventory that is measured using last-in first-out (“LIFO”) or the retail inventory method, but rather does apply to all other inventory, which includes inventory that is measured using first-in first-out or average cost. An entity should measure in scope inventory at the lower of cost and net realizable value. Net realizable value is the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. Subsequent measurement is unchanged for inventory measured using LIFO or the retail inventory method. The amendments in this ASU are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2016. The amendments in this ASU should be applied prospectively with earlier application permitted as of the beginning of an interim or annual reporting period. We do not expect the adoption of the amendments in this ASU to have a significant impact on our consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*. The amendments in this ASU will increase transparency and comparability among entities by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. The amendments in this ASU will require lessees to recognize in the statement of financial position a liability to make lease payments (the lease liability) and a right-of-use asset representing its right to use the underlying asset for the lease term. The amendments in this ASU are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. Early application of the amendments in this ASU is permitted for all entities. Reporting entities are required to recognize and measure leases under these amendments at the beginning of the earliest period presented using a modified retrospective approach. We are currently evaluating the impact of the adoption of the amendments in this ASU on our consolidated financial statements and believe, based on our preliminary assessment, that we will record significant additional right-to-use assets and lease obligations.

In March 2016, the FASB issued ASU No. 2016-09, *Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*. The amendments in this ASU simplify several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. The amendments in this ASU are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2016. Early adoption of the amendments in this ASU is permitted in any interim or annual period. We do not expect the adoption of the amendments in this ASU to have a significant impact on our consolidated financial statements.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)**

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments*. The amendments in this ASU clarify and include specific guidance to address diversity in how certain cash receipts and cash payments are presented and classified in the statement of cash flows. The amendments in this ASU are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2017. Early adoption is permitted, including adoption in an interim period. The amendments in this ASU should be applied using a retrospective transition method to each period presented. We do not expect the adoption of the amendments in this ASU to have a significant impact on our consolidated financial statements.

In October 2016, the FASB issued ASU No. 2016-16, *Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory*. The amendments in this ASU require entities to recognize the current and deferred income taxes for an intra-entity transfer of an asset other than inventory when the transfer occurs, as opposed to deferring the recognition of the income tax consequences until the asset has been sold to an outside party. The amendments in this ASU are effective for annual reporting periods beginning after December 31, 2017, including interim reporting periods within those annual reporting periods. Early adoption is permitted for all entities as of the beginning of an annual reporting period for which financial statements (interim or annual) have not been issued or made available for issuance. The amendments in this ASU should be applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the beginning of the period of adoption. We do not expect the adoption of the amendments in this ASU to have a significant impact on our consolidated financial statements.

In November 2016, the FASB issued ASU No. 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash*. The amendments in this ASU require that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. Therefore, amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. The amendments in this ASU are effective for fiscal years beginning after December 15, 2017, and interim period within those fiscal years. Early adoption is permitted, including adoption in an interim period. The amendments in this ASU should be applied using a retrospective transition method to each period presented. We do not expect the adoption of the amendments in this ASU to have a significant impact on our consolidated financial statements. In January 2017, the FASB issued ASU No. 2017-01, *Business Combinations (Topic 805): Clarifying the Definition of a Business*. The amendments in this ASU clarify the definition of a business with the objective of adding guidance to assist entities with evaluating whether transactions should be accounted for as acquisitions or disposals of assets or businesses. The amendments in this ASU are effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. Early application is permitted. The amendments in this ASU should be applied prospectively on or after the effective date. No disclosures are required at transition. We do not expect the adoption of the amendments in this ASU to have a significant impact on our consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-04, *Intangibles—Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment*. The amendments in this ASU simplify the subsequent measurement of goodwill by eliminating Step 2 from the goodwill impairment test. Under the amendments in this ASU, an entity should perform its annual, or interim, goodwill impairment test by

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)**

comparing the fair value of a reporting unit with its carrying value, which eliminates the current requirement to calculate a goodwill impairment charge by comparing the implied fair value of goodwill with its carrying amount. The amendments in this ASU are effective for annual or any interim goodwill impairment tests in fiscal years beginning after December 15, 2019. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The amendments in this ASU should be applied on a prospective basis. We do not expect the adoption of the amendments in this ASU to have a significant impact on our consolidated financial statements.

**3. BUSINESS COMBINATIONS AND DISPOSITIONS**

**SALE OF EUROPEAN SURFACTANTS MANUFACTURING FACILITIES**

On December 30, 2016, our Performance Products segment completed the sale of its European surfactants business to Innospec Inc. for \$199 million in cash plus our retention of trade receivables and payables for an enterprise value of \$225 million. Under the terms of the transaction, Innospec acquired our manufacturing facilities located in Saint-Mihiel, France; Castiglione delle Stiviere, Italy; and Barcelona, Spain. The purchase price is subject to the finalization of working capital adjustments. We remain committed to our global surfactants business, including in the U.S. and Australia, where our differentiated surfactants businesses are backward integrated into essential feedstocks. Upon closing the transaction, we entered into supply and long-term tolling arrangements with Innospec in order to continue marketing certain core products strategic to our global agrochemicals, lubes and certain other businesses. In connection with this sale, we recognized a pre-tax gain in the fourth quarter of 2016 of \$98 million which was reflected in other operating income, net on the accompanying consolidated statements of operations.

**ROCKWOOD ACQUISITION**

On October 1, 2014, we completed the Rockwood Acquisition. We paid \$1.02 billion in cash and assumed certain unfunded pension liabilities in connection with the Rockwood Acquisition. The acquisition was financed using a bank term loan. The majority of the acquired businesses have been integrated into our Pigments and Additives segment. Transaction costs charged to expense related to this acquisition were approximately nil, nil and \$24 million for the years ended December 31, 2016, 2015 and 2014, respectively, and were recorded in selling, general and administrative expenses in our consolidated statements of operations.

The following businesses were acquired from Rockwood:

- titanium dioxide, a white pigment derived from titanium bearing ores with strong specialty business in fibers, inks, pharmaceuticals, food and cosmetics;
- functional additives made from barium and zinc based inorganics used to make colors more brilliant, primarily in plastics, coatings, films, food, cosmetics, pharmaceuticals and paper;
- color pigments made from synthetic iron-oxide and other non-TiO<sub>2</sub> inorganic pigments used by manufacturers of coatings and colorants;
- timber treatment wood protection chemicals used primarily in residential and commercial applications;

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**3. BUSINESS COMBINATIONS AND DISPOSITIONS (Continued)**

- water treatment products used to improve water purity in industrial, commercial and municipal applications; and
- specialty automotive molded components.

In connection with securing certain regulatory approvals required to complete the Rockwood Acquisition, we sold our TiO<sub>2</sub> TR52 product line used in printing inks to Henan in December 2014. The sale did not include any manufacturing assets but does include an agreement to supply TR52 product to Henan during a transitional period.

We have accounted for the Rockwood Acquisition using the acquisition method. As such, we analyzed the fair value of tangible and intangible assets acquired and liabilities assumed. The allocation of acquisition cost to the assets acquired and liabilities assumed is summarized as follows (dollars in millions):

Cash paid for Rockwood Acquisition in 2014 . . . . .	\$1,038
Purchase price adjustment received in 2015 . . . . .	(18)
Net acquisition cost . . . . .	<u>\$1,020</u>
Fair value of assets acquired and liabilities assumed:	
Cash . . . . .	\$ 77
Accounts receivable . . . . .	220
Inventories . . . . .	401
Prepaid expenses and other current assets . . . . .	55
Property, plant and equipment . . . . .	665
Intangible assets . . . . .	31
Deferred income taxes, non-current . . . . .	106
Other assets . . . . .	8
Accounts payable . . . . .	(146)
Accrued expenses and other current liabilities . . . . .	(106)
Long-term debt, non-current . . . . .	(3)
Pension and related liabilities . . . . .	(233)
Deferred income taxes, non-current . . . . .	(9)
Other liabilities . . . . .	<u>(30)</u>
Total fair value of net assets acquired . . . . .	<u>1,036</u>
Noncontrolling interest . . . . .	<u>(16)</u>
Total . . . . .	<u>\$1,020</u>

During the second quarter of 2015, we received \$18 million related to the settlement of certain purchase price adjustments. As a result of the finalization of the valuation of the assets and liabilities, reallocations were made in certain property, plant and equipment, deferred tax, accrued liability and other long-term liability balances. None of the fair value of this acquisition was allocated to goodwill. Intangible assets acquired consist primarily of developed technology, trademarks and customer relationships, all of which are being amortized over nine years. The noncontrolling interest primarily relates to Viance, a 50%-owned joint venture with Dow Chemical acquired as part of the Rockwood Acquisition. The noncontrolling interest was valued at 50% of the fair value of the net assets of Viance



**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**3. BUSINESS COMBINATIONS AND DISPOSITIONS (Continued)**

as of October 1, 2014, as dictated by the ownership interest percentages. If the Rockwood Acquisition were to have occurred on January 1, 2014, the following estimated pro forma revenues and net income attributable to Huntsman Corporation would have been reported (dollars in millions, except per share amounts):

	<b>Pro Forma</b>
	<b>Year ended December 31, 2014 (Unaudited)</b>
Revenues . . . . .	\$12,724
Net income attributable to Huntsman Corporation . . . . .	398
Income per share:	
Basic . . . . .	\$ 1.64
Diluted . . . . .	1.62

**4. SEPARATION OF PIGMENTS AND ADDITIVES BUSINESS**

On October 28, 2016, we filed an initial Form 10 registration statement with the SEC as part of the process to spin off our Pigments and Additives and Textile Effects businesses in a tax-free transaction. On January 17, 2017, we announced that we will retain our Textile Effects business and we amended the Form 10 registration statement. We also announced that the name of the spin-off entity will be Venator Materials Corporation. Venator shares are expected to trade on the New York Stock Exchange under the ticker VNTR after the distribution to our stockholders. The completion of the spin-off is subject to the satisfaction or waiver of a number of conditions, including the registration statement on Form 10 for Venator’s common stock being declared effective by the SEC and certain other conditions described in the information statement included in the Form 10. The ongoing process to separate the Pigments and Additives business is proceeding and is targeted for the second quarter 2017. As noted in “Note 1. General—Recent Developments” above, there was fire damage sustained at our titanium dioxide facility in Pori, Finland. The potential impact of this interruption, if any, on the spin date is not yet known.

In connection with this spin-off, we recorded spin-off separation costs of \$18 million during 2016, within Corporate and other, including \$7 million of accrued employee termination benefit costs and \$11 million of other separation costs, of which \$8 million was paid during 2016 and \$3 million was recorded in accounts payable as of December 31, 2016 in the accompanying consolidated balance sheets.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**5. INVENTORIES**

Inventories consisted of the following (dollars in millions):

	<u>December 31, 2016</u>	<u>December 31, 2015</u>
Raw materials and supplies . . . . .	\$ 291	\$ 389
Work in progress . . . . .	91	125
Finished goods . . . . .	<u>1,017</u>	<u>1,221</u>
<b>Total</b> . . . . .	1,399	1,735
LIFO reserves . . . . .	<u>(55)</u>	<u>(43)</u>
<b>Net inventories</b> . . . . .	<u>\$1,344</u>	<u>\$1,692</u>

For both December 31, 2016 and 2015, approximately 9% of inventories were recorded using the LIFO cost method.

**6. PROPERTY, PLANT AND EQUIPMENT**

The cost and accumulated depreciation of property, plant and equipment were as follows (dollars in millions):

	<u>December 31,</u>	
	<u>2016</u>	<u>2015</u>
Land . . . . .	\$ 229	\$ 208
Buildings . . . . .	822	793
Plant and equipment . . . . .	7,244	6,981
Construction in progress . . . . .	<u>483</u>	<u>935</u>
<b>Total</b> . . . . .	8,778	8,917
Less accumulated depreciation . . . . .	<u>(4,566)</u>	<u>(4,471)</u>
<b>Net</b> . . . . .	<u>\$ 4,212</u>	<u>\$ 4,446</u>

Depreciation expense for 2016, 2015 and 2014 was \$400 million, \$377 million and \$413 million, respectively.

**7. INVESTMENT IN UNCONSOLIDATED AFFILIATES**

Investments in companies in which we exercise significant influence, but do not control, are accounted for using the equity method. Investments in companies in which we do not exercise significant influence are accounted for using the cost method.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**7. INVESTMENT IN UNCONSOLIDATED AFFILIATES (Continued)**

Our ownership percentage and investment in unconsolidated affiliates were as follows (dollars in millions):

	<b>December 31,</b>	
	<b>2016</b>	<b>2015</b>
Equity Method:		
Louisiana Pigment Company, L.P. (50%) . . . . .	\$ 81	\$ 84
BASF Huntsman Shanghai Isocyanate Investment BV (50%)(1) . . . . .	112	116
Nanjing Jinling Huntsman New Material Co., Ltd. (49%) . . . . .	112	120
Jurong Ningwu New Materials Development Co., Ltd. (30%) . . . . .	19	18
Total equity method investments . . . . .	324	338
Cost Method:		
International Diol Company (4%) . . . . .	5	5
White Mountain Titanium Corporation (3%) . . . . .	3	3
Others . . . . .	—	1
Total investments . . . . .	\$332	\$347

(1) We own 50% of BASF Huntsman Shanghai Isocyanate Investment BV. BASF Huntsman Shanghai Isocyanate Investment BV owns a 70% interest in SLIC, thus giving us an indirect 35% interest in SLIC.

In November 2012, we entered into an agreement to form a joint venture with Sinopec (Nanjing Jingling). The joint venture involves the construction and operation of a PO/MTBE facility in China. Under the joint venture agreement, we hold a 49% interest in the joint venture and Sinopec holds a 51% interest. Our total equity investment is anticipated to be approximately \$85 million, net of license fees from the joint venture. At the end of 2016, cumulative capital contributions were approximately \$85 million, net of license fees from the joint venture. The facility is expected to be mechanically complete in early 2017 with beneficial commercial operations expected in the second half of 2017.

**8. VARIABLE INTEREST ENTITIES**

We evaluate our investments and transactions to identify variable interest entities for which we are the primary beneficiary. We hold a variable interest in the following joint ventures for which we are the primary beneficiary:

- Rubicon LLC is our 50%-owned joint venture with Chemtura that manufactures products for our Polyurethanes and Performance Products segments. The structure of the joint venture is such that the total equity investment at risk is not sufficient to permit the joint venture to finance its activities without additional financial support. By virtue of the operating agreement with this joint venture, we purchase a majority of the output, absorb a majority of the operating costs and provide a majority of the additional funding.
- Pacific Iron Products Sdn Bhd is our 50%-owned joint venture with Coogee Chemicals that manufactures products for our Pigments and Additives segment. In this joint venture we supply all the raw materials through a fixed cost supply contract, operate the manufacturing facility and

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**8. VARIABLE INTEREST ENTITIES (Continued)**

market the products of the joint venture to customers. Through a fixed price raw materials supply contract with the joint venture we are exposed to the risk related to the fluctuation of raw material pricing.

- AAC is our 50%-owned joint venture with Zamil group that manufactures products for our Performance Products segment. As required in the operating agreement governing this joint venture, we purchase all of AAC's production and sell it to our customers. Substantially all of the joint venture's activities are conducted on our behalf.
- Sasol-Huntsman is our 50%-owned joint venture with Sasol that owns and operates a maleic anhydride facility in Moers, Germany. This joint venture manufactures products for our Performance Products segment. The joint venture uses our technology and expertise, and we bear a disproportionate amount of risk of loss due to a related-party loan to Sasol-Huntsman for which we bear the default risk.
- Viance is our 50%-owned joint venture with Dow Chemical. Viance markets timber treatment products for our Pigments and Additives segment. Our joint venture interest in Viance was acquired as part of the Rockwood Acquisition on October 1, 2014. The joint venture sources all of its products through a contract manufacturing arrangement at our Harrisburg, North Carolina facility, and we bear a disproportionate amount of working capital risk of loss due to the supply arrangement whereby we control manufacturing on Viance's behalf. As a result, we concluded that we are the primary beneficiary and began consolidating Viance upon the Rockwood Acquisition on October 1, 2014.

Creditors of these entities have no recourse to our general credit. See "Note 15. Debt—Direct and Subsidiary Debt." As the primary beneficiary of these variable interest entities at December 31, 2016, the joint ventures' assets, liabilities and results of operations are included in our consolidated financial statements.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**8. VARIABLE INTEREST ENTITIES (Continued)**

The following table summarizes the carrying amount of our variable interest entities' assets and liabilities included in our consolidated balance sheets, before intercompany eliminations, as of December 31, 2016 and 2015 (dollars in millions):

	<u>December 31,</u>	
	<u>2016</u>	<u>2015</u>
Current assets . . . . .	\$117	\$121
Property, plant and equipment, net . . . . .	284	307
Other noncurrent assets . . . . .	98	95
Deferred income taxes . . . . .	43	35
Intangible assets . . . . .	31	36
Goodwill . . . . .	12	13
<b>Total assets . . . . .</b>	<b><u>\$585</u></b>	<b><u>\$607</u></b>
Current liabilities . . . . .	\$172	\$159
Long-term debt . . . . .	116	140
Deferred income taxes . . . . .	10	11
Other noncurrent liabilities . . . . .	76	54
<b>Total liabilities . . . . .</b>	<b><u>\$374</u></b>	<b><u>\$364</u></b>

The revenues, income from continuing operations before income taxes and net cash provided by operating activities for our variable interest entities are as follows (dollars in millions):

	<u>Year ended December 31,</u>		
	<u>2016</u>	<u>2015</u>	<u>2014</u>
Revenues . . . . .	\$213	\$230	\$219
Income from continuing operations before income taxes . . . . .	35	49	39
Net cash provided by operating activities . . . . .	76	84	59

**9. INTANGIBLE ASSETS**

The gross carrying amount and accumulated amortization of intangible assets were as follows (dollars in millions):

	<u>December 31, 2016</u>			<u>December 31, 2015</u>		
	<u>Carrying Amount</u>	<u>Accumulated Amortization</u>	<u>Net</u>	<u>Carrying Amount</u>	<u>Accumulated Amortization</u>	<u>Net</u>
Patents, trademarks and technology . . . . .	\$368	\$329	\$39	\$369	\$327	\$42
Licenses and other agreements . . . . .	37	23	14	38	22	16
Non-compete agreements . . . . .	3	2	1	3	2	1
Other intangibles . . . . .	76	64	12	82	55	27
<b>Total . . . . .</b>	<b><u>\$484</u></b>	<b><u>\$418</u></b>	<b><u>\$66</u></b>	<b><u>\$492</u></b>	<b><u>\$406</u></b>	<b><u>\$86</u></b>

Amortization expense was \$15 million, \$8 million and \$19 million for the years ended December 31, 2016, 2015 and 2014, respectively.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**9. INTANGIBLE ASSETS (Continued)**

Our estimated future amortization expense for intangible assets over the next five years is as follows (dollars in millions):

<u>Year ending December 31,</u>	
2017	\$9
2018	9
2019	9
2020	9
2021	8

**10. OTHER NONCURRENT ASSETS**

Other noncurrent assets consisted of the following (dollars in millions):

	<u>December 31,</u>	
	<u>2016</u>	<u>2015</u>
Capitalized turnaround costs, net	\$214	\$248
Spare parts inventory	92	95
Deposits	46	45
Catalyst assets, net	43	44
Investment in available-for-sale securities	18	18
Pension assets	6	35
Other	88	88
<b>Total</b>	<u>\$507</u>	<u>\$573</u>

Amortization expense of catalyst assets for the years ended December 31, 2016, 2015 and 2014 was \$17 million, \$14 million and \$13 million, respectively.

**11. ACCRUED LIABILITIES**

Accrued liabilities consisted of the following (dollars in millions):

	<u>December 31,</u>	
	<u>2016</u>	<u>2015</u>
Payroll and related accruals	\$185	\$183
Volume and rebate accruals	73	72
Taxes other than income taxes	62	65
Income taxes	32	18
Restructuring and plant closing reserves	45	117
Interest	22	22
Asset retirement obligations	13	18
Pension liabilities	11	11
Other postretirement benefits	8	9
Environmental accruals	7	6
Spin-off separation accruals	7	—
Other miscellaneous accruals	151	165
<b>Total</b>	<u>\$616</u>	<u>\$686</u>

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**12. RESTRUCTURING, IMPAIRMENT AND PLANT CLOSING COSTS**

As of December 31, 2016, 2015 and 2014, accrued restructuring, impairment and plant closing costs by type of cost and initiative consisted of the following (dollars in millions):

	<b>Workforce reductions(1)</b>	<b>Demolition and decommissioning</b>	<b>Non-cancelable lease costs and contract termination costs</b>	<b>Other restructuring costs</b>	<b>Total(2)</b>
Accrued liabilities as of January 1, 2014 . . . .	\$ 52	\$ —	\$ 60	\$ 1	\$ 113
Adjustment to Pigments and Additives					
opening balance sheet liabilities . . . . .	1	—	—	—	1
2014 charges for 2013 and prior initiatives . .	37	7	4	17	65
2014 charges for 2014 initiatives . . . . .	64	—	—	—	64
Reversal of reserves no longer required . . . .	(4)	—	—	(1)	(5)
2014 payments for 2013 and prior initiatives .	(58)	(7)	(8)	(13)	(86)
2014 payments for 2014 initiatives . . . . .	(1)	—	—	(1)	(2)
Net activity of discontinued operations . . . . .	—	—	(2)	—	(2)
Foreign currency effect on liability balance . .	(4)	—	(6)	—	(10)
Accrued liabilities as of December 31, 2014 . .	<u>87</u>	<u>—</u>	<u>48</u>	<u>3</u>	<u>138</u>
Adjustment to Pigments and Additives					
opening balance sheet liabilities . . . . .	1	—	—	—	1
2015 charges for 2014 and prior initiatives . .	71	24	15	23	133
2015 charges for 2015 initiatives . . . . .	58	1	—	8	67
Reversal of reserves no longer required . . . .	(7)	—	(6)	—	(13)
2015 payments for 2014 and prior initiatives .	(68)	(8)	(17)	(21)	(114)
2015 payments for 2015 initiatives . . . . .	(26)	(1)	—	(8)	(35)
Foreign currency effect on liability balance . .	(7)	—	(2)	—	(9)
Accrued liabilities as of December 31, 2015 . .	<u>109</u>	<u>16</u>	<u>38</u>	<u>5</u>	<u>168</u>
2016 charges for 2015 and prior initiatives . . .	4	24	9	29	66
2016 charges for 2016 initiatives . . . . .	7	—	—	5	12
Reversal of reserves no longer required . . . . .	(2)	—	—	—	(2)
Distribution of prefunded restructuring costs .	(41)	(5)	—	(1)	(47)
2016 payments for 2015 and prior initiatives . .	(43)	(16)	(4)	(29)	(92)
2016 payments for 2016 initiatives . . . . .	(7)	—	—	(4)	(11)
Net activity of discontinued operations . . . . .	—	—	1	—	1
Foreign currency effect on liability balance . . .	(1)	(1)	(2)	—	(4)
Accrued liabilities as of December 31, 2016 . .	<u>\$ 26</u>	<u>\$ 18</u>	<u>\$ 42</u>	<u>\$ 5</u>	<u>\$ 91</u>

- (1) The total workforce reduction reserves of \$26 million relate to the termination of 375 positions, of which 339 positions had not been terminated as of December 31, 2016.
- (2) In December 2015, we prepaid \$49 million of severance and other restructuring costs related to restructuring programs in our Pigments and Additives, Textile Effects and Performance Products segments. Certain of the severance costs were prepaid to a third party who distributed the severance payments to affected employees when they were terminated in 2016.
- (3) Accrued liabilities remaining at December 31, 2016 and 2015 by year of initiatives were as follows (dollars in millions):

	<b>December 31,</b>	
	<b>2016</b>	<b>2015</b>
2014 initiatives and prior . . . . .	\$84	\$143
2015 initiatives . . . . .	4	25
2016 initiatives . . . . .	3	—
Total . . . . .	<u>\$91</u>	<u>\$168</u>

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**12. RESTRUCTURING, IMPAIRMENT AND PLANT CLOSING COSTS (Continued)**

Details with respect to our reserves for restructuring, impairment and plant closing costs are provided below by segment and initiative (dollars in millions):

	Polyurethanes	Performance Products	Advanced Materials	Textile Effects	Pigments and Additives	Discontinued Operations	Corporate and other	Total
Accrued liabilities as of January 1, 2014	\$ 9	\$ 10	\$ 12	\$ 68	\$ 2	\$ 3	\$ 9	\$ 113
Adjustment to Pigments and Additives opening balance sheet liabilities . . . .	—	—	—	—	1	—	—	1
2014 charges for 2013 and prior initiatives . . . . .	2	23	10	13	3	—	14	65
2014 charges for 2014 initiatives . . . . .	—	—	1	6	57	—	—	64
Reversal of reserves no longer required . . . . .	(1)	—	(2)	(1)	—	—	(1)	(5)
2014 payments for 2013 and prior initiatives . . . . .	(3)	(22)	(14)	(25)	(4)	—	(18)	(86)
2014 payments for 2014 initiatives . . . . .	—	—	(1)	(1)	—	—	—	(2)
Net activity of discontinued operations . . . . .	—	—	—	—	—	(2)	—	(2)
Foreign currency effect on liability balance . . . . .	(1)	(2)	(1)	(6)	—	—	—	(10)
Accrued liabilities as of December 31, 2014 . . . . .	6	9	5	54	59	1	4	138
Adjustment to Pigments & Additives opening balance sheet liabilities . . . .	—	—	—	—	1	—	—	1
2015 charges for 2014 and prior initiatives . . . . .	2	3	1	42	77	—	8	133
2015 charges for 2015 initiatives . . . . .	17	8	5	2	34	—	1	67
Reversal of reserves no longer required . . . . .	(4)	(1)	—	(7)	—	—	(1)	(13)
2015 payments for 2014 and prior initiatives . . . . .	(4)	(8)	(2)	(34)	(59)	—	(7)	(114)
2015 payments for 2015 initiatives . . . . .	(11)	(1)	(5)	(1)	(16)	—	(1)	(35)
Foreign currency effect on liability balance . . . . .	(1)	(1)	—	(1)	(6)	—	—	(9)
Accrued liabilities as of December 31, 2015 . . . . .	5	9	4	55	90	1	4	168
2016 charges for 2015 and prior initiatives . . . . .	—	16	—	28	19	—	3	66
2016 charges for 2016 initiatives . . . . .	4	—	—	1	6	—	1	12
Reversal of reserves no longer required . . . . .	(1)	—	—	—	—	—	(1)	(2)
Distribution of prefunded restructuring costs . . . . .	—	(6)	—	(5)	(36)	—	—	(47)
2016 payments for 2015 and prior initiatives . . . . .	(3)	(19)	—	(14)	(52)	—	(4)	(92)
2016 payments for 2016 initiatives . . . . .	(3)	—	—	(1)	(6)	—	(1)	(11)
Net activity of discontinued operations . . . . .	—	—	—	—	—	1	—	1
Foreign currency effect on liability balance . . . . .	—	—	(1)	(3)	—	—	—	(4)
Accrued liabilities as of December 31, 2016 . . . . .	\$ 2	\$ —	\$ 3	\$ 61	\$ 21	\$ 2	\$ 2	\$ 91
Current portion of restructuring reserves	\$ 2	\$ —	\$ 1	\$ 24	\$ 14	\$ 2	\$ 2	\$ 45
Long-term portion of restructuring reserves . . . . .	—	—	2	37	7	—	—	46



**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**12. RESTRUCTURING, IMPAIRMENT AND PLANT CLOSING COSTS (Continued)**

Details with respect to cash and noncash restructuring charges for the years ended December 31, 2016, 2015 and 2014 by initiative are provided below (dollars in millions):

Cash charges:	
2016 charges for 2015 and prior initiatives . . . . .	\$ 66
2016 charges for 2016 initiatives . . . . .	12
Reversal of reserves no longer required . . . . .	(2)
Accelerated depreciation . . . . .	8
Non-cash credits, net . . . . .	<u>(3)</u>
Total 2016 restructuring, impairment and plant closing costs . . . . .	<u>\$ 81</u>
Cash charges:	
2015 charges for 2014 and prior initiatives . . . . .	\$133
2015 charges for 2015 initiatives . . . . .	67
Reversal of reserves no longer required . . . . .	(13)
Pension-related charges . . . . .	3
Accelerated depreciation . . . . .	74
Non-cash charges . . . . .	<u>38</u>
Total 2015 restructuring, impairment and plant closing costs . . . . .	<u>\$302</u>
Cash charges:	
2014 charges for 2013 and prior initiatives . . . . .	\$ 65
2014 charges for 2014 initiatives . . . . .	64
Reversal of reserves no longer required . . . . .	(5)
Pension-related charges . . . . .	2
Non-cash charges . . . . .	<u>32</u>
Total 2014 restructuring, impairment and plant closing costs . . . . .	<u>\$158</u>

**2016 RESTRUCTURING ACTIVITIES**

In December 2015, our Performance Products segment announced plans for a reorganization of its commercial and technical functions and a refocused divisional business strategy to better position the segment for growth in coming years. In addition, a program was launched to capture growth opportunities, improve manufacturing cost efficiency and reduce inventories. In connection with this restructuring program, we recorded restructuring expense of \$16 million in 2016. All expected charges have been incurred as of the end of 2016.

In September 2011, we announced plans to implement a significant restructuring of our Textile Effects segment, including the closure of our production facilities and business support offices in Basel, Switzerland, as part of an ongoing strategic program aimed at improving the Textile Effects segment's long-term global competitiveness (the "Textile Effects Restructuring Plan"). In connection with the Textile Effects Restructuring Plan and in connection with revised estimates of site closure costs, during 2016, our Textile Effects segment recorded charges of \$9 million for non-cancelable long-term contract termination costs and \$20 million for decommissioning associated with this initiative.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**12. RESTRUCTURING, IMPAIRMENT AND PLANT CLOSING COSTS (Continued)**

In December 2014, we announced a comprehensive restructuring program to improve the global competitiveness of our Pigments and Additives segment (the “Pigments and Additives Restructuring Plan”). As part of the Pigments and Additives Restructuring Plan, we are reducing our workforce by approximately 900 positions. In connection with the Pigments and Additives Restructuring Plan, we recorded restructuring expense of \$3 million in 2016. We expect to incur additional charges of approximately \$4 million through the end of 2017.

In March 2015, we announced plans to restructure our color pigments business (the “Color Pigments Restructuring Plan”), another step in our Pigments and Additives Restructuring Plan, and recorded restructuring expense of approximately \$15 million in 2016. We expect to incur additional charges of approximately \$10 million through the end of 2017.

In July 2016, we announced plans to close our Pigments and Additives segment’s South African titanium dioxide manufacturing facility. As part of the program, we recorded restructuring expense of approximately \$6 million in 2016. Additionally, we recorded an impairment charge of \$1 million during the second quarter of 2016. The majority of the long-lived assets associated with this manufacturing facility were impaired in the fourth quarter of 2015. We expect to incur additional charges of approximately \$5 million through the third quarter of 2018.

In connection with planned restructuring activities, our Pigments and Additives segment recorded accelerated depreciation as restructuring expense of \$8 million during 2016.

**2015 RESTRUCTURING ACTIVITIES**

In June 2015, our Polyurethanes segment initiated a restructuring program in Europe. In connection with this restructuring program, we recorded restructuring expense of \$13 million during 2015 related primarily to workforce reductions. All expected charges have been incurred as of the end of 2015.

During 2013, our Performance Products segment initiated a restructuring program to refocus its surfactants business in Europe (the “Performance Products Restructuring Plan”). As part of our Performance Products Restructuring Plan, we recorded cash charges of \$8 million primarily related to workforce reductions in 2015.

In June 2015, our Advanced Materials segment initiated a restructuring program in Europe. In connection with this restructuring program, we recorded restructuring expense of \$11 million during 2015 related primarily to workforce reductions and accelerated depreciation recorded as restructuring, impairment and plant closing costs.

In connection with the Textile Effects Restructuring Plan, during 2015, we recorded charges of \$9 million for non-cancelable long-term contract termination costs, \$21 million for decommissioning and \$1 million of other restructuring charges associated with this initiative. During the fourth quarter of 2015, we settled certain of our obligations under these long-term contracts and recorded a restructuring charge of \$14 million. In addition, we recorded charges of \$6 million associated with other initiatives.

In February 2015, we announced a plan to close the ‘black end’ manufacturing operations and ancillary activities at our Calais, France site, which will reduce our titanium dioxide capacity by approximately 100 kilotons, or 13% of our European titanium dioxide capacity. In connection with this

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**12. RESTRUCTURING, IMPAIRMENT AND PLANT CLOSING COSTS (Continued)**

announcement, we began to accelerate depreciation on the affected assets and recorded accelerated depreciation in 2015 of \$68 million as restructuring, impairment and plant closing costs. In addition, during 2015, we recorded charges of \$30 million primarily for workforce reductions and non-cash charges of \$17 million.

In connection with the Pigments and Additives Restructuring Plan, during 2015, our Pigments and Additives segment recorded charges of \$61 million for workforce reductions, \$3 million for pension related charges and \$15 million in other restructuring costs.

In connection with our Color Pigments Restructuring Plan, we recorded restructuring expense of approximately \$4 million during 2015 primarily related to workforce reductions.

During the fourth quarter of 2015, we determined that the South African asset group of our Pigments and Additives segment was impaired and recorded an impairment charge of \$19 million.

During 2015, our Corporate and other segment recorded charges of \$8 million primarily related to a reorganization of our global information technology organization.

**2014 RESTRUCTURING ACTIVITIES**

In connection with a September 2014 announcement of a feasibility study into a MDI production expansion at our Geismar, Louisiana facility, we concluded that certain capitalized engineering costs associated with a previously planned MDI production expansion at our Rotterdam, The Netherlands facility were impaired and our Polyurethanes segment recorded a noncash impairment charge of \$16 million during 2014.

In connection with the Performance Products Restructuring Plan, in 2014 we completed the sale of our European commodity surfactants business, including the ethoxylation facility in Lavera, France to Wilmar. In addition, Wilmar has entered into a multi-year arrangement to purchase certain sulfated surfactant products from our facilities in St. Mihiel, France and Castiglione delle Stiviere, Italy. Additionally, in 2014 we ceased production at our Patrica, Italy surfactants facility. During 2014, we recorded charges of \$23 million primarily related to workforce reductions.

During 2014, our Advanced Materials segment recorded charges of \$11 million primarily related to workforce reductions with our global transformational change program designed to improve the segment's manufacturing efficiencies, enhance its commercial excellence and improve its long-term global competitiveness.

In connection with the Textile Effects Restructuring Plan, during 2014, our Textile Effects segment recorded charges of \$19 million, including a \$9 million noncash charge for a pension settlement loss. In June 2014, we announced plans for the closure of our Qingdao, China plant, which was completed in 2015. During 2014, we recorded charges of \$6 million primarily related to workforce reductions related to this initiative.

As part of the Pigments and Additives Restructuring Program, we recorded restructuring expense of \$57 million in the fourth quarter of 2014 related primarily to workforce reductions.

During 2014, our Corporate and other segment recorded charges of \$13 million primarily related to the reorganization of our global information technology organization.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**13. ASSET RETIREMENT OBLIGATIONS**

Asset retirement obligations consist primarily of landfill capping, closure and post-closure costs, asbestos abatement costs, demolition and removal costs and leasehold remediation costs. We are legally required to perform capping and closure and post-closure care on the landfills and asbestos abatement on certain of our premises. For each asset retirement obligation we recognized the estimated fair value of a liability and capitalized the cost as part of the cost basis of the related asset.

The following table describes changes to our asset retirement obligation liabilities (dollars in millions):

	<u>December 31,</u>	
	<u>2016</u>	<u>2015</u>
Asset retirement obligations at beginning of year . . . . .	\$52	\$26
Accretion expense . . . . .	2	3
Liabilities assumed in connection with the Rockwood Acquisition . . . . .	—	30
Liabilities settled . . . . .	(4)	(1)
Foreign currency effect on reserve balance . . . . .	(2)	(6)
Asset retirement obligations at end of year . . . . .	<u>\$48</u>	<u>\$52</u>

**14. OTHER NONCURRENT LIABILITIES**

Other noncurrent liabilities consisted of the following (dollars in millions):

	<u>December 31,</u>	
	<u>2016</u>	<u>2015</u>
Pension liabilities . . . . .	\$1,010	\$ 842
Other postretirement benefits . . . . .	88	84
Environmental accruals . . . . .	27	32
Restructuring and plant closing reserves . . . . .	46	51
Employee benefit accrual . . . . .	32	36
Asset retirement obligations . . . . .	35	34
Other . . . . .	143	147
<b>Total</b> . . . . .	<u>\$1,381</u>	<u>\$1,226</u>

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**15. DEBT**

Outstanding debt, net of debt issuance costs, of consolidated entities consisted of the following (dollars in millions):

	<u>December 31, 2016</u>	<u>December 31, 2015</u>
Senior Credit Facilities:		
Term loans . . . . .	\$1,967	\$2,454
Amounts outstanding under A/R programs . . . . .	208	215
Senior notes . . . . .	1,812	1,850
Variable interest entities . . . . .	128	151
Other . . . . .	80	125
Total debt—excluding debt to affiliates . . . . .	<u>\$4,195</u>	<u>\$4,795</u>
Total current portion of debt . . . . .	\$ 60	\$ 170
Long-term portion . . . . .	<u>4,135</u>	<u>4,625</u>
Total debt—excluding debt to affiliates . . . . .	<u>\$4,195</u>	<u>\$4,795</u>
Total debt—excluding debt to affiliates . . . . .	\$4,195	\$4,795
Notes payable to affiliates-noncurrent . . . . .	<u>1</u>	<u>1</u>
Total debt . . . . .	<u>\$4,196</u>	<u>\$4,796</u>

**DIRECT AND SUBSIDIARY DEBT**

Our direct debt and guarantee obligations consist of a guarantee of certain indebtedness incurred from time to time to finance certain insurance premiums. Substantially all of our other debt, including the facilities described below, has been incurred by our subsidiaries (primarily Huntsman International); we are not a guarantor of such subsidiary debt.

Certain of our subsidiaries are designated as nonguarantor subsidiaries and have third-party debt agreements. These debt agreements contain certain restrictions with regard to dividends, distributions, loans or advances. In certain circumstances, the consent of a third party would be required prior to the transfer of any cash or assets from these subsidiaries to us.

**Debt Issuance Costs**

We record debt issuance costs related to a debt liability on the balance sheet as a reduction in the face amount of that debt liability. As of December 31, 2016 and 2015, the amount of debt issuance costs directly reducing the debt liability was \$57 million and \$67 million, respectively. We record the amortization of debt issuance costs as interest expense.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**15. DEBT (Continued)**

**Senior Credit Facilities**

As of December 31, 2016, our Senior Credit Facilities consisted of our Revolving Facility, our 2015 Extended Term Loan B, our 2021 Term Loan B, and our 2023 Term Loan B as follows (dollars in millions):

<u>Facility</u>	<u>Committed Amount</u>	<u>Principal Outstanding</u>	<u>Unamortized Discounts and Debt Issuance Costs</u>	<u>Carrying Value</u>	<u>Interest Rate(3)</u>	<u>Maturity</u>
Revolving Facility . . . . .	\$650	\$ —(1)	\$—(1)	\$ —(1)	USD LIBOR plus 3.00%	2021
2015 Extended Term Loan B . . . . .	NA	306	(1)	305	USD LIBOR plus 3.00%	2019
2021 Term Loan B . . . . .	NA	349	(12)	337	USD LIBOR plus 2.75%(2)	2021
2023 Term Loan B . . . . .	NA	1,372	(47)	1,325	USD LIBOR plus 3.00%(2)	2023

(1) We had no borrowings outstanding under our Revolving Facility; we had approximately \$22 million (U.S. dollar equivalents) of letters of credit and bank guarantees issued and outstanding under our Revolving Facility.

(2) The 2021 Term Loan B and the 2023 Term Loan B are subject to a 0.75% LIBOR floor.

(3) The applicable interest rate of the Revolving Facility is subject to certain secured leverage ratio thresholds. As of December 31, 2016, the weighted average interest rate on our outstanding balances under the Senior Credit Facilities was approximately 4%.

On both July 22, 2016 and September 30, 2016, we prepaid \$100 million of our 2015 Extended Term Loan B. In connection with the \$200 million prepayments on our term loan, we recognized a loss on early extinguishment of debt of \$1 million. On December 30, 2016, we made an early repayment of \$260 million on our 2015 Extended Term Loan B using proceeds from the sale of the European surfactants business and existing cash.

Our obligations under the Senior Credit Facilities are guaranteed by substantially all of our domestic subsidiaries and certain of our foreign subsidiaries (collectively, the “Guarantors”), and are secured by a first priority lien on substantially all of our domestic property, plant and equipment, the stock of all of our material domestic subsidiaries and certain foreign subsidiaries, and pledges of intercompany notes between certain of our subsidiaries.

**Amendment to the Credit Agreement**

On November 15, 2016, we entered into a sixteenth amendment to the agreement governing the Senior Credit Facilities (“Credit Agreement”). The amendment provides for a new term loan facility in an aggregate principal amount of \$350 million, the 2021 Term Loan B, and a new term loan facility in an aggregate principal amount of \$1,375 million, the 2023 Term Loan B. Proceeds of these loans, along with cash on hand, were used to repay in full our 2014 Term Loan B and our 2016 Term Loan B.

The 2021 Term Loan B matures on October 1, 2021 and the 2023 Term Loan B matures on April 1, 2023, provided that the maturity date will accelerate if we do not repay, refinance or have a minimum level of liquidity available to enable us to repay certain of our senior notes upon maturity. The 2021 Term Loan B and 2023 Term Loan B are subject to the same terms and conditions as our existing senior secured term loan facilities.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**15. DEBT (Continued)**

The margin for borrowing under the 2021 Term Loan B is LIBOR plus 2.75% and the margin for borrowing under the 2023 Term Loan B is LIBOR plus 3.00% and both loans are subject to a 0.75% LIBOR floor. The 2021 Term Loan B and 2023 Term Loan B amortize in amounts equal to 1% of the principal amount, payable quarterly commencing on December 31, 2016.

On April 1, 2016, we entered into a fifteenth amendment to the Credit Agreement. The amendment provided for a new term loan facility, the 2016 Term Loan B, to refinance existing term loans pursuant to the Credit Agreement in an aggregate principal amount of \$550 million. The net proceeds of the 2016 Term Loan B were used to repay in full our extended term loan B due 2017, our extended term loan B—series 2 due 2017 and our Term Loan C. In connection with these repayments, we recorded a loss on early extinguishment of debt of approximately \$2 million in the second quarter of 2016. The 2016 Term Loan B was repaid in full in conjunction with the sixteenth amendment on November 15, 2016.

The fifteenth amendment also extends the stated termination date of our Revolving Facility from March 20, 2017 to March 20, 2021, provided that the maturity date will accelerate if we do not repay, refinance or have a minimum level of liquidity available to enable us to repay our 2015 Extended Term Loan B due 2019 or our senior notes upon their maturity. The amendment further increased the committed amount of our Revolving Facility by \$25 million (from \$625 million to \$650 million). Borrowings under the Revolving Facility bear interest at the same rate as the existing revolving commitments. As of December 31, 2016, we had no borrowings under our Revolving Facility.

On August 10, 2015 we entered into a fourteenth amendment to the Credit Agreement. The amendment increased the interest rate margin with respect to the 2015 Extended Term Loan B to LIBOR plus 3.00%.

**A/R Programs**

Our A/R Programs are structured so that we grant a participating undivided interest in certain of our trade receivables to the U.S. SPE and the EU SPE. We retain the servicing rights and a retained interest in the securitized receivables. Information regarding our A/R Programs as of December 31, 2016 was as follows (monetary amounts in millions):

Facility	Maturity	Maximum Funding Availability(1)	Amount Outstanding	Interest Rate(2)
U.S. A/R Program . . .	March 2018	\$250	\$90(3)	Applicable rate plus 0.95%
EU A/R Program . . .	March 2018	€225	€114	Applicable rate plus 1.10%
		(approximately \$234)	(approximately \$118)	

- (1) The amount of actual availability under our A/R Programs may be lower based on the level of eligible receivables sold, changes in the credit ratings of our customers, customer concentration levels and certain characteristics of the accounts receivable being transferred, as defined in the applicable agreements.
- (2) Applicable rate for our U.S. A/R Program is defined by the lender as USD LIBOR. Applicable rate for our EU A/R Program is either GBP LIBOR, USD LIBOR or EURIBOR.
- (3) As of December 31, 2016, we had approximately \$7 million (U.S. dollar equivalents) of letters of credit issued and outstanding under our U.S. A/R Program.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**15. DEBT (Continued)**

As of December 31, 2016 and 2015, \$437 million and \$438 million, respectively, of accounts receivable were pledged as collateral under our A/R Programs.

**Notes**

As of December 31, 2016, we had outstanding the following notes (monetary amounts in millions):

<u>Notes</u>	<u>Maturity</u>	<u>Interest Rate</u>	<u>Amount Outstanding</u>	<u>Unamortized Discounts and Debt Issuance Costs</u>
2020 Senior Notes . . . .	November 2020	4.875%	\$650 (\$646 carrying value)	\$(4)
2021 Senior Notes . . . .	April 2021	5.125%	€445 (€444 carrying value (\$461))	\$(1)
2022 Senior Notes . . . .	November 2022	5.125%	\$400 (\$396 carrying value)	\$(4)
2025 Senior Notes . . . .	April 2025	4.25%	€300 (€297 carrying value (\$309))	\$(3)

On March 31, 2015, Huntsman International completed a €300 million (approximately \$326 million) offering of 2025 Senior Notes. On April 17, 2015, we applied the net proceeds of this offering to redeem \$289 million (\$294 million carrying value) of its 2021 Senior Subordinated Notes.

The 2025 Senior Notes bear interest at 4.25% per year, payable semi-annually on April 1 and October 1, and are due on April 1, 2025. We may redeem the 2025 Senior Notes in whole or in part at any time prior to January 1, 2025 at a price equal to 100% of the principal amount thereof plus a “make-whole” premium and accrued and unpaid interest.

The 2020, 2021, 2022 and 2025 Senior Notes are general unsecured senior obligations of Huntsman International and are guaranteed on a general unsecured senior basis by the Guarantors. The indentures impose certain limitations on the ability of Huntsman International and its subsidiaries to, among other things, incur additional indebtedness secured by any principal properties, incur indebtedness of nonguarantor subsidiaries, enter into sale and leaseback transactions with respect to any principal properties and consolidate or merge with or into any other person or lease, sell or transfer all or substantially all of its properties and assets. Upon the occurrence of certain change of control events, holders of the 2020, 2021, 2022 and 2025 Senior Notes will have the right to require that Huntsman International purchase all or a portion of such holder’s notes in cash at a purchase price equal to 101% of the principal amount thereof plus accrued and unpaid interest to the date of repurchase.

**Redemption of Notes and Loss on Early Extinguishment of Debt**

During the year ended December 31, 2015, we redeemed or repurchased the following notes (dollars in millions):

<u>Date of Redemption</u>	<u>Notes</u>	<u>Principal Amount of Notes Redeemed</u>	<u>Amount Paid (Excluding Accrued Interest)</u>	<u>Loss on Early Extinguishment of Debt</u>
September 2015 . . . . .	2021 Senior Subordinated Notes	\$195	\$204	\$ 7
April 2015 . . . . .	2021 Senior Subordinated Notes	289	311	20
January 2015 . . . . .	2021 Senior Subordinated Notes	37	40	3



**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**15. DEBT (Continued)**

**Variable Interest Entity Debt**

As of December 31, 2016, AAC, our consolidated 50%-owned joint venture, had \$126 million outstanding under its loan commitments and debt financing arrangements. As of December 31, 2016, we have \$12 million classified as current debt and \$114 million as long-term debt on our consolidated balance sheets. We do not guarantee these loan commitments, and AAC is not a guarantor of any of our other debt obligations.

**Other Debt**

On July 24, 2015, HPS entered into a financing arrangement to fund the construction of our MDI plant in China. As part of the financing, HPS has secured commitments of a RMB 669 million (approximately \$96 million) term loan and a RMB 423 million (approximately \$61 million) working capital facility. These facilities are unsecured, and we do not provide a guarantee of these loan commitments. As of December 31, 2016, we had term loan borrowings of RMB111 million (approximately \$16 million) and no borrowings under the working capital facility. The interest rate on the facilities is 90% of the Peoples Bank of China rate. As of December 31, 2016, the interest rate was approximately 4%.

HPS also has a loan facility for working capital loans and discounting of commercial drafts. During the year 2016, HPS has repaid RMB 325 million (approximately \$47 million) of borrowings under this facility. As of December 31, 2016 HPS had no borrowings outstanding under this facility. Interest is calculated using the Peoples Bank of China rate plus the applicable margin. The average all in rate as of December 31, 2016 was approximately 4%.

**COMPLIANCE WITH COVENANTS**

We believe that we are in compliance with the covenants contained in the agreements governing our material debt instruments, including our Senior Credit Facilities, our A/R Programs and our notes.

Our material financing arrangements contain certain covenants with which we must comply. A failure to comply with a covenant could result in a default under a financing arrangement unless we obtained an appropriate waiver or forbearance (as to which we can provide no assurance). A default under these material financing arrangements generally allows debt holders the option to declare the underlying debt obligations immediately due and payable. Furthermore, certain of our material financing arrangements contain cross-default and cross-acceleration provisions under which a failure to comply with the covenants in one financing arrangement may result in an event of default under another financing arrangement.

Our Senior Credit Facilities are the Leverage Covenant which applies only to the Revolving Facility and is calculated at the Huntsman International level. The Leverage Covenant is applicable only if borrowings, letters of credit or guarantees are outstanding under the Revolving Facility (cash collateralized letters of credit or guarantees are not deemed outstanding). The Leverage Covenant is a net senior secured leverage ratio covenant which requires that Huntsman International's ratio of senior secured debt to EBITDA (as defined in the applicable agreement) is not more than 3.75 to 1.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**15. DEBT (Continued)**

If in the future Huntsman International fails to comply with the Leverage Covenant, then we may not have access to liquidity under our Revolving Facility. If Huntsman International failed to comply with the Leverage Covenant at a time when we had uncollateralized loans or letters of credit outstanding under the Revolving Facility, Huntsman International would be in default under the Senior Credit Facilities, and, unless Huntsman International obtained a waiver or forbearance with respect to such default (as to which we can provide no assurance), Huntsman International could be required to pay off the balance of the Senior Credit Facilities in full, and we may not have further access to such facilities.

The agreements governing our A/R Programs also contain certain receivable performance metrics. Any material failure to meet the applicable A/R Programs' metrics in the future could lead to an early termination event under the A/R Programs, which could require us to cease our use of such facilities, prohibiting us from additional borrowings against our receivables or, at the discretion of the lenders, requiring that we repay the A/R Programs in full. An early termination event under the A/R Programs would also constitute an event of default under our Senior Credit Facilities, which could require us to pay off the balance of the Senior Credit Facilities in full and could result in the loss of our Senior Credit Facilities.

**MATURITIES**

The scheduled maturities of our debt (excluding debt to affiliates) by year as of December 31, 2016 are as follows (dollars in millions):

<u>Year ending December 31,</u>	
2017 . . . . .	\$ 60
2018 . . . . .	261
2019 . . . . .	350
2020 . . . . .	700
2021 . . . . .	838
Thereafter . . . . .	<u>1,986</u>
	<u>\$4,195</u>

**16. DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES**

We are exposed to market risks, such as changes in interest rates, foreign exchange rates and commodity prices. From time to time, we enter into transactions, including transactions involving derivative instruments, to manage certain of these exposures. We also hedge our net investment in certain European operations. Changes in the fair value of the hedge in the net investment of certain European operations are recorded in accumulated other comprehensive loss.

**INTEREST RATE RISKS**

Through our borrowing activities, we are exposed to interest rate risk. Such risk arises due to the structure of our debt portfolio, including the mix of fixed and floating interest rates. Actions taken to reduce interest rate risk include managing the mix and rate characteristics of various interest bearing liabilities, as well as entering into interest rate derivative instruments.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**16. DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES (Continued)**

From time to time, we may purchase interest rate swaps and/or other derivative instruments to reduce the impact of changes in interest rates on our floating-rate long-term debt. Under interest rate swaps, we agree with other parties to exchange, at specified intervals, the difference between fixed-rate and floating-rate interest amounts calculated by reference to an agreed notional principal amount.

We have entered into several interest rate contracts to hedge the variability caused by monthly changes in cash flow due to associated changes in LIBOR under our Senior Credit Facilities. As of December 31, 2016 and December 31, 2015, we had \$100 million notional value of interest rate hedges with a fixed rate of 2.5%. These swaps are designated as cash flow hedges and the effective portion of the changes in the fair value of the swaps are recorded in other comprehensive loss. The fair value of these hedges on December 31, 2016 and December 31, 2015 was \$1 million and \$2 million, respectively, and was recorded as other current liabilities on our consolidated balance sheets. These hedges will expire in April 2017. For the years ended December 31, 2016 and 2015, the changes in accumulated other comprehensive loss associated with these cash flow hedging activities were gains of approximately \$2 million and \$1 million, respectively.

Beginning in 2009, AAC entered into a 12-year floating to fixed interest rate contract providing for a receipt of LIBOR interest payments for a fixed payment of 5.02%. In connection with the consolidation of AAC as of July 1, 2010, the interest rate contract is now included in our consolidated results. See "Note 8. Variable Interest Entities." The notional amount of the swap as of December 31, 2016 was \$18 million, and the interest rate contract is not designated as a cash flow hedge. As of December 31, 2016 and 2015, the fair value of the swap was \$1 million and \$2 million, respectively, and was recorded as other noncurrent liabilities on our consolidated balance sheets. For 2016 and 2015, we recorded a reduction of interest expense of \$1 million each due to changes in fair value of the swap.

During 2017, accumulated other comprehensive loss of nil is expected to be reclassified to earnings. The actual amount that will be reclassified to earnings over the next twelve months may vary from this amount due to changing market conditions. We would be exposed to credit losses in the event of nonperformance by a counterparty to our derivative financial instruments. We anticipate, however, that the counterparties will be able to fully satisfy their obligations under the contracts. Market risk arises from changes in interest rates.

**FOREIGN EXCHANGE RATE RISK**

Our cash flows and earnings are subject to fluctuations due to exchange rate variation. Our revenues and expenses are denominated in various currencies. We enter into foreign currency derivative instruments to minimize the short-term impact of movements in foreign currency rates. Where practicable, we generally net multicurrency cash balances among our subsidiaries to help reduce exposure to foreign currency exchange rates. Certain other exposures may be managed from time to time through financial market transactions, principally through the purchase of spot or forward foreign exchange contracts (generally with maturities of three months or less). We do not hedge our currency exposures in a manner that would eliminate the effect of changes in exchange rates on our cash flows and earnings. As of both December 31, 2016 and 2015, we had approximately \$176 million notional amount (in U.S. dollar equivalents) outstanding in foreign currency contracts with a term of approximately one month.

In November 2014, we entered into two five year cross-currency interest rate contracts and one eight year cross-currency interest rate contract to swap an aggregate notional \$200 million for an

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**16. DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES (Continued)**

aggregate notional €161 million. The swap is designated as a hedge of net investment for financial reporting purposes. Under the cross-currency interest rate contract, we will receive fixed U.S. dollar payments of \$5 million semiannually on May 15 and November 15 (equivalent to an annual rate of 5.125%) and make interest payments of approximately €3 million (equivalent to an annual rate of approximately 3.6%). As of December 31, 2016, the fair value of this swap was \$29 million and was recorded in noncurrent assets.

In March 2010, we entered into three five year cross-currency interest rate contracts to swap an aggregate notional \$350 million for an aggregate notional €255 million. This swap was designated as a hedge of net investment for financial reporting purposes. During the three months ended March 31, 2015, we terminated these cross-currency interest rate contracts and received \$66 million in payments from the counterparties.

A portion of our debt is denominated in euros. We also finance certain of our non-U.S. subsidiaries with intercompany loans that are, in many cases, denominated in currencies other than the entities' functional currency. We manage the net foreign currency exposure created by this debt through various means, including cross-currency swaps, the designation of certain intercompany loans as permanent loans because they are not expected to be repaid in the foreseeable future and the designation of certain debt and swaps as net investment hedges.

Foreign currency transaction gains and losses on intercompany loans that are not designated as permanent loans are recorded in earnings. Foreign currency transaction gains and losses on intercompany loans that are designated as permanent loans are recorded in other comprehensive (loss) income. From time to time, we review such designation of intercompany loans.

We review our non-U.S. dollar denominated debt and derivative instruments to determine the appropriate amounts designated as hedges. As of December 31, 2016, we have designated approximately €651 million (approximately \$677 million) of euro-denominated debt and cross-currency interest rate contracts as a hedge of our net investment. For the years ended December 31, 2016, 2015 and 2014, the amount of gain recognized on the hedge of our net investment was \$27 million, \$68 million and \$97 million, respectively, and was recorded in other comprehensive (loss) income.

**COMMODITY PRICES RISK**

Inherent in our business is exposure to price changes for several commodities. However, our exposure to changing commodity prices is somewhat limited since the majority of our raw materials are acquired at posted or market related prices, and sales prices for many of our finished products are at market related prices which are largely set on a monthly or quarterly basis in line with industry practice. Consequently, we do not generally hedge our commodity exposures.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**17. FAIR VALUE**

The fair values of our financial instruments were as follows (dollars in millions):

	December 31,			
	2016		2015	
	Carrying Value	Estimated Fair Value	Carrying Value	Estimated Fair Value
Non-qualified employee benefit plan investments . . . . .	\$ 27	\$ 27	\$ 26	\$ 26
Investments in equity securities . . . . .	18	18	18	18
Cross-currency interest rate contacts . . . . .	29	29	28	28
Interest rate contracts . . . . .	(2)	(2)	(4)	(4)
Long-term debt (including current portion) . . . . .	(4,195)	(4,368)	(4,795)	(4,647)

The carrying amounts reported in the balance sheets of cash and cash equivalents, accounts receivable and accounts payable approximate fair value because of the immediate or short-term maturity of these financial instruments. The fair values of non-qualified employee benefit plan investments and investments in equity securities are obtained through market observable pricing using prevailing market prices. The estimated fair values of our long-term debt are based on quoted market prices for the identical liability when traded as an asset in an active market (Level 1).

The fair value estimates presented herein are based on pertinent information available to management as of December 31, 2016 and 2015. Although management is not aware of any factors that would significantly affect the estimated fair value amounts, such amounts have not been comprehensively revalued for purposes of these financial statements since December 31, 2016, and current estimates of fair value may differ significantly from the amounts presented herein.

The following assets and liabilities are measured at fair value on a recurring basis (dollars in millions):

Description	Fair Value Amounts Using			
	December 31, 2016	Quoted prices in active markets for identical assets (Level 1)(3)	Significant other observable inputs (Level 2)(3)	Significant unobservable inputs (Level 3)
<b>Assets:</b>				
Available-for-sale equity securities:				
Non-qualified employee benefit plan investments . . . . .	\$27	\$27	\$—	\$—
Investments in equity securities . . . . .	18	18	—	—
Derivatives:				
Cross-currency interest rate contracts(1) . . . . .	29	—	—	29
<b>Total assets</b> . . . . .	<u>\$74</u>	<u>\$45</u>	<u>\$—</u>	<u>\$29</u>
<b>Liabilities:</b>				
Derivatives:				
Interest rate contracts(2) . . . . .	\$(2)	\$—	\$(2)	\$—

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**17. FAIR VALUE (Continued)**

<u>Description</u>	<u>Fair Value Amounts Using</u>			
	<u>December 31,</u> <u>2015</u>	<u>Quoted prices in active</u> <u>markets for identical</u> <u>assets (Level 1)(3)</u>	<u>Significant other</u> <u>observable inputs</u> <u>(Level 2)(3)</u>	<u>Significant</u> <u>unobservable inputs</u> <u>(Level 3)</u>
<b>Assets:</b>				
Available-for-sale equity securities:				
Non-qualified employee benefit plan				
investments . . . . .	\$26	\$26	\$—	\$—
Investments in equity securities . . . . .	18	18	—	—
Derivatives:				
Cross-currency interest rate contracts(1) . . . . .	<u>28</u>	<u>—</u>	<u>—</u>	<u>28</u>
<b>Total assets</b> . . . . .	<u>\$72</u>	<u>\$44</u>	<u>\$—</u>	<u>\$28</u>
<b>Liabilities:</b>				
Derivatives:				
Interest rate contracts(2) . . . . .	<u>\$(4)</u>	<u>\$—</u>	<u>\$(4)</u>	<u>\$—</u>

(1) The income approach is used to calculate the fair value of these instruments. Fair value represents the present value of estimated future cash flows, calculated using relevant interest rates, exchange rates, and yield curves at stated intervals. There were no material changes to the valuation methods or assumptions used to determine the fair value during the current period.

In November 2014, we entered into two five year cross-currency interest rate contracts and one eight year cross-currency interest rate contract. These instruments have been categorized by us as Level 3 within the fair value hierarchy due to unobservable inputs associated with the credit valuation adjustment, which we deemed to be significant inputs to the overall measurement of fair value at inception.

(2) The income approach is used to calculate the fair value of these instruments. Fair value represents the present value of estimated future cash flows, calculated using relevant interest rates and yield curves at stated intervals. There were no material changes to the valuation methods or assumptions used to determine the fair value during the current period.

(3) There were no transfers between Levels 1 and 2 within the fair value hierarchy for the years ended December 31, 2016 and 2015.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**17. FAIR VALUE (Continued)**

The following tables show reconciliations of beginning and ending balances for the years ended December 31, 2016 and 2015 for instruments measured at fair value on a recurring basis using significant unobservable inputs (Level 3) (dollars in millions).

	<b>Cross-Currency Interest Rate Contracts</b>
<b>Fair Value Measurements Using Significant Unobservable Inputs (Level 3)</b>	
Beginning balance, January 1, 2016 . . . . .	\$28
Transfers into Level 3 . . . . .	—
Transfers out of Level 3(1) . . . . .	—
Total gains (losses):	
Included in earnings . . . . .	—
Included in other comprehensive income (loss) . . . . .	1
Purchases, sales, issuances and settlements . . . . .	—
Ending balance, December 31, 2016 . . . . .	<u>\$29</u>
The amount of total gains (losses) for the period included in earnings attributable to the change in unrealized gains (losses) relating to assets still held at December 31, 2016 . . .	<u>\$—</u>

	<b>Cross-Currency Interest Rate Contracts</b>
<b>Fair Value Measurements Using Significant Unobservable Inputs (Level 3)</b>	
Beginning balance, January 1, 2015 . . . . .	\$ 5
Transfers into Level 3 . . . . .	—
Transfers out of Level 3(1) . . . . .	—
Total gains (losses):	
Included in earnings . . . . .	—
Included in other comprehensive income (loss) . . . . .	23
Purchases, sales, issuances and settlements . . . . .	—
Ending balance, December 31, 2015 . . . . .	<u>\$28</u>
The amount of total gains (losses) for the period included in earnings attributable to the change in unrealized gains (losses) relating to assets still held at December 31, 2015 . . .	<u>\$—</u>

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**17. FAIR VALUE (Continued)**

Gains and losses (realized and unrealized) included in earnings for instruments measured at fair value on a recurring basis using significant unobservable inputs (Level 3) are reported in interest expense and other comprehensive income (loss) as follows (dollars in millions):

	<u>Interest expense</u>	<u>Other comprehensive income (loss)</u>
<b>2016</b>		
Total net gains included in earnings . . . . .	\$—	\$—
Changes in unrealized gains relating to assets still held at December 31, 2016 . . . . .	—	1
	<u>Interest expense</u>	<u>Other comprehensive income (loss)</u>
<b>2015</b>		
Total net gains included in earnings . . . . .	\$—	\$—
Changes in unrealized gains relating to assets still held at December 31, 2015 . . . . .	—	23

We also have assets that under certain conditions are subject to measurement at fair value on a non-recurring basis. These assets include property, plant and equipment and those associated with acquired businesses, including goodwill and intangible assets. For these assets, measurement at fair value in periods subsequent to their initial recognition is applicable if one or more is determined to be impaired. During 2016 and 2015, we recorded charges of \$1 million and \$19 million, respectively, for the impairment of long-lived assets. See “Note 12. Restructuring, Impairment and Plant Closing Costs.”

**18. EMPLOYEE BENEFIT PLANS**

**DEFINED BENEFIT AND OTHER POSTRETIREMENT BENEFIT PLANS**

Our employees participate in a trustee, non-contributory defined benefit pension plan (the “Plan”) that covers substantially all of our full-time U.S. employees. Effective July 1, 2004, the Plan formula for employees not covered by a collective bargaining agreement was converted to a cash balance design. For represented employees, participation in the cash balance design is subject to the terms of negotiated contracts. For participating employees, benefits accrued under the prior formula were converted to opening cash balance accounts. The new cash balance benefit formula provides annual pay credits from 4% to 12% of eligible pay, depending on age and service, plus accrued interest. Participants in the plan on July 1, 2004 may be eligible for additional annual pay credits from 1% to 8%, depending on their age and service as of that date, for up to five years. The conversion to the cash balance plan did not have a significant impact on the accrued benefit liability, the funded status or ongoing pension expense.

We sponsor defined benefit plans in a number of countries outside of the U.S. The availability of these plans, and their specific design provisions, are consistent with local competitive practices and regulations.

We also sponsor unfunded postretirement benefit plans other than pensions, which provide medical and life insurance benefits.



**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**18. EMPLOYEE BENEFIT PLANS (Continued)**

Our postretirement benefit plans provide a fully insured Medicare Part D plan including prescription drug benefits affected by the Medicare Prescription Drug, Improvement and Modernization Act of 2003 (the “Act”). We cannot determine whether the medical benefits provided by our postretirement benefit plans are actuarially equivalent to those provided by the Act. We do not collect a subsidy and our net periodic postretirement benefits cost, and related benefit obligation, do not reflect an amount associated with the subsidy.

Beginning July 1, 2014, the Huntsman Defined Benefit Pension Plan was closed to new non-union entrants and as of April 1, 2015, it was closed to new union entrants. In addition, as of January 1, 2015, Rubicon LLC also closed its defined benefit plan to new entrants. Following the closure of these plans, new hires have been provided with a defined contribution plan with a non-discretionary employer contribution of 6% of pay and a company match of up to 4% of pay, for a total company contribution of up to 10% of pay.

In connection with the Rockwood Acquisition, we assumed certain pension and other postretirement benefit liabilities in the amount of approximately \$233 million as of October 1, 2014.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**18. EMPLOYEE BENEFIT PLANS (Continued)**

The following table sets forth the funded status of the plans and the amounts recognized in our consolidated balance sheets at December 31, 2016 and 2015 (dollars in millions):

	Defined Benefit Plans				Other Postretirement Benefit Plans			
	2016		2015		2016		2015	
	U.S. Plans	Non-U.S. Plans	U.S. Plans	Non-U.S. Plans	U.S. Plans	Non-U.S. Plans	U.S. Plans	Non-U.S. Plans
<b>Change in benefit obligation</b>								
Benefit obligation at beginning of year . .	\$ 961	\$3,010	\$1,001	\$3,317	\$ 88	\$ 5	\$137	\$ 6
Service cost . . . . .	30	34	32	40	2	—	4	—
Interest cost . . . . .	48	72	43	79	4	—	5	—
Participant contributions . . . . .	—	5	—	6	2	—	3	—
Plan amendments . . . . .	—	—	—	(31)	—	(3)	(40)	—
Foreign currency exchange rate changes .	—	(322)	—	(210)	—	—	—	(1)
Settlements/transfers/divestitures . . . . .	—	(2)	—	—	—	—	—	—
Curtailments . . . . .	—	(2)	—	(4)	—	—	—	—
Special termination benefits . . . . .	—	—	—	3	—	—	—	—
Actuarial (gain) loss . . . . .	73	427	(65)	(65)	9	—	(9)	—
Benefits paid . . . . .	(54)	(119)	(50)	(125)	(11)	—	(12)	—
Benefit obligation at end of year . . . . .	<u>\$1,058</u>	<u>\$3,103</u>	<u>\$ 961</u>	<u>\$3,010</u>	<u>\$ 94</u>	<u>\$ 2</u>	<u>\$ 88</u>	<u>\$ 5</u>
<b>Change in plan assets</b>								
Fair value of plan assets at beginning of year . . . . .	\$ 722	\$2,431	\$ 761	\$2,587	\$ —	\$—	\$ —	\$—
Actual return on plan assets . . . . .	55	322	(10)	40	—	—	—	—
Foreign currency exchange rate changes .	—	(281)	—	(153)	—	—	—	—
Participant contributions . . . . .	—	5	—	6	2	—	3	—
Company contributions . . . . .	5	60	21	76	9	—	9	—
Benefits paid . . . . .	(54)	(119)	(50)	(125)	(11)	—	(12)	—
Fair value of plan assets at end of year . . .	<u>\$ 728</u>	<u>\$2,418</u>	<u>\$ 722</u>	<u>\$2,431</u>	<u>\$ —</u>	<u>\$—</u>	<u>\$ —</u>	<u>\$—</u>
<b>Funded status</b>								
Fair value of plan assets . . . . .	\$ 728	\$2,418	\$ 722	\$2,431	\$ —	\$—	\$ —	\$—
Benefit obligation . . . . .	1,058	3,103	961	3,010	94	2	88	5
Accrued benefit cost . . . . .	<u>\$ (330)</u>	<u>\$ (685)</u>	<u>\$ (239)</u>	<u>\$ (579)</u>	<u>\$(94)</u>	<u>\$(2)</u>	<u>\$(88)</u>	<u>\$(5)</u>
<b>Amounts recognized in balance sheet:</b>								
Noncurrent asset . . . . .	\$ —	\$ 6	\$ —	\$ 35	\$ —	\$—	\$ —	\$—
Current liability . . . . .	(6)	(5)	(6)	(5)	(8)	—	(9)	—
Noncurrent liability . . . . .	(324)	(686)	(233)	(609)	(86)	(2)	(79)	(5)
	<u>\$ (330)</u>	<u>\$ (685)</u>	<u>\$ (239)</u>	<u>\$ (579)</u>	<u>\$(94)</u>	<u>\$(2)</u>	<u>\$(88)</u>	<u>\$(5)</u>

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**18. EMPLOYEE BENEFIT PLANS (Continued)**

	Defined Benefit Plans				Other Postretirement Benefit Plans			
	2016		2015		2016		2015	
	U.S. Plans	Non-U.S. Plans	U.S. Plans	Non-U.S. Plans	U.S. Plans	Non-U.S. Plans	U.S. Plans	Non-U.S. Plans
<b>Amounts recognized in accumulated other comprehensive loss:</b>								
Net actuarial loss . . . . .	\$407	\$1,100	\$359	\$906	\$ 45	\$ 1	\$ 38	\$ 1
Prior service credit . . . . .	(17)	(31)	(22)	(34)	(51)	(2)	(58)	—
	<u>\$390</u>	<u>\$1,069</u>	<u>\$337</u>	<u>\$872</u>	<u>\$ (6)</u>	<u>\$(1)</u>	<u>\$(20)</u>	<u>\$ 1</u>

The amounts in accumulated other comprehensive loss that are expected to be recognized as components of net periodic benefit cost during the next fiscal year are as follows (dollars in millions):

	Defined Benefit Plans		Other Postretirement Benefit Plans	
	U.S. Plans	Non-U.S. Plans	U.S. Plans	Non-U.S. Plans
	Actuarial loss . . . . .	\$29	\$58	\$ 3
Prior service credit . . . . .	(2)	(4)	(6)	(3)
Total . . . . .	<u>\$27</u>	<u>\$54</u>	<u>\$(3)</u>	<u>\$(2)</u>

Components of net periodic benefit costs for the years ended December 31, 2016, 2015 and 2014 were as follows (dollars in millions):

	Defined Benefit Plans					
	U.S. plans			Non-U.S. plans		
	2016	2015	2014	2016	2015	2014
Service cost . . . . .	\$ 30	\$ 32	\$ 27	\$ 34	\$ 40	\$ 32
Interest cost . . . . .	48	43	45	72	79	102
Expected return on plan assets . . . . .	(55)	(57)	(56)	(132)	(143)	(138)
Amortization of prior service credit . . . . .	(5)	(6)	(6)	(4)	—	—
Amortization of actuarial loss . . . . .	25	32	19	42	43	34
Settlement loss . . . . .	—	—	—	—	—	13
Special termination benefits . . . . .	—	—	—	—	3	3
Net periodic benefit cost . . . . .	<u>\$ 43</u>	<u>\$ 44</u>	<u>\$ 29</u>	<u>\$ 12</u>	<u>\$ 22</u>	<u>\$ 46</u>

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**18. EMPLOYEE BENEFIT PLANS (Continued)**

	Other Postretirement Benefit Plans					
	U.S. plans			Non-U.S. plans		
	2016	2015	2014	2016	2015	2014
Service cost . . . . .	\$ 2	\$ 4	\$ 3	\$ —	\$ —	\$ —
Interest cost . . . . .	4	5	5	—	—	—
Amortization of prior service credit . . . . .	(7)	(5)	(4)	—	—	—
Amortization of actuarial loss . . . . .	2	3	1	—	—	—
Net periodic benefit cost . . . . .	<u>\$ 1</u>	<u>\$ 7</u>	<u>\$ 5</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>

The amounts recognized in net periodic benefit cost and other comprehensive (loss) income as of December 31, 2016, 2015 and 2014 were as follows (dollars in millions):

	Defined Benefit Plans					
	U.S. plans			Non-U.S. plans		
	2016	2015	2014	2016	2015	2014
Current year actuarial loss . . . . .	\$ 74	\$ 2	\$144	\$ 235	\$ 33	\$ 257
Amortization of actuarial loss . . . . .	(25)	(32)	(19)	(42)	(43)	(34)
Current year prior service credit . . . . .	—	—	—	—	(32)	(6)
Amortization of prior service credit . . . . .	5	6	6	4	—	—
Settlements . . . . .	—	—	—	—	—	(13)
Total recognized in other comprehensive loss (income) . .	54	(24)	131	197	(42)	204
Net periodic benefit cost . . . . .	43	44	29	12	22	46
Total recognized in net periodic benefit cost and other comprehensive (loss) income . . . . .	<u>\$ 97</u>	<u>\$ 20</u>	<u>\$160</u>	<u>\$ 209</u>	<u>\$ (20)</u>	<u>\$ 250</u>

	Other Postretirement Benefit Plans					
	U.S. plans			Non-U.S. plans		
	2016	2015	2014	2016	2015	2014
Current year actuarial loss (gain) . . . . .	\$ 9	\$ (9)	\$ 30	\$ —	\$ —	\$ 1
Amortization of actuarial loss . . . . .	(2)	(3)	(1)	—	—	—
Current year prior service credit . . . . .	—	(40)	—	(2)	—	—
Amortization of prior service credit . . . . .	7	5	4	—	—	—
Total recognized in other comprehensive loss (income) . . . . .	14	(47)	33	(2)	—	1
Net periodic benefit cost . . . . .	1	7	5	—	—	—
Total recognized in net periodic benefit cost and other comprehensive (loss) income . . . . .	<u>\$ 15</u>	<u>\$(40)</u>	<u>\$ 38</u>	<u>\$ (2)</u>	<u>\$ —</u>	<u>\$ 1</u>

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**18. EMPLOYEE BENEFIT PLANS (Continued)**

The following weighted-average assumptions were used to determine the projected benefit obligation at the measurement date and the net periodic pension cost for the year:

	<b>Defined Benefit Plans</b>					
	<b>U.S. plans</b>			<b>Non-U.S. plans</b>		
	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>
<b>Projected benefit obligation</b>						
Discount rate . . . . .	4.24%	4.90%	4.25%	1.82%	2.53%	2.48%
Rate of compensation increase . . . . .	4.17%	4.17%	4.16%	3.51%	3.23%	3.23%
<b>Net periodic pension cost</b>						
Discount rate . . . . .	4.90%	4.25%	5.13%	2.53%	2.48%	3.62%
Rate of compensation increase . . . . .	4.17%	4.16%	4.17%	3.42%	3.23%	3.37%
Expected return on plan assets . . . . .	7.56%	7.74%	7.75%	5.68%	5.79%	5.82%
	<b>Other Postretirement Benefit Plans</b>					
	<b>U.S. plans</b>			<b>Non-U.S. plans</b>		
	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>
<b>Projected benefit obligation</b>						
Discount rate . . . . .	4.03%	4.68%	4.17%	3.50%	7.25%	6.44%
<b>Net periodic pension cost</b>						
Discount rate . . . . .	4.68%	4.20%	4.79%	7.25%	6.44%	6.49%

At both December 31, 2016 and 2015, the health care trend rate used to measure the expected increase in the cost of benefits was assumed to be 7.0%, decreasing to 5% after 2025. Assumed health care cost trend rates can have a significant effect on the amounts reported for the postretirement benefit plans. A one-percent point change in assumed health care cost trend rates would have the following effects (dollars in millions):

<b>Asset category</b>	<b>Increase</b>	<b>Decrease</b>
Effect on total of service and interest cost . . . . .	\$—	\$—
Effect on postretirement benefit obligation . . . . .	1	(1)

The projected benefit obligation and fair value of plan assets for the defined benefit plans with projected benefit obligations in excess of plan assets as of December 31, 2016 and 2015 were as follows (dollars in millions):

	<b>U.S. plans</b>		<b>Non-U.S. plans</b>	
	<b>2016</b>	<b>2015</b>	<b>2016</b>	<b>2015</b>
<b>Projected benefit obligation in excess of plan assets</b>				
Projected benefit obligation . . . . .	\$1,058	\$961	\$3,074	\$2,129
Fair value of plan assets . . . . .	728	722	2,389	1,514

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**18. EMPLOYEE BENEFIT PLANS (Continued)**

The projected benefit obligation, accumulated benefit obligation and fair value of plan assets for the defined benefit plans with an accumulated benefit obligation in excess of plan assets as of December 31, 2016 and 2015 were as follows (dollars in millions):

	U.S. plans		Non-U.S. plans	
	2016	2015	2016	2015
<b>Accumulated benefit obligation in excess of plan assets</b>				
Projected benefit obligation . . . . .	\$1,058	\$961	\$2,145	\$1,403
Accumulated benefit obligation . . . . .	1,031	941	2,020	1,312
Fair value of plan assets . . . . .	728	722	1,487	823

Expected future contributions and benefit payments are as follows (dollars in millions):

	U.S. Plans		Non-U.S. Plans	
	Defined Benefit Plans	Other Postretirement Benefit Plans	Defined Benefit Plans	Other Postretirement Benefit Plans
<b>2017 expected employer contributions</b>				
To plan trusts . . . . .	\$ 54	\$ 8	\$ 54	\$—
<b>Expected benefit payments</b>				
2017 . . . . .	66	8	97	—
2018 . . . . .	90	8	102	—
2019 . . . . .	66	8	102	—
2020 . . . . .	65	8	107	—
2021 . . . . .	67	8	111	—
2022 - 2026 . . . . .	369	37	588	1

Our investment strategy with respect to pension assets is to pursue an investment plan that, over the long term, is expected to protect the funded status of the plan, enhance the real purchasing power of plan assets, and not threaten the plan's ability to meet currently committed obligations. Additionally, our investment strategy is to achieve returns on plan assets, subject to a prudent level of portfolio risk. Plan assets are invested in a broad range of investments. These investments are diversified in terms of domestic and international equities, both growth and value funds, including small, mid and large capitalization equities; short-term and long-term debt securities; real estate; and cash and cash equivalents. The investments are further diversified within each asset category. The portfolio diversification provides protection against a single investment or asset category having a disproportionate impact on the aggregate performance of the plan assets.

Our pension plan assets are managed by outside investment managers. The investment managers value our plan assets using quoted market prices, other observable inputs or unobservable inputs. For certain assets, the investment managers obtain third-party appraisals at least annually, which use valuation techniques and inputs specific to the applicable property, market, or geographic location. During 2016, there were no transfers into or out of Level 3 assets.

We have established target allocations for each asset category. Our pension plan assets are periodically rebalanced based upon our target allocations.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**18. EMPLOYEE BENEFIT PLANS (Continued)**

The fair value of plan assets for the pension plans was \$3.1 billion and \$3.2 billion at December 31, 2016 and 2015, respectively. The following plan assets are measured at fair value on a recurring basis (dollars in millions):

Asset category	December 31, 2016	Fair Value Amounts Using		
		Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
U.S. pension plans:				
Equities . . . . .	\$ 387	\$ 276	\$ 111	\$—
Fixed income . . . . .	277	212	65	—
Real estate/other . . . . .	64	—	—	64
Cash . . . . .	—	—	—	—
Total U.S. pension plan assets . .	<u>\$ 728</u>	<u>\$ 488</u>	<u>\$ 176</u>	<u>\$64</u>
Non-U.S. pension plans:				
Equities . . . . .	\$ 803	\$ 447	\$ 356	\$—
Fixed income . . . . .	1,137	548	583	6
Real estate/other . . . . .	458	64	326	68
Cash . . . . .	20	20	—	—
Total Non-U.S. pension plan assets . . . . .	<u>\$2,418</u>	<u>\$1,079</u>	<u>\$1,265</u>	<u>\$74</u>

Asset category	December 31, 2015	Fair Value Amounts Using		
		Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
U.S. pension plans:				
Equities . . . . .	\$ 387	\$ 279	\$ 108	\$—
Fixed income . . . . .	277	211	66	—
Real estate/other . . . . .	58	—	—	58
Cash . . . . .	—	—	—	—
Total U.S. pension plan assets . .	<u>\$ 722</u>	<u>\$ 490</u>	<u>\$ 174</u>	<u>\$58</u>
Non-U.S. pension plans:				
Equities . . . . .	\$ 830	\$ 446	\$ 384	\$—
Fixed income . . . . .	1,113	514	599	—
Real estate/other . . . . .	477	84	339	54
Cash . . . . .	11	10	1	—
Total Non-U.S. pension plan assets . . . . .	<u>\$2,431</u>	<u>\$1,054</u>	<u>\$1,323</u>	<u>\$54</u>

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**18. EMPLOYEE BENEFIT PLANS (Continued)**

The following table reconciles the beginning and ending balances of plan assets measured at fair value using unobservable inputs (Level 3) (dollars in millions):

	<u>Real Estate/Other</u>	
	<u>Year ended December 31, 2016</u>	<u>Year ended December 31, 2015</u>
<b>Fair Value Measurements of Plan Assets Using Significant Unobservable Inputs (Level 3)</b>		
Balance at beginning of period . . . . .	\$112	\$ 96
Return on pension plan assets . . . . .	4	4
Purchases, sales and settlements . . . . .	16	12
Transfers into (out of) Level 3 . . . . .	<u>—</u>	<u>—</u>
Balance at end of period . . . . .	<u>\$132</u>	<u>\$112</u>
	<u>Fixed Income</u>	
	<u>Year ended December 31, 2016</u>	<u>Year ended December 31, 2015</u>
<b>Fair Value Measurements of Plan Assets Using Significant Unobservable Inputs (Level 3)</b>		
Balance at beginning of period . . . . .	\$—	\$—
Return on pension plan assets . . . . .	—	—
Purchases, sales and settlements . . . . .	6	—
Transfers into (out of) Level 3 . . . . .	<u>—</u>	<u>—</u>
Balance at end of period . . . . .	<u>\$ 6</u>	<u>\$—</u>

Based upon historical returns, the expectations of our investment committee and outside advisors, the expected long-term rate of return on the pension assets is estimated to be between 5.68% and



**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**18. EMPLOYEE BENEFIT PLANS (Continued)**

7.75%. The asset allocation for our pension plans at December 31, 2016 and 2015 and the target allocation for 2017, by asset category are as follows:

<u>Asset category</u>	<u>Target Allocation 2017</u>	<u>Allocation at December 31, 2016</u>	<u>Allocation at December 31, 2015</u>
U.S. pension plans:			
Equities . . . . .	53%	53%	54%
Fixed income . . . . .	39%	38%	38%
Real estate/other . . . . .	4%	9%	8%
Cash . . . . .	4%	—	—
Total U.S. pension plans . . . . .	<u>100%</u>	<u>100%</u>	<u>100%</u>
Non-U.S. pension plans:			
Equities . . . . .	36%	33%	34%
Fixed income . . . . .	44%	47%	46%
Real estate/other . . . . .	19%	19%	20%
Cash . . . . .	1%	1%	—
Total non-U.S. pension plans . . . . .	<u>100%</u>	<u>100%</u>	<u>100%</u>

Equity securities in our pension plans did not include any direct investments in equity securities of our Company or our affiliates at the end of 2016.

**DEFINED CONTRIBUTION PLANS—U.S.**

We have a money purchase pension plan covering substantially all of our domestic employees who were hired prior to January 1, 2004. Employer contributions are made based on a percentage of employees' earnings (ranging up to 8%). During 2014, we closed this plan to non-union participants, continuing to provide equivalent benefits to those covered under this plan into their salary deferral account.

We also have a salary deferral plan covering substantially all U.S. employees. Plan participants may elect to make voluntary contributions to this plan up to a specified amount of their compensation. We contribute an amount equal to one-half of the participant's contribution, not to exceed 2% of the participant's compensation.

Along with the introduction of the cash balance formula within our defined benefit pension plan, the money purchase pension plan was closed to new hires. At the same time, our match in the salary deferral plan was increased, for new hires, to a 100% match, not to exceed 4% of the participant's compensation, once the participant has achieved six years of service with our Company.

Our total combined expense for the above defined contribution plans for each of the years ended December 31, 2016, 2015 and 2014 was \$23 million, \$23 million and \$15 million, respectively.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**18. EMPLOYEE BENEFIT PLANS (Continued)**

**DEFINED CONTRIBUTION PLANS—NON-U.S.**

We have defined contribution plans in a variety of non-U.S. locations.

Our total combined expense for these defined contribution plans for the years ended December 31, 2016, 2015 and 2014 was \$12 million, \$13 million and \$14 million, respectively, primarily related to the Huntsman UK Pension Plan.

All UK associates are eligible to participate in the Huntsman UK Pension Plan, a contract-based arrangement with a third party. Company contributions vary by business during a five year transition period. Plan participants elect to make voluntary contributions to this plan up to a specified amount of their compensation. We contribute a matching amount not to exceed 12% of the participant's salary for new hires and 15% of the participant's salary for all other participants.

**SUPPLEMENTAL SALARY DEFERRAL PLAN AND SUPPLEMENTAL EXECUTIVE RETIREMENT PLAN**

The Huntsman Supplemental Savings Plan (the "SSP") is a non-qualified plan covering key management employees and allows participants to defer amounts that would otherwise be paid as compensation. The participant can defer up to 75% of their salary and bonus each year. This plan also provides benefits that would be provided under the Huntsman Salary Deferral Plan if that plan were not subject to legal limits on the amount of contributions that can be allocated to an individual in a single year. The SSP was amended and restated effective as of January 1, 2005 to allow eligible executive employees to comply with Section 409A of the Internal Revenue Code of 1986.

The Huntsman Supplemental Executive Retirement Plan (the "SERP") is an unfunded non-qualified pension plan established to provide certain executive employees with benefits that could not be provided, due to legal limitations, under the Huntsman Defined Benefit Pension Plan, a qualified defined benefit pension plan, and the Huntsman Money Purchase Pension Plan, a qualified money purchase pension plan.

Assets of these plans are included in other noncurrent assets and as of December 31, 2016 and 2015 were \$27 million and \$26 million, respectively. During each of the years ended December 31, 2016, 2015 and 2014, we expensed a total of \$1 million as contributions to the SSP and the SERP.

**STOCK-BASED INCENTIVE PLAN**

On May 5, 2016, our stockholders approved a new Huntsman Corporation 2016 Stock Incentive Plan (the "2016 Stock Incentive Plan"), which reserved 8.2 million shares for issuance. The Huntsman Corporation Stock Incentive Plan, as amended and restated (the "Prior Plan"), remains in effect for outstanding awards granted pursuant to the Prior Plan, but no further awards may be granted under the Prior Plan. Under the 2016 Stock Incentive Plan, we may grant nonqualified stock options, incentive stock options, stock appreciation rights, restricted stock, phantom stock, performance share units and other stock-based awards to our employees, directors and consultants and to employees and consultants of our subsidiaries, provided that incentive stock options may be granted solely to employees. The terms of the grants under both the 2016 Stock Incentive Plan and the Prior Plan are fixed at the grant date. As of December 31, 2016, we had approximately 8 million shares remaining under the 2016 Stock Incentive Plan available for grant. See "Note 23. Stock-Based Compensation Plan."

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**18. EMPLOYEE BENEFIT PLANS (Continued)**

**INTERNATIONAL PLANS**

International employees are covered by various post-employment arrangements consistent with local practices and regulations. Such obligations are included in other long-term liabilities in our consolidated balance sheets.

**19. INCOME TAXES**

The following is a summary of U.S. and non-U.S. provisions for current and deferred income taxes (dollars in millions):

	<b>Year ended December 31,</b>		
	<u>2016</u>	<u>2015</u>	<u>2014</u>
Income tax (benefit) expense:			
U.S.			
Current .....	\$(4)	\$ 48	\$ 55
Deferred .....	25	21	(4)
Non-U.S.			
Current .....	75	24	48
Deferred .....	(9)	(47)	(48)
Total .....	<u>\$87</u>	<u>\$ 46</u>	<u>\$ 51</u>

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**19. INCOME TAXES (Continued)**

The following schedule reconciles the differences between the U.S. federal income taxes at the U.S. statutory rate to our provision for income taxes (dollars in millions):

	Year ended December 31,		
	2016	2015	2014
Income from continuing operations before income taxes . . . . .	\$448	\$176	\$404
Expected tax expense at U.S. statutory rate of 35% . . . . .	\$157	\$ 62	\$142
Change resulting from:			
State tax expense net of federal benefit . . . . .	(1)	(3)	10
Non-U.S. tax rate differentials . . . . .	(47)	4	(7)
Non-taxable portion of gain on sale of European surfactants business . . . . .	(23)	—	—
U.S. domestic manufacturing deduction . . . . .	—	(7)	(14)
Currency exchange gains and losses . . . . .	(4)	(58)	(7)
Effect of tax holidays . . . . .	—	(6)	—
U.S. foreign tax credits, net of associated income and taxes . . . . .	—	(22)	(2)
Tax benefit of losses with valuation allowances as a result of other comprehensive income . . . . .	(1)	(3)	(7)
Tax authority audits and dispute resolutions . . . . .	(6)	10	3
Change in valuation allowance . . . . .	(13)	75	(76)
Other non-U.S. tax effects, including nondeductible expenses, tax effect of rate changes, transfer pricing adjustments and various withholding taxes . . . . .	19	(6)	3
Other U.S. tax effects, including nondeductible expenses and other credits . . . . .	6	—	6
Total income tax expense . . . . .	<u>\$ 87</u>	<u>\$ 46</u>	<u>\$ 51</u>

After extensive research and analysis, in 2014, we made certain elections and filed amended U.S. tax returns for tax years 2008 through 2012, along with our original U.S. tax return for tax year 2013. These new tax elections and amended tax returns allowed us to utilize U.S. foreign tax credits. The net result was \$104 million of income tax benefit recognized during 2014 for the release of the associated valuation allowance.

During 2015, we declared a dividend from our non-U.S. operations to the U.S. which included bringing onshore certain U.S. foreign tax credits. The foreign tax credits brought onshore exceeded the amount needed to offset the cash tax impact of the dividend, as well as enough to allow us to carry \$14 million of foreign tax credits back to a prior year and claim a refund.

Included in the non-U.S. deferred tax expense are income tax benefits of \$1 million in 2016, \$3 million in 2015 and \$7 million in 2014 for losses from continuing operations for certain jurisdictions with valuation allowances to the extent that income was recorded in other comprehensive income in that same jurisdiction. The benefits in 2016 were largely attributable to South Africa, and the benefits in 2015 and 2014 were largely attributable to the U.K. In all years, foreign currency gains and changes in pension related items resulted in income in other comprehensive income where we have a full valuation allowance against the net deferred tax asset. An offsetting income tax expense was recognized in accumulated other comprehensive loss.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**19. INCOME TAXES (Continued)**

We operate in many non-U.S. tax jurisdictions with no specific country earning a predominant amount of our off-shore earnings. The vast majority of these countries have income tax rates that are lower than the U.S. statutory rate. During 2016 and 2014, the average statutory rate for countries with pre-tax income was lower than the average statutory rate for countries with pre-tax losses, resulting in net benefits as compared to the U.S. statutory rate of \$47 million and \$7 million, respectively, reflected in the reconciliation above. In 2016, the \$47 million net benefit relates primarily to our Polyurethanes operations in The Netherlands and China and our Advanced Materials operations in Switzerland. During 2015, the average statutory rate for countries with pre-tax losses was lower than the average statutory rate for countries with pre-tax income, resulting in net expenses as compared to the U.S. statutory rate of \$4 million, reflected in the reconciliation above.

In certain non-U.S. tax jurisdictions, our U.S. GAAP functional currency is different than the local tax currency. As a result, foreign exchange gains and losses will impact our effective tax rate. For 2016, this resulted in a \$4 million tax benefit, for 2015, this resulted in a \$33 million tax benefit (\$58 million, net of \$25 million of contingent liabilities and valuation allowances) and for 2014, this resulted in a \$7 million tax benefit. A number of our intercompany liabilities that were denominated in U.S. dollars were owed by entities whose tax currency was the euro. As a result of the depreciation in the euro opposite the U.S. dollar, these entities recorded a tax only foreign exchange loss. Most of the intercompany receivables associated with these same U.S. dollar denominated intercompany debts were held by entities with a tax currency of the U.S. dollar which, therefore, resulted in no taxable gain.

During 2015, we were granted an extension of a tax holiday from 2015 to 2022 on certain of our manufacturing operations in Singapore. During 2015, pursuant to the Singapore tax holiday, we recorded a benefit of \$6 million. We will continue to enjoy this benefit to the extent of continuing profits in this manufacturing endeavor. There were no net tax benefits recorded in 2016.

We calculate deferred tax assets and liabilities related to U.S. state income taxes based on projected apportionment factors. During 2015, we experienced a decrease in our projected apportionment factors, which decreased our deferred tax liability for U.S. state income taxes. The amount of our deferred tax liability for U.S. state income taxes is significant, and therefore, the change in apportionment factors for 2015 decreased our net deferred tax liabilities by \$5 million. Also during 2015, we changed the legal entity location of certain of our U.S. operations. These changes had the effect of reducing our state tax expense by approximately \$3 million.

The components of income (loss) from continuing operations before income taxes were as follows (dollars in millions):

	Year ended December 31,		
	2016	2015	2014
U.S. ....	\$ 66	\$243	\$435
Non-U.S. ....	382	(67)	(31)
Total .....	<u>\$448</u>	<u>\$176</u>	<u>\$404</u>

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**19. INCOME TAXES (Continued)**

Components of deferred income tax assets and liabilities were as follows (dollars in millions):

	<u>December 31,</u>	
	<u>2016</u>	<u>2015</u>
Deferred income tax assets:		
Net operating loss carryforwards . . . . .	\$ 848	\$ 871
Pension and other employee compensation . . . . .	329	280
Property, plant and equipment . . . . .	85	97
Intangible assets . . . . .	118	131
Foreign tax credits . . . . .	5	14
Other, net . . . . .	87	100
Total . . . . .	<u>\$1,472</u>	<u>\$1,493</u>
Deferred income tax liabilities:		
Property, plant and equipment . . . . .	\$ (611)	\$ (577)
Pension and other employee compensation . . . . .	(1)	(8)
Other, net . . . . .	(134)	(128)
Total . . . . .	<u>\$ (746)</u>	<u>\$ (713)</u>
Net deferred tax asset before valuation allowance . . . . .	\$ 726	\$ 780
Valuation allowance—net operating losses and other . . . . .	(757)	(784)
Net deferred tax liability . . . . .	<u>\$ (31)</u>	<u>\$ (4)</u>
Non-current deferred tax asset . . . . .	396	418
Non-current deferred tax liability . . . . .	(427)	(422)
Net deferred tax liability . . . . .	<u>\$ (31)</u>	<u>\$ (4)</u>

We have gross NOLs of \$3,407 million in various non-U.S. jurisdictions. While the majority of the non-U.S. NOLs have no expiration date, \$475 million have a limited life (of which \$448 million are subject to a valuation allowance) and \$3 million are scheduled to expire in 2017 (all of which are subject to a valuation allowance). We had no NOLs expire unused in 2016.

Included in the \$3,407 million of gross non-U.S. NOLs is \$940 million attributable to our Luxembourg entities. As of December 31, 2016, due to the uncertainty surrounding the realization of the benefits of these losses, there is a valuation allowance of \$211 million against these net tax-effected NOLs of \$255 million.

We evaluate deferred tax assets to determine whether it is more likely than not that they will be realized. Valuation allowances are reviewed each period on a tax jurisdiction by jurisdiction basis to analyze whether there is sufficient positive or negative evidence to support a change in judgment about the realizability of the related deferred tax assets. These conclusions require significant judgment. In evaluating the objective evidence that historical results provide, we consider the cyclicity of businesses and cumulative income or losses during the applicable period. Cumulative losses incurred over the period limits our ability to consider other subjective evidence such as our projections for the future. Our judgments regarding valuation allowances are also influenced by the costs and risks associated with any tax planning idea.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**19. INCOME TAXES (Continued)**

During 2016, we established valuation allowances of \$12 million and released valuation allowances of \$25 million. In Italy we established \$9 million of valuation allowances on certain net deferred tax assets as a result of the sale of our European surfactants business, and in China we established \$3 million of valuation allowances as a result of the closure of our Qingdao, China plant. We released valuation allowances of \$12 million in Spain as a result of cumulative profitability, \$7 million in The Netherlands as a result of tax planning to utilize losses that would have otherwise expired, and \$6 million in France as a result of a tax combination allowing deferred tax liabilities to be offset by deferred tax assets which previously had a valuation allowance.

During 2015, we established valuation allowances of \$35 million and released valuation allowances of \$3 million. In the U.S., we established \$14 million of valuation allowance on U.S. foreign tax credits due to the application of specific foreign tax credit limitations, in The Netherlands we established \$7 million of valuation allowance on losses which are scheduled to expire after 2016, and in Italy we established \$12 million of valuation allowances on certain net deferred tax assets as a result of cumulative losses.

During 2014, we released valuation allowances of \$111 million and established valuation allowances of \$3 million. In the U.S., we released \$94 million of valuation allowance on U.S. foreign tax credits as a result of making certain tax elections and filing amended U.S. tax returns and in Luxembourg we released a valuation allowance on \$6 million of certain net deferred tax assets as a result of significant changes in estimated future taxable income resulting from increased intercompany receivables and, therefore, increased interest income in Luxembourg, our primary treasury center outside of the U.S.

Uncertainties regarding expected future income in certain jurisdictions could affect the realization of deferred tax assets in those jurisdictions and result in additional valuation allowances in future periods, or, in the case of unexpected pre-tax earnings, the release of valuation allowances in future periods.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**19. INCOME TAXES (Continued)**

The following is a summary of changes in the valuation allowance (dollars in millions):

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Valuation allowance as of January 1 . . . . .	\$784	\$702	\$814
Valuation allowance as of December 31 . . . . .	<u>757</u>	<u>784</u>	<u>702</u>
Net (increase) decrease . . . . .	27	(82)	112
Foreign currency movements . . . . .	(35)	(22)	(49)
(Decrease) increase to deferred tax assets with no impact on operating tax expense, including an offsetting (decrease) increase to valuation allowances . . . . .	<u>21</u>	<u>29</u>	<u>13</u>
Change in valuation allowance per rate reconciliation . . . . .	<u>\$ 13</u>	<u>\$(75)</u>	<u>\$ 76</u>
Components of change in valuation allowance affecting tax expense:			
Pre-tax losses in jurisdictions with valuation allowances resulting in no tax expense or benefit . . . . .	\$ —	\$(43)	\$(32)
Releases of valuation allowances in various jurisdictions . . . . .	25	3	111
Establishments of valuation allowances in various jurisdictions . . . . .	<u>(12)</u>	<u>(35)</u>	<u>(3)</u>
Change in valuation allowance per rate reconciliation . . . . .	<u>\$ 13</u>	<u>\$(75)</u>	<u>\$ 76</u>

The following is a reconciliation of our unrecognized tax benefits (dollars in millions):

	<u>2016</u>	<u>2015</u>
Unrecognized tax benefits as of January 1 . . . . .	\$ 62	\$68
Gross increases and decreases—tax positions taken during a prior period . . . . .	1	3
Gross increases and decreases—tax positions taken during the current period . . . . .	2	5
Decreases related to settlements of amounts due to tax authorities . . . . .	(22)	(2)
Reductions resulting from the lapse of statutes of limitation . . . . .	(4)	(8)
Foreign currency movements . . . . .	<u>(2)</u>	<u>(4)</u>
Unrecognized tax benefits as of December 31 . . . . .	<u>\$ 37</u>	<u>\$62</u>

As of December 31, 2016 and 2015, the amount of unrecognized tax benefits which, if recognized, would affect the effective tax rate is \$21 million and \$50 million, respectively.

During 2016, we concluded and settled tax examinations on various non-U.S. jurisdictions including, but not limited to, China, Germany, Indonesia, The Netherlands, Spain and the U.K. During 2015, we concluded and effectively settled tax examinations in the U.S. (both federal and various states) and various non-U.S. jurisdictions including, but not limited to China and France. During 2014, we concluded and settled tax examinations in the U.S. (both federal and various states) and various non-U.S. jurisdictions including, but not limited to, China, France and Spain.

During 2016, for unrecognized tax benefits that impact tax expense, we recorded a net decrease in unrecognized tax benefits with a corresponding income tax benefit (not including interest and penalty



**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**19. INCOME TAXES (Continued)**

expense) of \$5 million. During 2015 and 2014, we recorded a net increase in unrecognized tax benefits with a corresponding income tax expense (not including interest and penalty expense) of \$19 million and \$1 million, respectively. Additional decreases in unrecognized tax benefits were offset by cash settlements or by a decrease in net deferred tax assets and, therefore, did not affect income tax expense.

In accordance with our accounting policy, we continue to recognize interest and penalties accrued related to unrecognized tax benefits in income tax expense.

	<u>Year ended</u> <u>December 31,</u>		
	<u>2016</u>	<u>2015</u>	<u>2014</u>
Interest expense included in tax expense . . . . .	\$(1)	\$(9)	\$ 2
Penalties expense included in tax expense . . . . .	—	—	—
	 <u>December 31,</u>		
	<u>2016</u> <u>2015</u>		
Accrued liability for interest . . . . .	\$ 3	\$ 4	
Accrued liability for penalties . . . . .	—	—	

We conduct business globally and, as a result, we file income tax returns in U.S. federal, various U.S. state and various non-U.S. jurisdictions. The following table summarizes the tax years that remain subject to examination by major tax jurisdictions:

<u>Tax Jurisdiction</u>	<u>Open Tax Years</u>
China . . . . .	2012 and later
France . . . . .	2002 and later
Germany . . . . .	2011 and later
India . . . . .	2004 and later
Italy . . . . .	2012 and later
Malaysia . . . . .	2012 and later
Switzerland . . . . .	2010 and later
The Netherlands . . . . .	2013 and later
United Kingdom . . . . .	2015 and later
United States federal . . . . .	2009 and later

Certain of our U.S. and non-U.S. income tax returns are currently under various stages of audit by applicable tax authorities and the amounts ultimately agreed upon in resolution of the issues raised may differ materially from the amounts accrued.

We estimate that it is reasonably possible that certain of our non-U.S. unrecognized tax benefits could change within 12 months of the reporting date with a resulting decrease in the unrecognized tax benefits within a reasonably possible range of nil to \$6 million. For the 12-month period from the reporting date, we would expect that a substantial portion of the decrease in our unrecognized tax benefits would result in a corresponding benefit to our income tax expense.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**19. INCOME TAXES (Continued)**

For non-U.S. entities that were not treated as branches for U.S. tax purposes, we do not provide for income taxes on the undistributed earnings of these subsidiaries that are reinvested and, in the opinion of management, will continue to be reinvested indefinitely. We have material intercompany debt obligations owed by our non-U.S. subsidiaries to the U.S. We do not intend to repatriate earnings to the U.S. via dividend based on estimates of future domestic cash generation and our ability to return cash to the U.S. through payments of intercompany debt owned by our non-U.S. subsidiaries to the U.S. To the extent that cash is required in the U.S., rather than repatriate earnings to the U.S. via dividend, we expect to utilize our intercompany debt. If any earnings were repatriated via dividend, we may need to accrue and pay taxes on the distributions.

As discussed, we made a distribution of a portion of our earnings in 2015 when the amount of foreign tax credits associated with the distribution was greater than the amount of tax otherwise due. The undistributed earnings of foreign subsidiaries with positive earnings that are deemed to be permanently invested were approximately \$390 million at December 31, 2016. It is not practicable to determine the unrecognized deferred tax liability on those earnings because of the significant assumptions necessary to compute the tax.

**20. COMMITMENTS AND CONTINGENCIES**

**PURCHASE COMMITMENTS**

We have various purchase commitments extending through 2029 for materials, supplies and services entered into in the ordinary course of business. Included in the purchase commitments table below are contracts which require minimum volume purchases that extend beyond one year or are renewable annually and have been renewed for 2017. Certain contracts allow for changes in minimum required purchase volumes in the event of a temporary or permanent shutdown of a facility. To the extent the contract requires a minimum notice period, such notice period has been included in the table below. The contractual purchase prices for substantially all of these contracts are variable based upon market prices, subject to annual negotiations. We have estimated our contractual obligations by using the terms of our current pricing for each contract. We also have a limited number of contracts which require a minimum payment even if no volume is purchased. We believe that all of our purchase obligations will be utilized in our normal operations. For the years ended December 31, 2016, 2015 and 2014, we made minimum payments of \$2 million, nil and nil, respectively, under such take or pay contracts without taking the product.

Total purchase commitments as of December 31, 2016 are as follows (dollars in millions):

<u>Year ending December 31,</u>	
2017 . . . . .	\$1,636
2018 . . . . .	1,164
2019 . . . . .	415
2020 . . . . .	170
2021 . . . . .	168
Thereafter . . . . .	<u>1,063</u>
	<u>\$4,616</u>

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**20. COMMITMENTS AND CONTINGENCIES (Continued)**

**OPERATING LEASES**

We lease certain railcars, aircraft, equipment and facilities under long-term lease agreements. The total expense recorded under operating lease agreements in our consolidated statements of operations is approximately \$89 million, \$94 million and \$97 million for 2016, 2015 and 2014, respectively, net of sublease rentals of approximately \$2 million, \$3 million and \$3 million for the years ended December 31, 2016, 2015 and 2014, respectively.

Future minimum lease payments under operating leases as of December 31, 2016 are as follows (dollars in millions):

<u>Year ending December 31,</u>	
2017 . . . . .	\$ 82
2018 . . . . .	73
2019 . . . . .	65
2020 . . . . .	59
2021 . . . . .	54
Thereafter . . . . .	<u>177</u>
	<u>\$510</u>

Future minimum lease payments have not been reduced by minimum sublease rentals of \$2 million due in the future under noncancelable subleases.

**LEGAL MATTERS**

**Antitrust Matters**

We were named as a defendant in consolidated class action civil antitrust suits filed on February 9 and 12, 2010 in the U.S. District Court for the District of Maryland alleging that we, our co-defendants and other alleged co-conspirators conspired to fix prices of titanium dioxide sold in the U.S. between at least March 1, 2002 and the present. The other defendants named in this matter were DuPont, Kronos and Cristal (formerly Millennium). On August 28, 2012, the court certified a class consisting of all U.S. customers who purchased titanium dioxide directly from the defendants since February 1, 2003 (the “Direct Purchasers”). On December 13, 2013, we and all other defendants settled the Direct Purchasers litigation and the court approved the settlement. We paid the settlement in an amount immaterial to our consolidated financial statements.

On November 22, 2013, we were named as a defendant in a civil antitrust suit filed in the U.S. District Court for the District of Minnesota brought by a Direct Purchaser who opted out of the Direct Purchasers class litigation (the “Opt-Out Litigation”). On April 21, 2014, the court severed the claims against us from the other defendants sued and ordered our case transferred to the U.S. District Court for the Southern District of Texas. Subsequently, Kronos, another defendant, was also severed from the Minnesota case and claims against it were transferred and consolidated for trial with our case in the Southern District of Texas. On February 26, 2016, we reached an agreement to settle the Opt-Out Litigation and subsequently paid the settlement in an amount immaterial to our financial statements.

We were also named as a defendant in a class action civil antitrust suit filed on March 15, 2013 in the U.S. District Court for the Northern District of California by the purchasers of products made from

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**20. COMMITMENTS AND CONTINGENCIES (Continued)**

titanium dioxide (the “Indirect Purchasers”) making essentially the same allegations as did the Direct Purchasers. On October 14, 2014, plaintiffs filed their Second Amended Class Action Complaint narrowing the class of plaintiffs to those merchants and consumers of architectural coatings containing titanium dioxide. On August 11, 2015, the court granted our motion to dismiss the Indirect Purchasers litigation with leave to amend the complaint. A Third Amended Class Action Complaint was filed on September 29, 2015 further limiting the class to consumers of architectural paints. Plaintiffs have raised state antitrust claims under the laws of 15 states, consumer protection claims under the laws of nine states and unjust enrichment claims under the laws of 16 states. On November 4, 2015, we and our co-defendants filed another motion to dismiss. On June 13, 2016, the court substantially denied the motion to dismiss except as to consumer protection claims in one state. The parties are presently negotiating a settlement for an amount immaterial to our consolidated financial statements.

On August 23, 2016, we were named as a defendant in a fourth civil antitrust suit filed in the U.S. District Court for the Northern District of California by an Indirect Purchaser, Home Depot. Home Depot is an Indirect Purchaser primarily through paints it purchases from various manufacturers. Home Depot makes the same claims as the Direct and Indirect Purchasers.

The plaintiffs in the Indirect Purchasers claims seek to recover injunctive relief, treble damages or the maximum damages allowed by state law, costs of suit and attorneys’ fees. We are not aware of any illegal conduct by us or any of our employees. Nevertheless, we have incurred costs relating to these claims and could incur additional costs in amounts which in the aggregate could be material to us. Because of the overall complexity of these cases, we are unable to reasonably estimate any possible loss or range of loss and we have made no accrual with respect to the Home Depot claims.

**Product Delivery Claim**

We have been notified by a customer of potential claims related to our alleged delivery of a different product than the one the customer had ordered. Our customer claims that it was unaware that the different product had been delivered until after that product had been used to manufacture materials which were subsequently sold. Originally, the customer stated that it had been notified of claims by its customers of up to an aggregate of €153 million (approximately \$159 million) relating to this matter and claimed that we may be responsible for all or a portion of these potential claims. Our customer has since resolved some of these claims and the aggregate amount of the current claims is now approximately €113 million (approximately \$117 million). Based on the facts currently available, we believe that we are insured for any liability we may ultimately have in excess of \$10 million. However, no assurance can be given regarding our ultimate liability or costs. We believe our range of possible loss in this matter is between €0 and €113 million (approximately \$117 million), and we have made no accrual with respect to this matter.

**Indemnification Matters**

On July 3, 2012, Deutsche Bank Securities Inc. and Credit Suisse Securities (USA) LLC (the “Banks”) demanded that we indemnify them for claims brought against them by certain MatlinPatterson entities that were formerly our stockholders (“MatlinPatterson”) in litigation filed by MatlinPatterson on June 19, 2012 in the 9th District Court in Montgomery County, Texas (the “Texas Litigation”). These claims allegedly arose from the failed acquisition by and merger with Hexion. The

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**20. COMMITMENTS AND CONTINGENCIES (Continued)**

Texas Litigation was dismissed, which was upheld by the Ninth Court of Appeals and the Texas Supreme Court denied review by final order entered January 7, 2016.

On July 14, 2014, the Banks demanded that we indemnify them for additional claims brought against them by certain other former Company stockholders in litigation filed June 14, 2014 in the United States District Court for the Eastern District of Wisconsin (the “Wisconsin Litigation”). The stockholders in the Wisconsin Litigation have made essentially the same factual allegations as MatlinPatterson made in the Texas Litigation and, additionally, have named Apollo Global Management LLC and Apollo Management Holdings, L.P. as defendants. Stockholder plaintiffs in the Wisconsin Litigation assert claims for misrepresentation and conspiracy to defraud. On June 30, 2016, the plaintiffs voluntarily dismissed the Apollo defendants and on December 5, 2016, the court dismissed Deutsche Bank for lack of personal jurisdiction, but denied Credit Suisse’s motion to dismiss. Subsequently, Credit Suisse asked the court to reconsider its decision or certify its judgment to the Seventh Circuit Court of Appeals for an immediate appeal, which remains pending. We denied the Banks’ indemnification demand for both the Texas Litigation and the Wisconsin Litigation.

**Other Proceedings**

We are a party to various other proceedings instituted by private plaintiffs, governmental authorities and others arising under provisions of applicable laws, including various environmental, products liability and other laws. Except as otherwise disclosed in this report, we do not believe that the outcome of any of these matters will have a material effect on our financial condition, results of operations or liquidity.

**21. ENVIRONMENTAL, HEALTH AND SAFETY MATTERS**

**EHS CAPITAL EXPENDITURES**

We may incur future costs for capital improvements and general compliance under EHS laws, including costs to acquire, maintain and repair pollution control equipment. For the years ended December 31, 2016, 2015 and 2014, our capital expenditures for EHS matters totaled \$66 million, \$141 million, and \$125 million, respectively. Because capital expenditures for these matters are subject to evolving regulatory requirements and depend, in part, on the timing, promulgation and enforcement of specific requirements, our capital expenditures for EHS matters have varied significantly from year to year and we cannot provide assurance that our recent expenditures are indicative of future amounts we may spend related to EHS and other applicable laws.

**ENVIRONMENTAL RESERVES**

We have accrued liabilities relating to anticipated environmental cleanup obligations, site reclamation and closure costs and known penalties. Liabilities are recorded when potential liabilities are either known or considered probable and can be reasonably estimated. Our liability estimates are calculated using present value techniques as appropriate and are based upon requirements placed upon us by regulators, available facts, existing technology and past experience. The environmental liabilities do not include amounts recorded as asset retirement obligations. We had accrued \$34 million and \$38 million for environmental liabilities as of December 31, 2016 and 2015, respectively. Of these amounts, \$7 million and \$6 million were classified as accrued liabilities in our consolidated balance sheets as of December 31, 2016 and 2015, respectively, and \$27 million and \$32 million were classified

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**21. ENVIRONMENTAL, HEALTH AND SAFETY MATTERS (Continued)**

as other noncurrent liabilities in our consolidated balance sheets as of December 31, 2016 and 2015, respectively. In certain cases, our remediation liabilities may be payable over periods of up to 30 years. We may incur losses for environmental remediation in excess of the amounts accrued; however, we are not able to estimate the amount or range of such potential excess.

**ENVIRONMENTAL MATTERS**

Under the Comprehensive Environmental Response, Compensation, and Liability Act (“CERCLA”) and similar state laws, a current or former owner or operator of real property in the U.S. may be liable for remediation costs regardless of whether the release or disposal of hazardous substances was in compliance with law at the time it occurred, and a current owner or operator may be liable regardless of whether it owned or operated the facility at the time of the release. Outside the U.S., analogous contaminated property laws, such as those in effect in France and Australia, can hold past owners and/or operators liable for remediation at former facilities. Currently, there are approximately six former facilities or third-party sites in the U.S. for which we have been notified of potential claims against us for cleanup liabilities, including, but not limited to, sites listed under CERCLA. Based on current information and past experiences at other CERCLA sites, we do not expect these third-party claims to have a material impact on our consolidated financial statements.

Under the Resource Conservation and Recovery Act (“RCRA”) in the U.S. and similar state laws, we may be required to remediate contamination originating from our properties as a condition to our hazardous waste permit. Some of our manufacturing sites have an extended history of industrial chemical manufacturing and use, including on-site waste disposal. We are aware of soil, groundwater or surface contamination from past operations at some of our sites, and we may find contamination at other sites in the future. For example, our Port Neches, Texas, and Geismar, Louisiana, facilities are the subject of ongoing remediation requirements imposed under RCRA. Similar laws exist in a number of locations in which we currently operate, or previously operated, manufacturing facilities, such as Australia, India, France, Hungary and Italy.

**West Footscray Remediation**

By letter dated March 7, 2006, our former Base Chemicals and Polymers facility in West Footscray, Australia was issued a cleanup notice by the Environmental Protection Authority Victoria (“EPA Victoria”) due to concerns about soil and groundwater contamination emanating from the site. On August 23, 2010, EPA Victoria revoked a second cleanup notice and issued a revised notice that included a requirement for financial assurance for the remediation. As of December 31, 2016, we had an accrued liability of approximately \$15 million related to estimated environmental remediation costs at this site. We can provide no assurance that the authority will not seek to institute additional requirements for the site or that additional costs will not be required for the cleanup.

**North Maybe Mine Remediation**

The North Maybe Canyon Mine site is a CERCLA site and involves a former phosphorous mine near Soda Springs, Idaho, which is believed to have been operated by several companies, including a predecessor company to us. In 2004, the U.S. Forest Service notified us that we are a CERCLA potentially responsible party (“PRP”) for contamination originating from the site. In February 2010, we and Wells Cargo (another PRP) agreed to conduct a Remedial Investigation/Feasibility Study of a

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**21. ENVIRONMENTAL, HEALTH AND SAFETY MATTERS (Continued)**

portion of the site and are currently engaged in that process. At this time, we are unable to reasonably estimate our potential liabilities at this site.

**Port Neches Flaring Matter**

As part of the EPA's national enforcement initiative on flaring operations and by letter dated October 12, 2012, the U.S. Department of Justice (the "DOJ") notified us that we were in violation of the CAA based on our response to a 2010 CAA Section 114 Information Request. The EPA has used the enforcement initiative to bring similar actions against refiners and other chemical manufacturers and has sought to collect civil penalties in excess of \$100,000. Specifically, the EPA alleged violations at our Port Neches, Texas facility from 2007-2012 for flare operations not consistent with good pollution control practice and not in compliance with certain flare-related regulations. As a result of these findings, the EPA referred this matter to the DOJ. We provided a formal response to the DOJ and the EPA with a supplemental data submission on April 29, 2013. We have been engaged in discussions with the DOJ and the EPA regarding these alleged violations and conducted field trials on an alternate flare monitoring method beginning in September 2014. We are currently unable to determine the likelihood or magnitude of any potential penalty or injunctive relief that may be incurred in resolving this matter.

**22. HUNTSMAN CORPORATION STOCKHOLDERS' EQUITY**

**SHARE REPURCHASE PROGRAM**

On September 29, 2015, our Board of Directors authorized our Company to repurchase up to \$150 million in shares of our common stock. Repurchases under this program may be made through open market transactions, in privately negotiated transactions, accelerated share repurchase programs or by other means. The timing and actual number of any shares repurchased depends on a variety of factors, including market conditions. The share repurchase authorization does not have an expiration date and repurchases may be commenced, suspended or discontinued from time to time without prior notice. On October 27, 2015, we entered into and funded an accelerated share repurchase agreement with Citibank, N.A. to repurchase \$100 million of our common stock. Citibank, N.A. made an initial delivery of approximately 7.1 million shares of Huntsman Corporation common stock based on the closing price of \$11.94 on October 27, 2015. The accelerated share repurchase agreement was completed in January 2016 with the delivery of an additional approximately 1.5 million shares of Huntsman Corporation common stock. The final number of shares repurchased and the aggregate cost per share was based on the Company's daily volume-weighted average stock price during the term of the transaction, less a discount. We have \$50 million remaining that is available under this authorization to be used to purchase additional shares.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**22. HUNTSMAN CORPORATION STOCKHOLDERS' EQUITY (Continued)**

**DIVIDENDS ON COMMON STOCK**

The following tables represent dividends on common stock for our Company for the years ended December 31, 2016 and 2015 (dollars in millions, except per share payment amounts):

<u>Quarter ended</u>	<u>2016</u>	
	<u>Per share payment amount</u>	<u>Approximate amount paid</u>
March 31, 2016 . . . . .	\$0.125	\$30
June 30, 2016 . . . . .	0.125	30
September 30, 2016 . . . . .	0.125	30
December 31, 2016 . . . . .	0.125	30
	<u>2015</u>	
<u>Quarter ended</u>	<u>Per share payment amount</u>	<u>Approximate amount paid</u>
March 31, 2015 . . . . .	\$0.125	\$31
June 30, 2015 . . . . .	0.125	31
September 30, 2015 . . . . .	0.125	31
December 31, 2015 . . . . .	0.125	30

**23. STOCK-BASED COMPENSATION PLAN**

Under the 2016 Stock Incentive Plan, we may grant nonqualified stock options, incentive stock options, stock appreciation rights, restricted stock, phantom stock, performance share units and other stock-based awards to our employees, directors and consultants and to employees and consultants of our subsidiaries, provided that incentive stock options may be granted solely to employees. The terms of the grants under both the 2016 Stock Incentive Plan and the Prior Plan are fixed at the grant date. As of December 31, 2016, we were authorized to grant up to 8.2 million shares under the 2016 Stock Incentive Plan. As of December 31, 2016, we had approximately 8 million shares remaining under the 2016 Stock Incentive Plan available for grant. Option awards have a maximum contractual term of 10 years and generally must have an exercise price at least equal to the market price of our common stock on the date the option award is granted. Outstanding stock-based awards generally vest over a three-year period; certain performance share unit awards vest over a two-year period.

The compensation cost from continuing operations under the 2016 Stock Incentive Plan was as follows (dollars in millions):

	<u>Year ended December 31,</u>		
	<u>2016</u>	<u>2015</u>	<u>2014</u>
Compensation cost . . . . .	\$34	\$30	\$28

The total income tax benefit recognized in the statement of operations for stock-based compensation arrangements was \$7 million, \$6 million and \$6 million for the years ended December 31, 2016, 2015 and 2014, respectively.



**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**23. STOCK-BASED COMPENSATION PLAN (Continued)**

**STOCK OPTIONS**

The fair value of each stock option award is estimated on the date of grant using the Black-Scholes valuation model that uses the assumptions noted in the following table. Expected volatilities are based on the historical volatility of our common stock through the grant date. The expected term of options granted was estimated based on the contractual term of the instruments and employees' expected exercise and post-vesting employment termination behavior. The risk-free rate for periods within the contractual life of the option was based on the U.S. Treasury yield curve in effect at the time of grant. The assumptions noted below represent the weighted averages of the assumptions utilized for all stock options granted during the year.

	Year ended December 31,		
	2016	2015	2014
Dividend yield . . . . .	5.6%	2.3%	2.4%
Expected volatility . . . . .	57.9%	57.6%	60.3%
Risk-free interest rate . . . . .	1.4%	1.4%	1.7%
Expected life of stock options granted during the period . . . . .	5.9 years	5.9 years	5.7 years

A summary of stock option activity under the 2016 Stock Incentive Plan and the Prior Plan as of December 31, 2016 and changes during the year then ended is presented below:

Option Awards	Shares (in thousands)	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value (in millions)
Outstanding at January 1, 2016 . . . . .	9,544	\$15.51		
Granted . . . . .	3,024	9.04		
Exercised . . . . .	(148)	12.65		
Forfeited . . . . .	(1,175)	19.70		
Outstanding at December 31, 2016 . . . . .	11,245	13.37	5.5	\$71
Exercisable at December 31, 2016 . . . . .	7,339	14.02	3.7	42

The weighted-average grant-date fair value of stock options granted during 2016, 2015 and 2014 was \$3.15, \$9.81 and \$9.63 per option, respectively. As of December 31, 2016, there was \$10 million of total unrecognized compensation cost related to nonvested stock option arrangements granted under the 2016 Stock Incentive Plan and the Prior Plan. That cost is expected to be recognized over a weighted-average period of approximately 1.8 years.

During the years ended December 31, 2016, 2015 and 2014, the total intrinsic value of stock options exercised was approximately \$1 million, nil and \$14 million, respectively.

**NONVESTED SHARES**

Nonvested shares granted under the 2016 Stock Incentive Plan and the Prior Plan consist of restricted stock and performance share unit awards, which are accounted for as equity awards, and

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**23. STOCK-BASED COMPENSATION PLAN (Continued)**

phantom stock, which is accounted for as a liability award because it can be settled in either stock or cash.

The fair value of each performance share unit award is estimated using a Monte Carlo simulation model that uses various assumptions, including an expected volatility rate and a risk-free interest rate. For the years ended December 31, 2016 and 2015, the weighted-average expected volatility rate was 39.3% and 30.0%, respectively and the weighted average risk-free interest rate was 0.9% and 0.7%, respectively. For the performance share unit awards granted during the years ended December 31, 2016 and 2015 the number of shares earned varies based upon the Company achieving certain performance criteria over two-year and three-year performance periods. The performance criteria are total stockholder return of our common stock relative to the total stockholder return of a specified industry peer group for the two-year and three-year performance periods. No performance share unit awards were granted during the year ended December 31, 2014.

A summary of the status of our nonvested shares as of December 31, 2016 and changes during the year then ended is presented below:

	Equity Awards		Liability Awards	
	Shares (in thousands)	Weighted Average Grant-Date Fair Value	Shares (in thousands)	Weighted Average Grant-Date Fair Value
Nonvested at January 1, 2016 . . . . .	1,854	\$19.97	475	\$21.37
Granted . . . . .	1,889	9.28	715	9.09
Vested . . . . .	(671)(1)	19.74	(243)	20.18
Forfeited . . . . .	(76)	16.42	(35)	15.74
Nonvested at December 31, 2016 . . . . .	2,996	13.36	912	12.27

(1) As of December 31, 2016, a total of 454,900 restricted stock units were vested but not yet issued, of which 60,948 vested during 2016. These shares have not been reflected as vested shares in this table because, in accordance with the restricted stock unit agreements, shares of common stock are not issued for vested restricted stock units until termination of employment.

As of December 31, 2016, there was \$28 million of total unrecognized compensation cost related to nonvested share compensation arrangements granted under the Stock Incentive Plan and the Prior Plan. That cost is expected to be recognized over a weighted-average period of approximately 1.9 years. The value of share awards that vested during the years ended December 31, 2016, 2015 and 2014 was \$16 million, \$20 million and \$19 million, respectively.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**24. OTHER COMPREHENSIVE LOSS**

Other comprehensive loss consisted of the following (dollars in millions):

	Foreign currency translation adjustment(a)	Pension and other postretirement benefits adjustments(b)	Other comprehensive income of unconsolidated affiliates	Other, net	Total	Amounts attributable to noncontrolling interests	Amounts attributable to Huntsman Corporation
Beginning balance, January 1, 2016 . . . . .	\$(288)	\$(1,056)	\$11	\$17	\$(1,316)	\$28	\$(1,288)
Other comprehensive (loss) income before reclassifications, gross . . .	(162)	(315)	(7)	5	(479)	8	(471)
Tax (expense) benefit . . . . .	(10)	58	—	1	49	—	49
Amounts reclassified from accumulated other comprehensive loss, gross(c) . . . . .	1	53	—	—	54	—	54
Tax expense . . . . .	—	(15)	—	—	(15)	—	(15)
Net current-period other comprehensive (loss) income . . . . .	(171)	(219)	(7)	6	(391)	8	(383)
Ending balance, December 31, 2016 . . . . .	\$(459)	\$(1,275)	\$ 4	\$23	\$(1,707)	\$36	\$(1,671)

(a) Amounts are net of tax of \$100 and \$90 as of December 31, 2016 and January 1, 2016, respectively.

(b) Amounts are net of tax of \$177 and \$135 as of December 31, 2016 and January 1, 2016, respectively.

(c) See table below for details about these reclassifications.

	Foreign currency translation adjustment(a)	Pension and other postretirement benefits adjustments(b)	Other comprehensive income of unconsolidated affiliates	Other, net	Total	Amounts attributable to noncontrolling interests	Amounts attributable to Huntsman Corporation
Beginning balance, January 1, 2015 . . . . .	\$ 25	\$(1,122)	\$10	\$11	\$(1,076)	\$23	\$(1,053)
Other comprehensive (loss) income before reclassifications, gross . . .	(271)	44	1	6	(220)	5	(215)
Tax expense . . . . .	(42)	(33)	—	—	(75)	—	(75)
Amounts reclassified from accumulated other comprehensive loss, gross(c) . . . . .	—	69	—	—	69	—	69
Tax expense . . . . .	—	(14)	—	—	(14)	—	(14)
Net current-period other comprehensive (loss) income . . . . .	(313)	66	1	6	(240)	5	(235)
Ending balance, December 31, 2015 . . . . .	\$(288)	\$(1,056)	\$11	\$17	\$(1,316)	\$28	\$(1,288)

(a) Amounts are net of tax of \$90 and \$47 as of December 31, 2015 and January 1, 2015, respectively.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**24. OTHER COMPREHENSIVE LOSS (Continued)**

(b) Amounts are net of tax of \$135 and \$182 as of December 31, 2015 and January 1, 2015, respectively.

(c) See table below for details about these reclassifications.

<b>Details about Accumulated Other Comprehensive Loss Components(a):</b>	<b>Year ended December 31, 2016</b>	<b>Year ended December 31, 2015</b>	<b>Year ended December 31, 2014</b>	<b>Affected line item in the statement where net income is presented</b>
	<b>Amount reclassified from accumulated other comprehensive loss</b>	<b>Amount reclassified from accumulated other comprehensive loss</b>	<b>Amount reclassified from accumulated other comprehensive loss</b>	
Amortization of pension and other postretirement benefits:				
Prior service credit . . . . .	\$ 16	\$ 10	\$ 9	(b)
Actuarial loss . . . . .	(69)	(79)	(55)	(b)(c)
Settlement loss . . . . .	—	—	(13)	(b)
	<u>(53)</u>	<u>(69)</u>	<u>(59)</u>	Total before tax
	15	14	11	Income tax expense
<b>Total reclassifications for the period . . . . .</b>	<b><u>\$(38)</u></b>	<b><u>\$(55)</u></b>	<b><u>\$(48)</u></b>	Net of tax

(a) Pension and other postretirement benefits amounts in parentheses indicate credits on our consolidated statements of operations.

(b) These accumulated other comprehensive loss components are included in the computation of net periodic pension costs. See "Note 18. Employee Benefit Plans."

(c) Amounts contain approximately \$4 million, \$6 million and \$4 million of actuarial losses related to discontinued operations for the years ended December 31, 2016, 2015 and 2014, respectively.

Items of other comprehensive income (loss) of our Company and our consolidated affiliates have been recorded net of tax, with the exception of the foreign currency translation adjustments related to subsidiaries with earnings permanently reinvested. The tax effect is determined based upon the jurisdiction where the income or loss was recognized and is net of valuation allowances.

**25. RELATED PARTY TRANSACTIONS**

Our consolidated financial statements include the following transactions with our affiliates not otherwise disclosed (dollars in millions):

	<b>Year ended December 31,</b>		
	<b>2016</b>	<b>2015</b>	<b>2014</b>
Sales to:			
Unconsolidated affiliates . . . . .	\$131	\$131	\$261
Inventory purchases from:			
Unconsolidated affiliates . . . . .	397	487	614

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**25. RELATED PARTY TRANSACTIONS (Continued)**

Our subsidiary Airstar Corporation (“Airstar”) subleases a Gulfstream IV-SP Aircraft (the “Aircraft”) from Jstar Corporation (“Jstar”), a corporation wholly owned by Jon M. Huntsman pursuant to a lease arrangement that expires in 2021. Jon M. Huntsman is the Executive Chairman and the father of our Chief Executive Officer, Peter R. Huntsman. Under this arrangement, monthly sublease payments from Airstar to Jstar are approximately \$120,000, and an aggregate of \$7 million is payable through the end of the remaining five year lease term. These monthly sublease payments are equal to the financing costs paid by Jstar to a leasing company and the arrangement does not result in a financial benefit to Jstar.

We occupy and use a portion of an office building owned by the Huntsman Foundation, a private charitable foundation established by Jon M. and Karen H. Huntsman to further the charitable interests of the Huntsman family, under a lease pursuant to which we make annual lease payments. With the scheduled transition of employees to The Woodlands, Texas the original lease rate was reduced by 50% effective February 1, 2016. During 2016, we made payments of approximately \$1 million to the Huntsman Foundation under the lease, which includes a contractual 2% increase from 2015. The lease expires on December 31, 2018, subject to a five-year extension, at our option.

Through May 2002, we paid the premiums on various life insurance policies for Jon M. Huntsman. These policies have been liquidated, and the cash values have been paid to Mr. Huntsman. Mr. Huntsman is indebted to us in the amount of approximately \$2 million with accrued interest, which represents the insurance premiums paid on his behalf through May 2002. This amount is included in other noncurrent assets in our consolidated balance sheets.

Effective August 31, 2015, we entered into a Consulting Agreement with Jon M. Huntsman, Jr., one of our former directors and the former governor of Utah and U.S. Ambassador to Singapore and China. Pursuant to the Consulting Agreement, Jon M. Huntsman, Jr. agreed to: provide strategic advice to senior management and the Board of Directors of the Company on political, economic and business matters; support development and continued maintenance of the Company’s high value customers and significant business relationships across all regions; support development and continued maintenance of governmental and business relationships in developing economic regions, particularly in connection with markets and opportunities in India, China and Southeast Asia; participate in negotiations and discussions with business executives and leaders, government officials and/or dignitaries; and participate in such other meetings or discussions as may be requested by senior management of the Company upon reasonable notice. In exchange for these services, we agree to pay Jon M. Huntsman, Jr. \$50,000 per month and up to \$200,000 in additional compensation based on achievement of designated results as determined by the Board of Directors. The Consulting Agreement was renewed for one year effective August 31, 2016, subject to our right to extend the agreement for additional one year terms. Jon M. Huntsman, Jr. is the son of our Executive Chairman, Jon M. Huntsman and the brother of our Chief Executive Officer, Peter R. Huntsman.

**26. OPERATING SEGMENT INFORMATION**

We derive our revenues, earnings and cash flows from the manufacture and sale of a wide variety of differentiated and commodity chemical products. We have reported our operations through five segments: Polyurethanes, Performance Products, Advanced Materials, Textile Effects and Pigments and Additives. We have organized our business and derived our operating segments around differences in product lines.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**26. OPERATING SEGMENT INFORMATION (Continued)**

The major products of each reportable operating segment are as follows:

<u>Segment</u>	<u>Products</u>
Polyurethanes . . . . .	MDI, PO, polyols, PG, TPU, aniline and MTBE
Performance Products . . . .	amines, surfactants, LAB, maleic anhydride, other performance chemicals, EG, olefins and technology licenses
Advanced Materials . . . . .	basic liquid and solid epoxy resins; specialty resin compounds; cross-linking, matting and curing agents; epoxy, acrylic and polyurethane-based formulations
Textile Effects . . . . .	textile chemicals, dyes and digital inks
Pigments and Additives . . . .	titanium dioxide, functional additives, color pigments, timber treatment and water treatment chemicals

Sales between segments are generally recognized at external market prices and are eliminated in consolidation. We use adjusted EBITDA to measure the financial performance of our global business units and for reporting the results of our operating segments. This measure includes all operating items relating to the businesses. The adjusted EBITDA of operating segments excludes items that principally apply to our Company as a whole.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**26. OPERATING SEGMENT INFORMATION (Continued)**

The revenues and adjusted EBITDA for each of our reportable operating segments are as follows (dollars in millions):

	<u>Year ended December 31,</u>		
	<u>2016</u>	<u>2015</u>	<u>2014</u>
<b>Revenues:</b>			
Polyurethanes . . . . .	\$3,667	\$ 3,811	\$ 5,032
Performance Products . . . . .	2,126	2,501	3,072
Advanced Materials . . . . .	1,020	1,103	1,248
Textile Effects . . . . .	751	804	896
Pigments and Additives . . . . .	2,139	2,160	1,549
Eliminations . . . . .	(46)	(80)	(219)
Total . . . . .	<u>\$9,657</u>	<u>\$10,299</u>	<u>\$11,578</u>
<b>Segment adjusted EBITDA(1):</b>			
Polyurethanes . . . . .	\$ 569	\$ 573	\$ 722
Performance Products . . . . .	316	460	473
Advanced Materials . . . . .	223	220	199
Textile Effects . . . . .	73	63	58
Pigments and Additives . . . . .	130	61	76
Corporate and other(2) . . . . .	(184)	(156)	(188)
Total . . . . .	<u>1,127</u>	<u>1,221</u>	<u>1,340</u>
<b>Reconciliation of adjusted EBITDA to net income:</b>			
Interest expense . . . . .	(202)	(205)	(205)
Income tax expense—continuing operations . . . . .	(87)	(46)	(51)
Income tax benefit—discontinued operations . . . . .	2	2	2
Depreciation and amortization . . . . .	(432)	(399)	(445)
Net income attributable to noncontrolling interests . . . . .	31	33	22
Other adjustments:			
Business acquisition and integration expenses and purchase accounting adjustments . . . . .	(23)	(53)	(67)
EBITDA from discontinued operations . . . . .	(6)	(6)	(10)
Gain (loss) on disposition of business/assets . . . . .	119	(2)	3
Loss on early extinguishment of debt . . . . .	(3)	(31)	(28)
Certain legal settlements and related expenses . . . . .	(3)	(4)	(3)
Amortization of pension and postretirement actuarial losses . . . . .	(65)	(74)	(51)
Net plant incident remediation costs . . . . .	(1)	(4)	—
Restructuring, impairment and plant closing and transition costs . . . . .	(82)	(306)	(162)
Spin-off separation expenses . . . . .	(18)	—	—
Net income . . . . .	<u>\$ 357</u>	<u>\$ 126</u>	<u>\$ 345</u>

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**26. OPERATING SEGMENT INFORMATION (Continued)**

	Year ended December 31,		
	2016	2015	2014
<b>Depreciation and Amortization:</b>			
Polyurethanes . . . . .	\$114	\$100	\$131
Performance Products . . . . .	132	119	138
Advanced Materials . . . . .	35	38	42
Textile Effects . . . . .	15	17	16
Pigments and Additives . . . . .	106	93	78
Corporate and other . . . . .	30	32	40
Total . . . . .	<u>\$432</u>	<u>\$399</u>	<u>\$445</u>
	Year ended December 31,		
	2016	2015	2014
<b>Capital Expenditures:</b>			
Polyurethanes . . . . .	\$143	\$181	\$174
Performance Products . . . . .	131	205	181
Advanced Materials . . . . .	16	25	46
Textile Effects . . . . .	19	24	38
Pigments and Additives . . . . .	103	202	136
Corporate and other . . . . .	9	26	26
Total . . . . .	<u>\$421</u>	<u>\$663</u>	<u>\$601</u>
	December 31,		
	2016	2015	2014
<b>Total Assets:</b>			
Polyurethanes . . . . .	\$2,677	\$2,779	\$ 2,859
Performance Products . . . . .	2,046	2,264	2,326
Advanced Materials . . . . .	728	822	828
Textile Effects . . . . .	523	562	574
Pigments and Additives . . . . .	2,155	2,494	2,640
Corporate and other . . . . .	1,060	899	1,696
Total . . . . .	<u>\$9,189</u>	<u>\$9,820</u>	<u>\$10,923</u>

(1) Beginning in the second quarter of 2016, we use segment adjusted EBITDA as the measure of each segment's profit or loss. We believe that segment adjusted EBITDA more accurately reflects what management uses to make decisions about resources to be allocated to the segments and assess their financial performance. We have recast the measure of each segment's profit or loss in the prior periods disclosed to reflect segment adjusted EBITDA.



**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**26. OPERATING SEGMENT INFORMATION (Continued)**

Segment adjusted EBITDA is defined as net income of Huntsman Corporation before interest, income tax, depreciation and amortization, net income attributable to noncontrolling interests and certain Corporate and other items, as well as eliminating the following adjustments: (a) business acquisition and integration expenses and purchase accounting adjustments; (b) EBITDA from discontinued operations; (c) gain (loss) on disposition of businesses/assets; (d) loss on early extinguishment of debt; (e) certain legal settlements and related expenses; (f) amortization of pension and postretirement actuarial losses; (g) net plant incident remediation costs; (h) restructuring, impairment, plant closing and transition costs; and (i) spin-off separation expenses.

- (2) Corporate and other includes unallocated corporate overhead, unallocated foreign exchange gains and losses, LIFO inventory valuation reserve adjustments, nonoperating income and expense, benzene sales and gains and losses on the disposition of corporate assets.
- (3) The operating results of our former polymers, base chemicals and Australian styrenics businesses are classified as discontinued operations, and, accordingly, the revenues of these businesses are excluded for all periods presented. The EBITDA of our former polymers, base chemicals and Australian styrenics businesses are included in discontinued operations for all periods presented.

	Year ended December 31,		
	2016	2015	2014
<b>By Geographic Area</b>			
<b>Revenues(1):</b>			
United States . . . . .	\$3,005	\$ 3,228	\$ 3,540
China . . . . .	1,021	1,110	1,200
Germany . . . . .	676	714	677
Mexico . . . . .	453	475	825
Other nations . . . . .	4,502	4,772	5,336
<b>Total</b> . . . . .	<b>\$9,657</b>	<b>\$10,299</b>	<b>\$11,578</b>
	December 31,		
	2016	2015	2014
<b>Long-lived assets(2):</b>			
United States . . . . .	\$1,841	\$1,938	\$1,748
Germany . . . . .	350	362	381
The Netherlands . . . . .	294	304	314
United Kingdom . . . . .	254	320	311
China . . . . .	243	217	221
Italy . . . . .	203	229	211
Other nations . . . . .	1,027	1,076	1,237
<b>Total</b> . . . . .	<b>\$4,212</b>	<b>\$4,446</b>	<b>\$4,423</b>

(1) Geographic information for revenues is based upon countries into which product is sold.

(2) Long-lived assets consist of property, plant and equipment, net.

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**27. SELECTED UNAUDITED QUARTERLY FINANCIAL DATA**

A summary of selected unaudited quarterly financial data for the years ended December 31, 2016 and 2015 is as follows (dollars in millions, except per share amounts):

	Three months ended			
	March 31, 2016	June 30, 2016	September 30, 2016	December 31, 2016(1)
Revenues . . . . .	\$2,355	\$2,544	\$2,363	\$2,395
Gross profit . . . . .	416	457	398	407
Restructuring, impairment and plant closing costs (credits) . . . . .	13	29	45	(6)
Income from continuing operations . . . . .	63	95	65	138
Net income . . . . .	62	94	64	137
Net income attributable to Huntsman Corporation . . . .	56	87	55	128
Basic income per share(2):				
Income from continuing operations attributable to Huntsman Corporation common stockholders . . . .	0.24	0.37	0.23	0.54
Net income attributable to Huntsman Corporation common stockholders . . . . .	0.24	0.37	0.23	0.54
Diluted income per share(2):				
Income from continuing operations attributable to Huntsman Corporation common stockholders . . . .	0.24	0.36	0.23	0.53
Net income attributable to Huntsman Corporation common stockholders . . . . .	0.24	0.36	0.23	0.53

	Three months ended			
	March 31, 2015	June 30, 2015	September 30, 2015	December 31, 2015(3)
Revenues . . . . .	\$2,589	\$2,740	\$2,638	\$2,332
Gross profit . . . . .	450	549	473	376
Restructuring, impairment and plant closing costs . . . .	93	114	14	81
Income from continuing operations . . . . .	17	41	63	9
Net income . . . . .	15	39	63	9
Net income attributable to Huntsman Corporation . . . .	5	29	55	4
Basic income per share(2):				
Income from continuing operations attributable to Huntsman Corporation common stockholders . . . .	0.03	0.13	0.23	0.02
Net income attributable to Huntsman Corporation common stockholders . . . . .	0.02	0.12	0.23	0.02
Diluted income per share(2):				
Income from continuing operations attributable to Huntsman Corporation common stockholders . . . .	0.03	0.13	0.22	0.02
Net income attributable to Huntsman Corporation common stockholders . . . . .	0.02	0.12	0.22	0.02

(1) On December 30, 2016, our Performance Products segment completed the sale of its European surfactants business to Innospec Inc. for \$199 million in cash plus our retention of trade receivables and payables for an enterprise value of \$225 million. For further information, see

**HUNTSMAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**27. SELECTED UNAUDITED QUARTERLY FINANCIAL DATA (Continued)**

“Note 3. Business Combinations and Dispositions—Sale of European Surfactants Manufacturing Facilities.”

- (2) Basic and diluted income per share are computed independently for each of the quarters presented based on the weighted average number of common shares outstanding during that period. Therefore, the sum of quarterly basic and diluted per share information may not equal annual basic and diluted earnings per share.
- (3) During the three months ended December 31, 2015, we declared a dividend from our non-U.S. operations to the U.S., which included bringing onshore certain U.S. foreign tax credits. The foreign tax credits brought onshore exceeded the amount needed to offset the cash tax impact of the dividend, as well as enough to allow us to carry \$14 million of foreign tax credits back to a prior year and claim a refund. During 2015, a number of our intercompany liabilities that were denominated in U.S. dollars were owed by entities whose tax currency was the euro. As a result of the depreciation in the euro opposite the U.S. dollar, these entities recorded a tax only foreign exchange loss. Most of the intercompany receivables associated with these same U.S. dollar denominated intercompany debts were held by entities with a tax currency of the U.S. dollar which, therefore, resulted in no taxable gain. This resulted in a \$33 million tax benefit (\$58 million, net of \$25 million of contingent liabilities and valuation allowances) in the fourth quarter of 2015.

\* \* \* \* \*

**MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND  
ISSUER PURCHASES OF EQUITY SECURITIES**

**MARKET INFORMATION AND HOLDERS**

Our common stock is listed on the New York Stock Exchange under the symbol "HUN." As of February 8, 2017, there were approximately 62 stockholders of record and the closing price of our common stock on the New York Stock Exchange was \$20.05 per share.

The reported high and low sale prices of our common stock on the New York Stock Exchange for each of the periods set forth below are as follows:

<u>Period</u>	<u>High</u>	<u>Low</u>
<b>2016</b>		
First Quarter . . . . .	\$13.83	\$ 7.46
Second Quarter . . . . .	16.65	12.45
Third Quarter . . . . .	18.11	12.40
Fourth Quarter . . . . .	20.52	15.38
<u>Period</u>	<u>High</u>	<u>Low</u>
<b>2015</b>		
First Quarter . . . . .	\$24.62	\$21.01
Second Quarter . . . . .	23.83	21.46
Third Quarter . . . . .	22.40	9.27
Fourth Quarter . . . . .	14.02	9.84

**DIVIDENDS**

The following tables represent dividends on common stock for our Company for the years ended December 31, 2016 and 2015 (dollars in millions, except per share payment amounts):

<u>Quarter ended</u>	<u>2016</u>	
	<u>Per share payment amount</u>	<u>Approximate amount paid</u>
March 31, 2016 . . . . .	\$0.125	\$30
June 30, 2016 . . . . .	0.125	30
September 30, 2016 . . . . .	0.125	30
December 31, 2016 . . . . .	0.125	30
<u>Quarter ended</u>	<u>2015</u>	
	<u>Per share payment amount</u>	<u>Approximate amount paid</u>
March 31, 2015 . . . . .	\$0.125	\$31
June 30, 2015 . . . . .	0.125	31
September 30, 2015 . . . . .	0.125	31
December 31, 2015 . . . . .	0.125	30

The payment of dividends is a business decision made by our Board of Directors from time to time based on our earnings, financial position and prospects, and such other considerations as our Board of Directors considers relevant. Accordingly, while management currently expects that the Company will continue to pay the quarterly cash dividend, its dividend practice may change at any time.

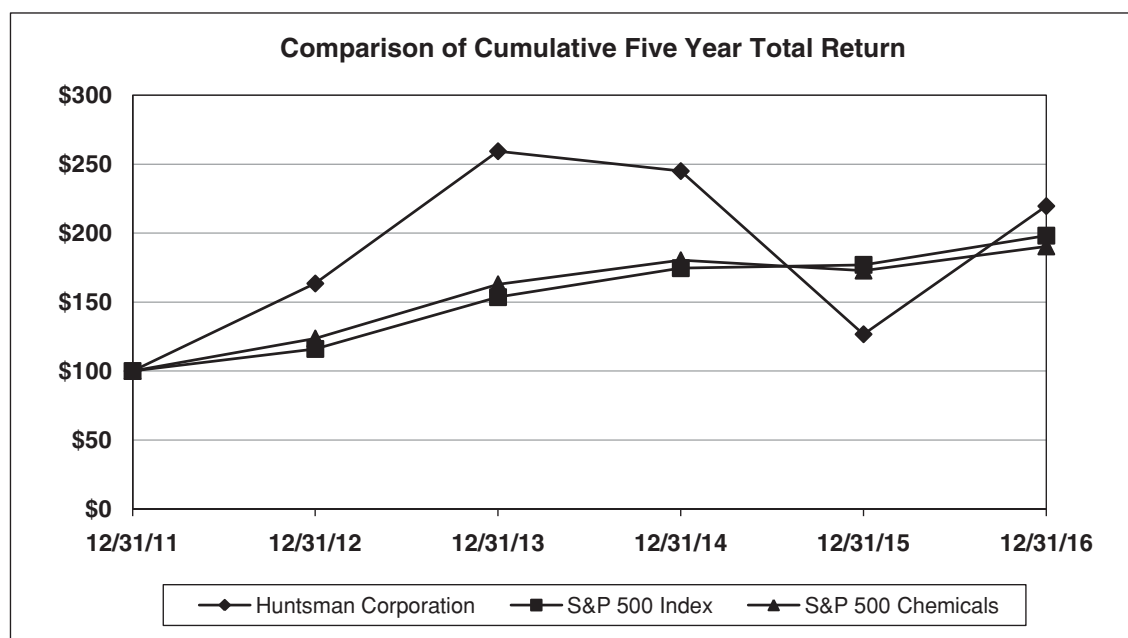
## PURCHASES OF EQUITY SECURITIES BY THE COMPANY

The following table provides information with respect to shares of restricted stock granted under our stock incentive plans that we withheld upon vesting to satisfy our tax withholding obligations during the three months ended December 31, 2016.

	Total number of shares purchased	Average price paid per share	Total number of shares purchased as part of publicly announced plans or programs(1)	Maximum number (or approximate dollar value) of shares that may yet be purchased under the plans or programs(1)
October . . . . .	—	\$ —	—	\$50,000,000
November . . . . .	—	—	—	50,000,000
December . . . . .	2,227	19.08	—	50,000,000
Total . . . . .	<u>2,227</u>	<u>\$19.08</u>		

- (1) On September 29, 2015, our Board of Directors authorized our Company to repurchase up to \$150 million in shares of our common stock. No shares were repurchased under our publicly announced stock repurchase program during the three months ended December 31, 2016. For more information, see “Note 22. Huntsman Corporation Stockholders’ Equity—Share Repurchase Program” to our consolidated financial statements.

## STOCK PERFORMANCE GRAPH



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## C O R P O R A T E I N F O R M A T I O N

### GLOBAL HEADQUARTERS

10003 Woodloch Forest Drive  
The Woodlands, Texas 77380  
Tel.: +1-281-719-6000

### INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Deloitte & Touche LLP

### STOCKHOLDER INQUIRIES

Inquiries from stockholders and other interested parties regarding our company are always welcome. Please direct your requests to:

Investor Relations  
10003 Woodloch Forest Drive  
The Woodlands, Texas 77380  
Tel.: +1-281-719-4610  
Email: [ir@huntsman.com](mailto:ir@huntsman.com)

### STOCK TRANSFER AGENT

By Regular Mail:  
Computershare  
P.O. Box 30170  
College Station, TX 77842 USA

By Overnight Delivery:  
Computershare  
211 Quality Circle  
Suite 210  
College Station, TX 77845 USA

Toll Free: 1-866-210-6997  
International: +1-201-680-6578

Website:  
[www.computershare.com/investor](http://www.computershare.com/investor)

### STOCK LISTING

Our common stock is listed on the New York Stock Exchange under the symbol HUN.



### ANNUAL MEETING

The 2017 annual meeting of stockholders will take place on Thursday, May 4, 2017 at 8:30 a.m., local time, at the following location:  
The Westin The Woodlands  
2 Waterway Square Place  
The Woodlands, TX 77380  
Tel.: +1-281-419-4300

### WEBSITE

[www.huntsman.com](http://www.huntsman.com)

### FORWARD-LOOKING STATEMENTS

Statements in this report that are not historical are forward-looking statements. These statements are based on management's current beliefs and expectations. The forward-looking statements in this report are subject to uncertainty and changes in circumstances and involve risks and uncertainties that may affect the company's operations, markets, products, services, prices and other factors as discussed in the Huntsman companies' filings with the U.S. Securities and Exchange Commission. Significant risks and uncertainties may relate to, but are not limited to, volatile global economic conditions, cyclical and volatile product markets, disruptions in production at manufacturing facilities, reorganization or restructuring of Huntsman's operations, including any delay of, or other negative developments affecting, the spin-off of Venator Materials Corporation, the ability to implement cost reductions and manufacturing optimization improvements in Huntsman businesses and realize anticipated cost savings, and other financial, economic, competitive, environmental, political, legal, regulatory and technological factors. The company assumes no obligation to provide revisions to any forward-looking statements should circumstances change, except as otherwise required by applicable laws.

**HUNTSMAN**

Enriching lives through innovation

Global Headquarters

Huntsman Corporation

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[www.venatorcorp.com](http://www.venatorcorp.com)