# UNITED STATES <br> SECURITIES AND EXCHANGE COMMISSION 

Washington, D.C. 20549
FORM 10-Q
(MARK ONE)
® QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
FOR THE QUARTERLY PERIOD ENDED JUNE 30, 2017TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE TRANSITION PERIOD FROM $\qquad$ TO $\qquad$
Commission File Number 1-4462

STEPAN COMPANY
(Exact name of registrant as specified in its charter)

| Delaware |  | $\mathbf{3 6 - 1 8 2 3 8 3 4}$ |
| :---: | :---: | :---: |
| (State or other jurisdiction <br> of incorporation or organization) |  | (I.R.S. Employer |
| Identification Number |  |  |

Edens and Winnetka Road, Northfield, Illinois 60093
(Address of principal executive offices)
Registrant's telephone number (847) 446-7500

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.
(Check one): Large accelerated filer
$\pm$ Accelerated filer
Non-accelerated filer
$\square \quad$ (Do not check if a smaller reporting company)
Smaller reporting company

Emerging growth company
If an emerging growth company, indicate by check mark if registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act) Yes $\square \quad$ No $\quad \mathbb{}$
Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

| Class | Outstanding at July 21, 2017 |
| :---: | :---: | :---: |

## Part I FINANCIAL INFORMATION

## Item 1 - Financial Statements

## STEPAN COMPANY CONDENSED CONSOLIDATED STATEMENTS OF INCOME Unaudited

| (In thousands, except per share amounts) | Three Months EndedJune 30 |  |  |  | Six Months Ended June 30 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2017 |  | 2016 |  |
| Net Sales | \$ | 495,101 | \$ | 454,603 | \$ | 963,370 | \$ | 900,500 |
| Cost of Sales |  | 405,135 |  | 361,672 |  | 781,306 |  | 714,070 |
| Gross Profit |  | 89,966 |  | 92,931 |  | 182,064 |  | 186,430 |
| Operating Expenses: |  |  |  |  |  |  |  |  |
| Selling |  | 13,259 |  | 14,572 |  | 26,744 |  | 28,262 |
| Administrative |  | 17,848 |  | 17,692 |  | 35,819 |  | 36,392 |
| Research, development and technical services |  | 14,296 |  | 14,256 |  | 27,717 |  | 28,038 |
| Deferred compensation expense |  | 5,016 |  | 2,434 |  | 5,392 |  | 5,154 |
|  |  | 50,419 |  | 48,954 |  | 95,672 |  | 97,846 |
|  |  |  |  |  |  |  |  |  |
| Business restructuring expenses (Note 14) |  | 586 |  | 1,061 |  | 1,372 |  | 1,061 |
|  |  |  |  |  |  |  |  |  |
| Operating Income |  | 38,961 |  | 42,916 |  | 85,020 |  | 87,523 |
| Other Income (Expense): |  |  |  |  |  |  |  |  |
| Interest, net |  | $(2,863)$ |  | $(3,417)$ |  | $(5,855)$ |  | $(7,031)$ |
| Other, net (Note 13) |  | 965 |  | (303) |  | 2,228 |  | (828) |
|  |  | $(1,898)$ |  | $(3,720)$ |  | $(3,627)$ |  | $(7,859)$ |
|  |  |  |  |  |  |  |  |  |
| Income Before Provision for Income Taxes |  | 37,063 |  | 39,196 |  | 81,393 |  | 79,664 |
| Provision for Income Taxes(a) |  | 9,167 |  | 10,695 |  | 21,585 |  | 23,244 |
| Net Income(a) |  | 27,896 |  | 28,501 |  | 59,808 |  | 56,420 |
| Net Income Attributable to <br> Noncontrolling Interests (Note 2) |  | (14) |  | (5) |  | (13) |  | (8) |
| Net Income Attributable to Stepan Company(a) | \$ | 27,882 | \$ | 28,496 | \$ | 59,795 | \$ | 56,412 |
|  |  |  |  |  |  |  |  |  |
| Net Income Per Common Share Attributable to Stepan Company (Note 9): |  |  |  |  |  |  |  |  |
| Basic(a) | \$ | 1.21 | \$ | 1.25 | \$ | 2.61 | \$ | 2.48 |
| Diluted(a) | \$ | 1.19 | \$ | 1.24 | \$ | 2.56 | \$ | 2.46 |


(a) The 2016 amounts for the noted items have been immaterially changed from the amounts originally reported as a result of the Company's fourth quarter 2016 adoption of Accounting Standards Update (ASU) No. 2016-9, Compensation-Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting.

The accompanying Notes to Condensed Consolidated Financial Statements are an integral part of these financial statements.

## CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

Unaudited

| (In thousands) | Three Months EndedJune 30 |  |  |  | Six Months Ended June 30 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2017 |  | 2016 |  |
| Net income | \$ | 27,896 | \$ | 28,501 | \$ | 59,808 | \$ | 56,420 |
| Other comprehensive income (loss): |  |  |  |  |  |  |  |  |
| Foreign currency translation adjustments (Note 10) |  | 5,997 |  | $(2,692)$ |  | 16,451 |  | 9,898 |
| Pension liability adjustment, net of tax (Note 10) |  | 567 |  | 565 |  | 1,132 |  | 1,129 |
| Derivative instrument activity, net of tax (Note 10) |  | (3) |  | (6) |  | (5) |  | (27) |
| Other comprehensive income (loss) |  | 6,561 |  | $(2,133)$ |  | 17,578 |  | 11,000 |
| Comprehensive income |  | 34,457 |  | 26,368 |  | 77,386 |  | 67,420 |
| Comprehensive (income) loss attributable to noncontrolling interests (Note 2) |  | (34) |  | 39 |  | (46) |  | 25 |
| Comprehensive income attributable to Stepan Company | \$ | 34,423 | \$ | 26,407 | \$ | 77,340 | \$ | 67,445 |

The accompanying Notes to Condensed Consolidated Financial Statements are an integral part of these financial statements.

## STEPAN COMPANY

## CONDENSED CONSOLIDATED BALANCE SHEETS <br> Unaudited

| (In thousands) | June 30, 2017 |  | December 31, 2016 |  |
| :---: | :---: | :---: | :---: | :---: |
| Assets |  |  |  |  |
| Current Assets: |  |  |  |  |
| Cash and cash equivalents | \$ | 223,818 | \$ | 225,743 |
| Receivables, net |  | 306,221 |  | 263,408 |
| Inventories (Note 6) |  | 178,372 |  | 173,663 |
| Other current assets |  | 25,018 |  | 22,727 |
| Total current assets |  | 733,429 |  | 685,541 |
| Property, Plant and Equipment: |  |  |  |  |
| Cost |  | 1,562,017 |  | 1,513,478 |
| Less: accumulated depreciation |  | (974,768) |  | (930,764) |
| Property, plant and equipment, net |  | 587,249 |  | 582,714 |
| Goodwill, net |  | 25,063 |  | 25,308 |
| Other intangible assets, net |  | 20,426 |  | 22,339 |
| Long-term investments (Note 3) |  | 26,907 |  | 24,055 |
| Other non-current assets |  | 13,665 |  | 13,933 |
| Total assets | \$ | 1,406,739 | \$ | 1,353,890 |
| Liabilities and Equity |  |  |  |  |
| Current Liabilities: |  |  |  |  |
| Current maturities of long-term debt (Note 12) | \$ | 21,219 | \$ | 28,154 |
| Accounts payable |  | 169,182 |  | 158,316 |
| Accrued liabilities |  | 83,991 |  | 110,795 |
| Total current liabilities |  | 274,392 |  | 297,265 |
| Deferred income taxes |  | 15,147 |  | 12,497 |
| Long-term debt, less current maturities (Note 12) |  | 283,222 |  | 288,859 |
| Other non-current liabilities |  | 125,279 |  | 119,353 |
| Commitments and Contingencies (Note 7) |  |  |  |  |
| Equity: |  |  |  |  |
| Common stock, $\$ 1$ par value; authorized $60,000,000$ shares; Issued shares 26,038,909 in 2017 and 25,894,782 shares in 2016 |  | 26,039 |  | 25,895 |
| Additional paid-in capital |  | 165,548 |  | 158,042 |
| Accumulated other comprehensive loss (Note 10) |  | $(109,920)$ |  | $(127,465)$ |
| Retained earnings |  | 699,640 |  | 649,070 |
| Less: Common treasury stock, at cost, 3,503,655 shares in 2017 and $3,470,084$ shares in 2016 |  | $(73,966)$ |  | (70,938) |
| Total Stepan Company stockholders' equity |  | 707,341 |  | 634,604 |
| Noncontrolling interests (Note 2) |  | 1,358 |  | 1,312 |
| Total equity |  | 708,699 |  | 635,916 |
| Total liabilities and equity | \$ | 1,406,739 | \$ | 1,353,890 |

The accompanying Notes to Condensed Consolidated Financial Statements are an integral part of these financial statements.

## CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS <br> Unaudited

| (In thousands) | Six Months Ended June 30 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  |
| Cash Flows From Operating Activities |  |  |  |  |
| Net income | \$ | 59,808 | \$ | 56,420 |
| Adjustments to reconcile net income to net cash provided by operating activities: |  |  |  |  |
| Depreciation and amortization |  | 37,729 |  | 36,453 |
| Deferred compensation |  | 5,392 |  | 5,154 |
| Realized and unrealized gains (losses) on long-term investments |  | $(2,576)$ |  | 205 |
| Stock-based compensation |  | 4,551 |  | 4,448 |
| Deferred income taxes |  | 2,741 |  | 6,146 |
| Other non-cash items |  | 2,972 |  | 272 |
| Changes in assets and liabilities: |  |  |  |  |
| Receivables, net |  | $(33,697)$ |  | $(33,586)$ |
| Inventories |  | $(1,477)$ |  | $(8,664)$ |
| Other current assets |  | $(2,050)$ |  | 335 |
| Accounts payable and accrued liabilities |  | $(11,777)$ |  | 8,586 |
| Pension liabilities |  | (58) |  | 365 |
| Environmental and legal liabilities |  | (469) |  | 767 |
| Deferred revenues |  | (162) |  | (564) |
| Net Cash Provided By Operating Activities (a) |  | 60,927 |  | 76,337 |
| Cash Flows From Investing Activities |  |  |  |  |
| Expenditures for property, plant and equipment |  | $(38,331)$ |  | $(40,696)$ |
| Business acquisition (Note 15) |  | $(4,339)$ |  | - |
| Other, net |  | $(2,184)$ |  | $(3,533)$ |
| Net Cash Used In Investing Activities |  | $(44,854)$ |  | $(44,229)$ |
| Cash Flows From Financing Activities |  |  |  |  |
| Revolving debt and bank overdrafts, net |  | $(7,221)$ |  | $(3,971)$ |
| Other debt repayments |  | $(5,714)$ |  | $(6,033)$ |
| Dividends paid |  | $(9,225)$ |  | $(8,477)$ |
| Company stock repurchased |  | $(1,500)$ |  | $(2,408)$ |
| Stock option exercises |  | 2,518 |  | 1,351 |
| Other, net |  | $(1,586)$ |  | (235) |
| Net Cash Used In Financing Activities (a) |  | $(22,728)$ |  | $(19,773)$ |
| Effect of Exchange Rate Changes on Cash |  | 4,730 |  | 1,933 |
| Net Increase (Decrease) in Cash and Cash Equivalents |  | $(1,925)$ |  | 14,268 |
| Cash and Cash Equivalents at Beginning of Period |  | 225,743 |  | 176,143 |
| Cash and Cash Equivalents at End of Period | \$ | 223,818 | \$ | 190,411 |
| Supplemental Cash Flow Information |  |  |  |  |
| Cash payments of income taxes, net of refunds | \$ | 18,288 | \$ | 11,074 |
| Cash payments of interest | \$ | 7,101 | \$ | 7,442 |

(a) The amounts for the six months ended June 30, 2016 have been immaterially changed from the originally reported amounts as a result of the Company's fourth quarter 2016 adoption of ASU No.2016-09, Compensation-Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting.

The accompanying Notes to Condensed Consolidated Financial Statements are an integral part of these financial statements.

## STEPAN COMPANY

## NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS <br> June 30, 2017 <br> Unaudited

## 1. CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

The condensed consolidated financial statements included herein have been prepared by Stepan Company (the Company), without audit, pursuant to the rules and regulations of the Securities and Exchange Commission (SEC). Certain information and footnote disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States of America (GAAP) have been condensed or omitted pursuant to such rules and regulations, although management believes that the disclosures are adequate and make the information presented not misleading. In the opinion of management, all adjustments, consisting only of normal recurring accruals, necessary to present fairly the Company's financial position as of June 30, 2017, results of operations for the three and six months ended June 30 , 2017 and 2016 , and cash flows for the six months ended June 30, 2017 and 2016, have been included. These financial statements and related footnotes should be read in conjunction with the financial statements and related footnotes included in the Company's 2016 Annual Report on Form 10-K.

## 2. RECONCILIATIONS OF EQUITY

Below are reconciliations of total equity, Company equity and equity attributable to noncontrolling interests for the six months ended June 30 , 2017 and 2016:

| (In thousands) | Total Equity |  | Stepan <br> Company <br> Equity |  | Noncontrolling Interests' Equity (3) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Balance at January 1, 2017 | \$ | 635,916 | \$ | 634,604 | \$ | 1,312 |
| Net income |  | 59,808 |  | 59,795 |  | 13 |
| Dividends |  | $(9,225)$ |  | $(9,225)$ |  | - |
| Common stock purchases (1) |  | $(3,191)$ |  | $(3,191)$ |  | - |
| Stock option exercises |  | 2,518 |  | 2,518 |  | - |
| Defined benefit pension adjustments, net of tax |  | 1,132 |  | 1,132 |  | - |
| Translation adjustments |  | 16,451 |  | 16,418 |  | 33 |
| Derivative instrument activity, net of tax |  | (5) |  | (5) |  | - |
| Other (2) |  | 5,295 |  | 5,295 |  | - |
| Balance at June 30, 2017 | \$ | 708,699 | \$ | 707,341 | \$ | 1,358 |
| (In thousands) | Total Equity |  | Stepan <br> Company <br> Equity |  | Noncontrolling Interests' Equity (3) |  |
| Balance at January 1, 2016 | \$ | 558,384 | \$ | 556,984 | \$ | 1,400 |
| Net income |  | 56,420 |  | 56,412 |  | 8 |
| Dividends |  | $(8,477)$ |  | $(8,477)$ |  | - |
| Common stock purchases (1) |  | $(2,643)$ |  | $(2,643)$ |  | - |
| Stock option exercises |  | 1,351 |  | 1,351 |  | - |
| Defined benefit pension adjustments, net of tax |  | 1,129 |  | 1,129 |  | - |
| Translation adjustments |  | 9,898 |  | 9,931 |  | (33) |
| Derivative instrument activity, net of tax |  | (27) |  | (27) |  | - |
| Other (2)(4) |  | 4,224 |  | 4,224 |  | - |
| Balance at June 30, 2016 | \$ | 620,259 | \$ | 618,884 | \$ | 1,375 |

(1) Includes the value of Company shares purchased in the open market and the value of Company common shares tendered by employees to settle statutory withholding taxes related to the receipt of performance awards and deferred compensation distributions.
(2) Primarily comprised of activity related to stock-based compensation and deferred compensation.
(3) Reflects the noncontrolling interest in the Company's China joint venture.
(4) Amounts for the noted line items have been immaterially changed from the amounts originally reported as a result of the Company's fourth quarter 2016 adoption of ASU No. 2016-9, Compensation-Stock Compensation (Topic 718): Improvements to Employee ShareBased Payment Accounting.

The following describe the financial instruments held by the Company at June 30, 2017, and December 31, 2016, and the methods and assumptions used to estimate the instruments' fair values:

## Cash and cash equivalents

Carrying value approximated fair value because of the short maturity of the instruments.

## Derivative assets and liabilities

Derivative assets and liabilities included the foreign currency exchange contracts discussed in Note 4. Fair value and carrying value were the same because the contracts were recorded at fair value. The fair values of the foreign currency contracts were calculated as the difference between the applicable forward foreign exchange rates at the reporting date and the contracted foreign exchange rates multiplied by the contracted notional amounts. See the table that follows the financial instrument descriptions for the reported fair values of derivative assets and liabilities.

## Long-term investments

Long-term investments included the mutual fund assets the Company held to fund a portion of its deferred compensation liabilities and all of its nonqualified supplemental executive defined contribution obligations (see the defined contribution plans section of Note 8). Fair value and carrying value were the same because the mutual fund assets were recorded at fair value. Fair values for the mutual funds were calculated using the published market price per unit at the reporting date multiplied by the number of units held at the reporting date. See the table that follows the financial instrument descriptions for the reported fair value of long-term investments.

## Debt obligations

The fair value of debt with original maturities greater than one year comprised the combined present values of scheduled principal and interest payments for each of the various loans, individually discounted at rates equivalent to those which could be obtained by the Company for new debt issues with durations equal to the average life to maturity of each loan. The fair values of the remaining Company debt obligations approximated their carrying values due to the short-term nature of the debt. The Company's fair value measurements for debt fall in level 2 of the fair value hierarchy.

At June 30, 2017, and December 31, 2016, the fair values of debt and the related carrying values, including current maturities, were as follows (the fair value and carrying value amounts are presented without regard to unamortized debt issuance costs of $\$ 1,064,000$ and $\$ 1,141,000$ as of June 30, 2017 and December 31, 2016, respectively):

| (In thousands) | $\begin{gathered} \text { June } 30, \\ 2017 \\ \hline \end{gathered}$ |  | $\begin{gathered} \text { December 31, } \\ 2016 \\ \hline \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Fair value | \$ | 306,814 | \$ | 316,364 |
| Carrying value |  | 305,505 |  | 318,154 |

The following tables present financial assets and liabilities measured on a recurring basis at fair value as of June 30, 2017, and December 31, 2016, and the level within the fair value hierarchy in which the fair value measurements fall:

| (In thousands) | $\begin{gathered} \text { June } 30, \\ 2017 \\ \hline \end{gathered}$ |  | Level 1 |  | Level 2 |  | Level 3 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mutual fund assets | \$ | 26,907 | \$ | 26,907 | \$ | - | \$ | - |
| Derivative assets: |  |  |  |  |  |  |  |  |
| Foreign currency contracts |  | 621 |  | - |  | 621 |  | - |
| Total assets at fair value | \$ | 27,528 | \$ | 26,907 | \$ | 621 | \$ | - |
| Derivative liabilities: |  |  |  |  |  |  |  |  |
| Foreign currency contracts | \$ | 807 | \$ | - | \$ | 807 | \$ | - |


| (In thousands) | $\begin{gathered} \text { December 31, } \\ 2016 \\ \hline \end{gathered}$ |  | Level 1 |  | Level 2 |  | Level 3 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mutual fund assets | \$ | 24,055 | \$ | 24,055 | \$ | - | \$ | - |
| Derivative assets: |  |  |  |  |  |  |  |  |
| Foreign currency contracts |  | 453 |  | - |  | 453 |  | - |
| Total assets at fair value | \$ | 24,508 | \$ | 24,055 | \$ | 453 | \$ | - |
| Derivative liabilities : |  |  |  |  |  |  |  |  |
| Foreign currency contracts | \$ | 469 | \$ | - | \$ | 469 | \$ | - |

## 4. DERIVATIVE INSTRUMENTS

The Company is exposed to certain risks relating to its ongoing business operations. The primary risk managed by the use of derivative instruments is foreign currency exchange risk. The Company holds forward foreign currency exchange contracts that are not designated as any type of accounting hedge as defined by GAAP. The Company uses these contracts to manage its exposure to exchange rate fluctuations on certain Company subsidiary cash, accounts receivable, accounts payable and other obligation balances that are denominated in currencies other than the entities' functional currencies. The forward foreign exchange contracts are recognized on the balance sheet as either an asset or a liability measured at fair value. Gains and losses arising from recording the foreign exchange contracts at fair value are reported in earnings as offsets to the losses and gains reported in earnings arising from the re-measurement of the asset and liability balances into the applicable functional currencies. At June 30, 2017, and December 31,2016 , the Company had open forward foreign currency exchange contracts, all with settlement dates of approximately one to three months, to buy or sell foreign currencies with U.S. dollar equivalent amounts of $\$ 50,428,000$ and $\$ 33,372,000$, respectively.

The fair values of the derivative instruments held by the Company on June 30,2017 , and December 31, 2016, are disclosed in Note 3 . Derivative instrument gains and losses for the three- and six-month periods ending June 30, 2017 and 2016, were immaterial. For amounts reclassified out of accumulated other comprehensive income (loss) (AOCI) into earnings for the three- and six-month periods ended June 30 , 2017 and 2016 , see Note 10.

## 5. STOCK-BASED COMPENSATION

On June 30, 2017, the Company had stock options and stock awards outstanding under its 2006 Incentive Compensation Plan and stock options, stock awards and stock appreciation rights (SARs) outstanding under its 2011 Incentive Compensation Plan. SARs granted prior to 2015 are cashsettled, and SARs granted after 2014, including the 2017 grant, are stock-settled. Stock options and SARs granted prior to 2017 cliff vest after two years. Stock options and SARs granted in 2017 have a three-year graded vesting feature, with one-third of the awards vesting each year. The Company has elected the straight-line method of expense attribution for the stock options and SARs with the graded vesting feature.

Compensation expense recorded for all stock options, stock awards and SARs was as follows:


The increase in stock-based compensation expense between the three-month periods ended June 30, 2017 and 2016, was primarily attributable to increased compensation related to cash-settled SARs. SARs compensation expense in the second quarter of 2017 was higher than in the second quarter of 2016 due to a greater quarter-over-quarter increase in the market value of Company common stock, which is used to calculate the fair value of SARs.

Unrecognized compensation costs for stock options, stock awards and SARs were as follows:

| (In thousands) | June 30, 2017 |  | December 31, 2016 |
| :--- | ---: | ---: | ---: | ---: |
|  | $\$$ | 1,854 | $\$ 95$ |
| Stock options | 6,419 | 5,514 |  |
| Stock awards | 3,853 | 1,859 |  |

The increases in unrecognized compensation costs for stock options, stock awards and SARs reflected the 2017 grants of:

|  | Shares |
| :--- | ---: |
| Stock options | 71,434 |
| Stock awards (at target) | 44,599 |
| SARs | 148,723 |

The unrecognized compensation costs at June 30, 2017, are expected to be recognized over weighted-average periods of 2.1 years, 1.8 years and 2.2 years for stock options, stock awards and SARs, respectively.

## INVENTORIES

The composition of inventories at June 30, 2017, and December 31, 2016, was as follows:

| (In thousands) | June 30, 2017 |  | December 31, 2016 |  |
| :---: | :---: | :---: | :---: | :---: |
| Finished goods | \$ | 110,366 | \$ | 127,597 |
| Raw materials |  | 68,006 |  | 46,066 |
| Total inventories | \$ | 178,372 | \$ | 173,663 |

Inventories are priced primarily using the last-in, first-out inventory valuation method. If the first-in, first-out inventory valuation method had been used for all inventories, total inventory balances would have been approximately $\$ 31,229,000$ and $\$ 25,872,000$ higher than reported at June 30 , 2017, and December 31, 2016, respectively.

## 7. CONTINGENCIES

There are a variety of legal proceedings pending or threatened against the Company. Some of these proceedings may result in fines, penalties, judgments or costs being assessed against the Company at some future time. The Company's operations are subject to extensive local, state and federal regulations, including the U.S. Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) and the Superfund amendments of 1986 (Superfund) and similar laws in the other countries in which the Company does business. Over the years, the Company has received requests for information related to or has been named by the government as a potentially responsible party (PRP) at a number of waste disposal sites where cleanup costs have been or may be incurred under CERCLA and similar state statutes. In addition, damages are being claimed against the Company in general liability actions for alleged personal injury or property damage in the case of some disposal and plant sites. The Company believes that it has made adequate provisions for the costs it may incur with respect to these sites.

As of June 30, 2017, the Company estimated a range of possible environmental and legal losses of $\$ 25.0$ million to $\$ 45.8$ million. At June 30 , 2017, and December 31, 2016, the Company's accrued liability for such losses, which represented the Company's best estimate within the estimated range of possible environmental and legal losses, was $\$ 25.0$ million and $\$ 25.8$ million, respectively. During the six-month period ended June 30 , 2017, cash outlays related to legal and environmental matters approximated $\$ 1.0$ million compared to $\$ 0.6$ million for the same period in 2016 .

For certain sites, the Company has responded to information requests made by federal, state or local government agencies but has received no response confirming or denying the Company's stated positions. As such, estimates of the total costs, or range of possible costs, of remediation, if any, or the Company's share of such costs, if any, cannot be determined with respect to these sites. Consequently, the Company is unable to predict the effect thereof on the Company's financial position, cash flows and results of operations. Based upon the Company's present knowledge with respect to its involvement at these sites, the possibility of other viable entities' responsibilities for cleanup, and the extended period over which any costs would be incurred, the Company believes that these matters, individually and in the aggregate, will not have a material effect on the Company's financial position. However, in the event of one or more adverse determinations with respect to such sites in any annual or interim period, the effect on the Company's cash flows and results of operations for those periods could be material.

Following are summaries of the material contingencies at June 30, 2017:

## Maywood, New Jersey Site

The Company's property in Maywood, New Jersey and property formerly owned by the Company adjacent to its current site and other nearby properties (Maywood site) were listed on the National Priorities List in September 1993 pursuant to the
provisions of CERCLA because of certain alleged chemical contamination. Pursuant to an Administrative Order on Consent entered into between United States Environmental Protection Agency (USEPA) and the Company for property formerly owned by the Company, and the issuance of an order by USEPA to the Company for property currently owned by the Company, the Company has completed various Remedial Investigation Feasibility Studies, and on September 24, 2014, USEPA issued its Record of Decision (ROD) for chemically-contaminated soil. USEPA has not yet issued a ROD for chemically-contaminated groundwater for the Maywood site. Based on the most current information available, the Company believes its recorded liability represents its best estimate of the cost of remediation for the Maywood site. The best estimate of the cost of remediation for the Maywood site could change as the Company continues to hold discussions with USEPA, as the design of the remedial action progresses or if other PRPs are identified. The ultimate amount for which the Company is liable could differ from the Company's current recorded liability.

In April 2015, the Company entered into an Administrative Settlement Agreement and Administrative Order on Consent with USEPA which requires payment of certain costs and performance of certain investigative and design work for chemically-contaminated soil. Based on the Company's review and analysis of this order, no changes to the Company's recorded liability for claims associated with soil remediation of chemical contamination were required.

In addition, under the terms of a settlement agreement reached on November 12, 2004, the United States Department of Justice and the Company agreed to fulfill the terms of a Cooperative Agreement reached in 1985 under which the United States will take title to and responsibility for radioactive waste removal at the Maywood site, including past and future remediation costs incurred by the United States. As such, the Company recorded no liability related to this settlement agreement.

## D'Imperio Property Site

During the mid-1970's, Jerome Lightman and the Lightman Drum Company disposed of hazardous substances at several sites in New Jersey. The Company was named as a PRP in a lawsuit in the U.S. District Court for the District of New Jersey that involved the D'Imperio Property Site located in New Jersey. In 2016, the PRPs were provided with updated remediation cost estimates which were considered in the Company's determination of its range of estimated possible losses and liability balance. The change in range of possible losses and liability balance were immaterial. Remediation work is continuing at this site. Based on current information, the Company believes that its recorded liability represents its best estimate of the cost of remediation for the D'Imperio site. Depending on the ultimate cost of the remediation at this site, the amount for which the Company is liable could differ from the current estimates.

## Wilmington Site

The Company is currently contractually obligated to contribute to the response costs associated with the Company's formerly-owned site at 51 Eames Street, Wilmington, Massachusetts. Remediation at this site is being managed by its current owner to whom the Company sold the property in 1980. Under the agreement, once total site remediation costs exceed certain levels, the Company is obligated to contribute up to five percent of future response costs associated with this site with no limitation on the ultimate amount of contributions. To date, the Company has paid the current owner $\$ 2.5$ million for the Company's portion of environmental response costs. The Company has recorded a liability for its portion of the estimated remediation costs for the site. The Company believes that based on current information its recorded liability for the claims related to this site is adequate. Depending on the ultimate cost of the remediation at this site, the amount for which the Company is liable could differ from the current estimates.

The Company and other prior owners also entered into an agreement in April 2004 waiving certain statute of limitations defenses for claims which may be filed by the Town of Wilmington, Massachusetts, in connection with this site. While the Company has denied any liability for any such claims, the Company agreed to this waiver while the parties continue to discuss the resolution of any potential claim which may be filed.

## Other U.S. Sites

Through the regular environmental monitoring of its plant production sites, the Company discovered levels of chemical contamination that were above thresholds allowed by law at two of its U.S. plants. The Company voluntarily reported its results to the applicable state environmental agencies. As a result, the Company is required to perform self-remediation of the affected areas. In the fourth quarter of 2016 , the Company recognized a charge for the estimated cost of remediating the sites. Based on current information, the Company believes that its recorded liability for the remediation is adequate. However, actual costs could differ from current estimates.

## Defined Benefit Pension Plans

The Company sponsors various funded qualified and unfunded non-qualified defined benefit pension plans, the most significant of which cover employees in the U.S. and U.K. locations. The U.S. and U.K. defined benefit pension plans are frozen and service benefits are no longer being accrued.

## Components of Net Periodic Benefit Cost

| (In thousands) | UNITED STATES |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Three Months Ended June 30 |  |  |  | Six Months Ended June 30 |  |  |  |
|  | 2017 |  | 2016 |  | 2017 |  | 2016 |  |
| Interest cost | \$ | 1,662 | \$ | 1,730 | \$ | 3,323 | \$ | 3,459 |
| Expected return on plan assets |  | $(2,322)$ |  | $(2,254)$ |  | $(4,643)$ |  | $(4,508)$ |
| Amortization of net actuarial loss |  | 788 |  | 882 |  | 1,576 |  | 1,764 |
| Net periodic benefit cost | \$ | 128 | \$ | 358 | \$ | 256 | \$ | 715 |


| (In thousands) | UNITED KINGDOM |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Three Months Ended June 30 |  |  |  | Six Months Ended June 30 |  |  |  |
|  | 2017 |  | 2016 |  | 2017 |  | 2016 |  |
| Interest cost | \$ | 147 | \$ | 194 | \$ | 290 | \$ | 387 |
| Expected return on plan assets |  | (198) |  | (238) |  | (390) |  | (476) |
| Amortization of net actuarial loss |  | 95 |  | 20 |  | 187 |  | 40 |
| Net periodic benefit cost (income) | \$ | 44 | \$ | (24) | \$ | 87 | \$ | (49) |

## Employer Contributions

## U.S. Plans

As a result of pension funding relief provisions included in the Highway and Transportation Funding Act of 2014, the Company expects to make no 2017 contributions to the funded U.S. qualified defined benefit plans. Approximately, $\$ 312,000$ is expected to be paid related to the unfunded nonqualified plans in 2017. Of such amount, \$200,000 had been paid as of June 30, 2017.

## U.K. Plan

The Company's U.K. subsidiary expects to contribute approximately $\$ 360,000$ to its defined benefit pension plan in 2017. Of such amount, $\$ 201,000$ had been contributed as of June 30, 2017.

## Defined Contribution Plans

The Company sponsors retirement savings defined contribution plans that cover U.S. and U.K. employees. The Company also sponsors a qualified profit sharing plan for its U.S. employees. The retirement savings and profit sharing defined contribution plans include a qualified plan and a nonqualified supplemental executive plan.

Defined contribution plan expenses for the Company's retirement savings and profit sharing plans were as follows:

| (In thousands) | Three Months Ended June 30 |  |  |  | Six Months EndedJune 30 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2017 |  | 2016 |  |
| Retirement savings plans | \$ | 1,224 | \$ | 1,254 | \$ | 2,483 | \$ | 2,545 |
| Profit sharing plan |  | 2,108 |  | 1,786 |  | 3,951 |  | 3,503 |
| Total defined contribution expense | \$ | 3,332 | \$ | 3,040 | \$ | 6,434 | \$ | 6,048 |

The Company funds the obligations of its non-qualified supplemental executive defined contribution plans (supplemental plans) through a rabbi trust. The trust comprises various mutual fund investments selected by the participants of the supplemental plans. In accordance with the accounting guidance for rabbi trust arrangements, the assets of the trust and the obligations of the supplemental plans are reported on the Company's consolidated balance sheets. The Company elected the fair value option for the mutual fund investment assets so that offsetting changes in the mutual fund values and defined contribution plan obligations would be recorded in earnings in the same period. Therefore, the mutual funds are reported at fair value with
any subsequent changes in fair value recorded in the consolidated statements of income. The liabilities related to the supplemental plans increase (i.e., supplemental plan expense is recognized) when the value of the trust assets appreciates and decrease when the value of the trust assets declines (i.e., supplemental plan income is recognized). At June 30, 2017, the balance of the trust assets was $\$ 1,910,000$, which equaled the balance of the supplemental plan liabilities (see the long-term investments section in Note 3 for further information regarding the Company's mutual fund assets).
9. EARNINGS PER SHARE

Below are the computations of basic and diluted earnings per share for the three and six months ended June 30, 2017 and 2016 :

| (In thousands, except per share amounts) | Three Months Ended June 30 |  |  |  | Six Months Ended June 30 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2017 |  | 2016 |  |
| Computation of Basic Earnings per Share |  |  |  |  |  |  |  |  |
| Net income attributable to Stepan Company | \$ | 27,882 | \$ | 28,496 | \$ | 59,795 | \$ | 56,412 |
| Weighted-average number of common shares outstanding |  | 22,953 |  | 22,760 |  | 22,927 |  | 22,746 |
| Basic earnings per share | \$ | 1.21 | \$ | 1.25 | \$ | 2.61 | \$ | 2.48 |
| Computation of Diluted Earnings per Share |  |  |  |  |  |  |  |  |
| Net income attributable to Stepan Company | \$ | 27,882 | \$ | 28,496 | \$ | 59,795 | \$ | 56,412 |
| Weighted-average number of shares outstanding |  | 22,953 |  | 22,760 |  | 22,927 |  | 22,746 |
| Add weighted-average net shares issuable from assumed exercise of options (under treasury stock method) (1) |  | 172 |  | 159 |  | 177 |  | 146 |
| Add weighted-average net shares related to unvested stock awards (under treasury stock method) |  | 8 |  | 6 |  | 8 |  | 5 |
| Add weighted-average net shares from assumed exercise of SARS (under treasury stock method) (1) |  | 143 |  | 41 |  | 143 |  | 20 |
| Add weighted-average contingently issuable net shares related to performance stock awards (under treasury stock method) |  | 105 |  | 38 |  | 101 |  | 33 |
| Weighted-average shares applicable to diluted earnings |  | 23,381 |  | 23,004 |  | 23,356 |  | 22,950 |
| Diluted earnings per share | \$ | 1.19 | \$ | 1.24 | \$ | 2.56 | \$ | 2.46 |

(1) Options/SARs to acquire 37,261 shares of Company common stock were excluded from the computations of diluted earnings per share for the six months ended June 30, 2017. Options/SARs to acquire 85,243 and 87,430 shares of Company common stock were excluded from the computations of diluted earnings per share for the three and six months ended June 30, 2016, respectively. Inclusion of the instruments would have had antidilutive effects on the computations of earnings per share.

## 10. ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

Below are the changes in the Company's AOCI balances by component (net of income taxes) for the three and six months ended June 30,2016 and 2017:

| (In thousands) | Foreign <br> Currency <br> Translation <br> Adjustments |  | Defined <br> Benefit <br> Pension Plan <br> Adjustments |  | Cash Flow Hedge Adjustments |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Balance at March 31, 2016 | \$ | $(75,758)$ | \$ | $(36,261)$ | \$ | 53 | \$ | $(111,966)$ |
| Other comprehensive income before reclassifications |  | $(2,648)$ |  | - |  | (9) |  | $(2,657)$ |
| Amounts reclassified from AOCI |  | - |  | 565 |  | 3 |  | 568 |
| Net current-period other comprehensive income |  | $(2,648)$ |  | 565 |  | (6) |  | $(2,089)$ |
| Balance at June 30, 2016 | \$ | (78,406) | \$ | (35,696) | \$ | 47 | \$ | $(114,055)$ |
|  |  |  |  |  |  |  |  |  |
| Balance at March 31,2017 | \$ | $(86,334)$ | \$ | $(30,225)$ | \$ | 98 | \$ | $(116,461)$ |
| Other comprehensive income before reclassifications |  | 5,977 |  | - |  | - |  | 5,977 |
| Amounts reclassified from AOCI |  | - |  | 567 |  | (3) |  | 564 |
| Net current-period other comprehensive income |  | 5,977 |  | 567 |  | (3) |  | 6,541 |
| Balance at June 30, 2017 | \$ | (80,357) | \$ | $(29,658)$ | \$ | 95 | \$ | (109,920) |
|  |  |  |  |  |  |  |  |  |
| Balance at December 31, 2015 | \$ | $(88,337)$ | \$ | $(36,825)$ | \$ | 74 | \$ | $(125,088)$ |
| Other comprehensive income before reclassifications |  | 9,931 |  | - |  | (32) | \$ | 9,899 |
| Amounts reclassified from AOCI |  | - |  | 1,129 |  | 5 | \$ | 1,134 |
| Net current-period other comprehensive income |  | 9,931 |  | 1,129 |  | (27) |  | 11,033 |
| Balance at June 30, 2016 | \$ | $\underline{(78,406)}$ | \$ | (35,696) | \$ | 47 | \$ | $(114,055)$ |
|  |  |  |  |  |  |  |  |  |
| Balance at December 31, 2016 | \$ | $(96,775)$ | \$ | (30,790) | \$ | 100 | \$ | $(127,465)$ |
| Other comprehensive income before reclassifications |  | 16,418 |  | - |  | - |  | 16,418 |
| Amounts reclassified from AOCI |  | - |  | 1,132 |  | (5) |  | 1,127 |
| Net current-period other comprehensive income |  | 16,418 |  | 1,132 |  | (5) |  | 17,545 |
| Balance at June 30, 2017 | \$ | $(80,357)$ | \$ | $(29,658)$ | \$ | 95 | \$ | (109,920) |

Information regarding the reclassifications out of AOCI for the three and six months ended June 30, 2017 and 2016, is displayed below:

| (In thousands) | Amount Reclassified from AOCI (a) |  |  |  |  |  |  |  | Affected Line Item in Consolidated Statements of Income |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Three Months Ended June 30 |  |  |  | Six Months EndedJune 30 |  |  |  |  |
|  | 2017 |  | 2016 |  | 2017 |  | 2016 |  |  |
| Amortization of defined benefit pension actuarial losses | \$ | (883) | \$ | (902) | \$ | $(1,763)$ | \$ | $(1,804)$ | (b) |
|  |  | 316 |  | 337 |  | 631 |  | 675 | Tax benefit |
|  | \$ | (567) | \$ | (565) | \$ | (1,132) | \$ | $(1,129)$ | Net of tax |
| Gains and losses on cash flow hedges: |  |  |  |  |  |  |  |  |  |
| Interest rate contracts | \$ | - | \$ | (7) | \$ | - | \$ | (13) | Interest, net |
| Foreign exchange contracts |  | 3 |  | 2 |  | 5 |  | 4 | Cost of sales |
|  |  | 3 |  | (5) |  | 5 |  | (9) | Total before tax |
|  |  | - |  | 2 |  | - |  | 4 | Tax benefit |
|  | \$ | 3 | \$ | (3) | \$ | 5 | \$ | (5) | Net of tax |
| Total reclassifications for the period | \$ | (564) | \$ | (568) | \$ | $\underline{(1,127)}$ | \$ | $(1,134)$ | Net of tax |

(a) Amounts in parentheses denote expense to statement of income.
(b) This component of accumulated other comprehensive income is included in the computation of net periodic benefit cost (see Note 8 for additional details).

## 11. SEGMENT REPORTING

The Company has three reportable segments: Surfactants, Polymers and Specialty Products. Net sales by segment for the three and six months ended June 30, 2017 and 2016, were as follows:

| (In thousands) | Three Months EndedJune 30 |  |  |  | Six Months Ended$\qquad$ June 30 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2017 |  | 2016 |  |
| Segment Net Sales |  |  |  |  |  |  |  |  |
| Surfactants | \$ | 329,334 | \$ | 298,587 | \$ | 651,937 | \$ | 608,547 |
| Polymers |  | 141,187 |  | 134,498 |  | 267,797 |  | 248,396 |
| Specialty Products |  | 24,580 |  | 21,518 |  | 43,636 |  | 43,557 |
| Total | \$ | 495,101 | \$ | 454,603 | \$ | 963,370 | \$ | 900,500 |

Segment operating income and reconciliations of segment operating income to consolidated income before income taxes for the three and six months ended June 30, 2017 and 2016, are summarized below:

| (In thousands) | Three Months Ended June 30 |  |  |  | Six Months EndedJune 30 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2017 |  | 2016 |  |
| Segment Operating Income |  |  |  |  |  |  |  |  |
| Surfactants | \$ | 31,030 | \$ | 27,232 | \$ | 69,267 | \$ | 64,477 |
| Polymers |  | 21,257 |  | 30,994 |  | 42,656 |  | 53,191 |
| Specialty Products |  | 5,439 |  | 1,788 |  | 6,714 |  | 4,121 |
| Segment operating income |  | 57,726 |  | 60,014 |  | 118,637 |  | 121,789 |
| Business restructuring |  | (586) |  | $(1,061)$ |  | $(1,372)$ |  | $(1,061)$ |
| Unallocated corporate expenses (1) |  | $(18,179)$ |  | $(16,037)$ |  | $(32,245)$ |  | $(33,205)$ |
| Consolidated operating income |  | 38,961 |  | 42,916 |  | 85,020 |  | 87,523 |
| Interest expense, net |  | $(2,863)$ |  | $(3,417)$ |  | $(5,855)$ |  | $(7,031)$ |
| Other, net |  | 965 |  | (303) |  | 2,228 |  | (828) |
| Consolidated income before income taxes | \$ | 37,063 | \$ | 39,196 | \$ | 81,393 | \$ | 79,664 |

(1) Unallocated corporate expenses primarily comprise corporate administrative expenses (e.g., corporate finance, legal, human resources, information systems, deferred compensation and environmental remediation) that are not included in segment operating income and not used to evaluate segment performance.
12. DEBT

At June 30, 2017, and December 31, 2016, debt comprised the following:

| (In thousands) | Maturity Dates | $\begin{gathered} \text { June } 30, \\ 2017 \\ \hline \end{gathered}$ |  | $\begin{gathered} \text { December 31, } \\ 2016 \\ \hline \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Unsecured private placement notes |  |  |  |  |  |
| $3.95 \%$ (net of unamortized debt issuance cost of $\$ 364$ and $\$ 382$ for 2017 and 2016, respectively) | 2021-2027 | \$ | 99,636 | \$ | 99,618 |
| $3.86 \%$ (net of unamortized debt issuance cost of $\$ 366$ and $\$ 390$ for 2017 and 2016, respectively) | 2019-2025 |  | 99,634 |  | 99,610 |
| $4.86 \%$ (net of unamortized debt issuance cost of $\$ 208$ and $\$ 225$ for 2017 and 2016, respectively) | 2017-2023 |  | 64,792 |  | 64,775 |
| $5.88 \%$ (net of unamortized debt issuance cost of $\$ 106$ and $\$ 116$ for 2017 and 2016, respectively) | 2017-2022 |  | 28,466 |  | 34,170 |
| $5.69 \%$ (net of unamortized debt issuance cost of $\$ 20$ and $\$ 28$ for 2017 and 2016, respectively) | 2017-2018 |  | 11,408 |  | 11,400 |
| Debt of foreign subsidiaries |  |  |  |  |  |
| Unsecured bank term loan, foreign currency | 2017 |  | 505 |  | 432 |
| Secured bank debt, foreign currency | 2017 |  | - |  | 7,008 |
| Total debt |  | \$ | 304,441 | \$ | 317,013 |
| Less current maturities |  |  | 21,219 |  | 28,154 |
| Long-term debt |  | \$ | 283,222 | \$ | 288,859 |

The Company has a committed $\$ 125,000,000$ multi-currency revolving credit agreement that expires on July 10 , 2019. The Company maintains standby letters of credit under its workers' compensation insurance agreements and for other purposes, as needed from time to time, which are issued under the revolving credit agreement. As of June 30, 2017, the Company had outstanding letters of credit totaling $\$ 5,053,000$ and no outstanding borrowing under the revolving credit agreement. There was $\$ 119,947,000$ available under the revolving credit agreement as of June 30 , 2017.

The various loan agreements contain provisions which, among others, require maintenance of certain financial ratios and place limitations on additional debt, investments and payment of dividends. Based on the loan agreement provisions that place limitations on dividend payments, unrestricted retained earnings (i.e., retained earnings available for dividend distribution) were \$193,274,000 and \$157,606,000 at June 30, 2017 and December 31, 2016, respectively.

## 13. OTHER, NET

Other, net in the consolidated statements of income included the following:

| (In thousands) | Three Months Ended June 30 |  |  |  | Six Months EndedJune 30 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2017 |  | 2016 |  |
| Foreign exchange losses | \$ | (15) | \$ | (464) | \$ | (499) | \$ | (775) |
| Investment income |  | 49 |  | 60 |  | 151 |  | 152 |
| Realized and unrealized gains (losses) on investments |  | 931 |  | 101 |  | 2,576 |  | (205) |
| Other, net | \$ | 965 | \$ | (303) | \$ | 2,228 | \$ | (828) |

In May 2016, the Company announced plans to shut down its Longford Mills, Ontario, Canada (Longford Mills) manufacturing facility, a part of the Surfactant reportable segment, by December 31, 2016. The shutdown plan was developed as an effort to improve the Company's asset utilization in North America and to reduce the Company's fixed cost base. Manufacturing operations of the Longford Mills plant ceased by the end of 2016, and production of goods manufactured at the facility was transferred to other Company North American production sites. Decommissioning of the assets is expected to continue throughout 2017 . As of June 30,2017 , an aggregate of $\$ 4,057,000$ of expense has been recognized since the beginning of the restructuring, reflecting $\$ 1,594,000$ of termination benefits for approximately 30 employees and $\$ 2,463,000$ for other expenses, principally asset decommissioning costs. In total, restructuring expenses related to the Longford Mills shutdown are expected to approximate $\$ 4,500,000$.

Below is a reconciliation of the December 31, 2016 and the June 30, 2017 restructuring liabilities:

| (In thousands) | Termination Benefits |  | Other <br> Expense |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Restructuring liability at December 31,2016 | \$ | 1,548 | \$ | 437 | \$ | 1,985 |
| Expense recognized |  | - |  | 786 |  | 786 |
| Amounts paid |  | (550) |  | (928) |  | $(1,478)$ |
| Foreign currency translation |  | 17 |  | 6 |  | 23 |
| Restructuring liability at March 31,2017 | \$ | 1,015 | \$ | 301 | \$ | 1,316 |
| Expense recognized |  | - |  | 454 |  | 454 |
| Amounts paid |  | (168) |  | (615) |  | (783) |
| Foreign currency translation |  | 20 |  | 3 |  | 23 |
| Restructuring liability at June 30, 2017 | \$ | 867 | \$ | 143 | \$ | 1,010 |

In June 2017, the Company eliminated 11 positions from manufacturing operations at its Singapore plant, which is part of the Company's Surfactant segment. The reduction in positions was made to better align the number of personnel with current business requirements and to reduce costs at that site. As a result of the reduction in workforce, termination expense of $\$ 132,000$ was recognized in the consolidated statements of income for the three and six months ended June 30, 2017. An immaterial amount of the termination pay remained payable at June 30, 2017.

## 15. ACQUISITIONS

## 2017 Acquisition Agreement

On June 13, 2017, the Company announced that it had reached an agreement with BASF Mexicana, S.A. DE C.V. (BASF) to acquire BASF's production facility in Ecatepec, Mexico, and a portion of its related surfactants business. The facility, which is near Mexico City, has over 50,000 metric tons of capacity, 124,000 square feet of warehouse space, a laboratory and office space. The acquisition is expected to be completed in the fourth quarter of 2017, subject to applicable regulatory approvals and other closing conditions. The acquisition is not expected to have a material effect on the Company's 2017 financial results. The acquired facility and business will be included in the Company's Surfactant segment.

## 2016 Business Acquisition

On October 3, 2016, the Company's subsidiary in Brazil acquired the commercial business of Tebras Tensoativos do Brazil Ltda. (Tebras) and the sulfonation production facility of PBC Industria Quimica Ltda. (PBC). The acquired businesses are included in the Company's Surfactants segment. The original purchase price of the acquisitions was $\mathrm{R} \$ 93,309,000$ (approximately $\$ 29,075,000$ ), of which R $\$ 70,000,000$ (approximately $\$ 21,812,000$ ) was paid from cash on hand, $\mathrm{R} \$ 9,000,000$ (approximately $\$ 2,804,000$ ) was deposited in escrow to cover certain potential losses as specified in the purchase agreement and $\mathrm{R} \$ 14,309,000$ (approximately $\$ 4,459,000$ ) for working capital adjustments was unpaid pending agreement on the adjustment amounts.

In the first quarter of 2017, the Company settled on and paid the working capital adjustment amounts that were outstanding at December 31, 2016. The payment totaled $\mathrm{R} \$ 13,925,000$ (approximately $\$ 4,339,000$ ), which made the adjusted purchase price of the acquisitions $\mathrm{R} \$ 92,925,000$ (approximately $\$ 28,955,000$ ).

As a result of the change in purchase price, the amount of the purchase price allocated to goodwill changed from $\$ 14,327,000$ to $\$ 14,207,000$. The values of all other assets acquired and liabilities assumed remained as previously reported. In
addition, the change in purchase price had no impact on the Company's current or previously reported results of operations. The following table summarizes the assets acquired and liabilities assumed:
(In thousands)
Assets:
$\quad$ Current assets
Property, plant and equipment
Identifiable intangible assets
Goodwill
Total assets acquired
Liabilities:
Current liabilities
Deferred tax liability
Total liabilities assumed
Net assets acquired

The acquired goodwill, which was assigned entirely to the Company's Surfactant segment, is not currently tax deductible. The goodwill reflects the opportunity of introducing the Company's broad line of surfactant products to the acquired entities' large customer base. Identifiable intangible assets included customer relationships $(\$ 4,331,000)$, a supply contract $(\$ 2,555,000)$ and non-compete agreements $(\$ 468,000)$. The amortization period for these intangibles at the time of acquisition were 13 years, four years and five years, respectively. The Company continues to evaluate the purchase price allocation, including the estimated fair values of assets acquired and liabilities assumed. Any changes to these amounts during the measurement period may result in an adjustment to the recorded amount of goodwill.

## 16. RECENT ACCOUNTING PRONOUNCEMENTS

In May 2014, the Financial Accounting Standards Board (FASB) issued ASU No. 2014-9, Revenue from Contracts with Customers (Topic 606). The new update was later amended by ASU No. 2015-14, Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date. The standard outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers. In addition, the ASU requires expanded disclosures about revenue recognition that enable the users of the financial statements to understand the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. ASU No. 2014-09 supersedes most of the previous revenue recognition guidance. For public entities, the new guidance, as amended, is effective for annual reporting periods beginning after December 15 , 2017 , including interim periods within that reporting period. An entity may use either a full retrospective or a modified retrospective approach to adopt the requirements of the new standard. The Company expects to apply the modified retrospective approach. Although the Company continues the process of determining the effects, if any, that adoption of ASU No. 2014-9 will have on Company financial statements, adoption of the new guidance is not currently expected to have a major effect on the Company's financial position, results of operations and cash flows. However, adoption of ASU No. 2014-9 is expected to affect the Company's disclosures by requiring further disaggregation of revenue and additional insight about performance obligations.

In July 2015, the FASB issued ASU No. 2015-11, Inventory (Topic 330):, Simplifying the Measurement of Inventory, which requires an entity to measure inventory within the scope of the update at the lower of cost and net realizable value. Prior guidance required inventory to be measured at the lower of cost or market. 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 the last-in, first-out method or the retail inventory method. For public entities, ASU No. 2015-11 is effective prospectively for annual periods beginning after December 15, 2016, and interim periods therein. On January 1, 2017, the Company adopted ASU No. 2015-11, which did not have a material effect on the Company's financial position, results of operations or cash flows.

In February 2016, the FASB issued ASU No. 2016-2, Leases (Topic 842). This guidance requires a dual approach for lessee accounting whereby a lessee will account for lease arrangements with terms greater than 12 months as either finance leases or operating leases. Both finance leases and operating leases will be recognized on the lessee's balance sheet as right-of-use assets and corresponding lease liabilities, with differing methodologies for income statement recognition. In addition, the ASU requires expanded qualitative and quantitative disclosures about the Company's lease arrangements. This guidance is effective for public business entities for fiscal years, and interim periods within those years, beginning after December 15, 2018. Early adoption is permitted. A modified retrospective approach is required for all leases existing or entered into after the beginning of the earliest comparative period in the consolidated financial statements. Most of the Company's operating leases will be required to be placed on the balance sheet. The Company is assessing the quantitative impact that adoption of ASU No. 2016-2 will have on its financial position, results of operations and cash flows.

In August 2016, the FASB issued ASU No. 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments, which adds or clarifies guidance on the classification of eight specific types of cash flows. The update is intended to reduce the existing diversity in practice with respect to the specific cash flow items. The amendments in ASU No. 2016-15 are effective for fiscal years beginning after December 15,2017 , including interim periods within those fiscal years. Early adoption is permitted. The Company is assessing the impact that adoption of ASU No. 2016-15 will have on its cash flow presentation. ASU No. 2016-15 is not expected to have an effect on the Company's financial position or results of operations.

In October 2016, the FASB issued ASU No. 2016-16, Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory. The update requires an entity to recognize the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. Current accounting guidance prohibits the recognition of current and deferred income taxes for an intra-entity asset transfer until the asset has been sold to an outside party. The amendments in ASU No. 2016-16 are effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. 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 update will 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. The Company is assessing the impact that adoption of ASU No. 2016-16 will have on its financial position, results of operations and cash flows.

In January 2017, the FASB issued ASU No. 2017-4, Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment, which eliminates Step 2 from the goodwill impairment test. When an indication of impairment was identified after performing the first step of the goodwill impairment test, Step 2 required that an entity determine the fair value at the impairment testing date of its assets and liabilities (including unrecognized assets and liabilities) using the same procedure that would be required in determining the fair value of assets acquired and liabilities assumed in a business combination. Under the amendments in ASU No. 2017-4, an entity would perform its annual, or interim, goodwill impairment test by comparing the fair value of a reporting unit with its carrying value. An entity would recognize an impairment charge for the amount by which the carrying value exceeds the reporting unit's fair value. In addition, an entity must consider income tax effects from any tax deductible goodwill on the carrying amount of the reporting unit when measuring the goodwill impairment loss, if applicable. A public business entity that is a SEC filer should adopt the amendments in ASU No. 2017-4 for its annual, or any interim, goodwill impairment tests in fiscal years beginning after December 15, 2019. It is not expected that the adoption of the guidance in ASU No. 2017-4 will have a material effect on the Company's financial position, results of operations or cash flows.

In March 2017, the FASB issued ASU No. 2017-7, Compensation - Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost, which amends existing guidance for the income statement presentation of the components of net periodic benefit cost for an entity's sponsored defined benefit pension and other postretirement plans. The amended guidance requires entities to include the current service component of net periodic benefit cost in employee compensation costs in the income statement and to include all other components elsewhere in the income statement outside of income from operations. In addition, only the service cost component of net benefit cost is eligible for capitalization. For the Company, ASU No. 2017-7 is effective for interim and annual periods beginning after December 31,2017 , with early adoption permitted as of the beginning of any annual period for which an entity's financial statements have not been issued. The requirements for the separate presentation of the service cost component and the other components of net periodic benefit cost must be adopted on a retrospective basis. The requirement to capitalize only the service component of net periodic benefit cost must be adopted on a prospective basis. Adoption of ASU No. 2017-7 will affect the presentation of the Company's results of operations but will not have a material effect on the Company's financial position or cash flows.

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

The following is management's discussion and analysis (MD\&A) of certain significant factors that have affected the Company's financial condition and results of operations during the interim periods included in the accompanying condensed consolidated financial statements.

Certain statements in this Quarterly Report on Form 10-Q, other than purely historical information, are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act). These statements include statements about Stepan Company's and its subsidiaries' (the Company) plans, objectives, strategies, financial performance and outlook, trends, the amount and timing of future cash distributions, prospects or future events and involve known and unknown risks that are difficult to predict. As a result, the Company's actual financial results, performance, achievements or prospects may differ materially from those expressed or implied by these forward-looking statements. In some cases, forward-looking statements can be identified by the use of words such as "may," "could," "expect," "intend," "plan," "seek," "anticipate," "believe," "estimate," "guidance," "predict," "potential," "continue," "likely," "will," "would," "illustrative" and variations of these terms and similar expressions, or the negative of these terms or similar expressions. Such forward-looking statements are necessarily based upon estimates and assumptions that, while considered reasonable by the Company and its management based on their knowledge and understanding of the business and industry, are inherently uncertain. These statements are not guarantees of future performance, and stockholders should not place undue reliance on forward-looking statements. There are a number of risks, uncertainties and other important factors, many of which are beyond the Company's control, that could cause the Company's actual results to differ materially from the forwardlooking statements contained in this Quarterly Report on Form 10-Q. Such risks, uncertainties and other important factors, include, among others, the risks, uncertainties and factors set forth under "Part I-Item IA. Risk Factors" in the Company's Annual Report on Form 10-K for the year ended December 31, 2016: the risks and uncertainties related to disruptions in production or accidents at, or loss of, any of the Company's manufacturing facilities; global competition and the Company's ability to successfully compete; volatility of raw material, natural gas and electricity costs as well as any disruption in their supply; disruptions in transportation or significant changes in transportation costs; reduced demand for Company products due to customer product reformulations or new technologies; the Company's ability to make acquisitions of suitable candidates and successfully integrate acquisitions; the Company's ability to keep and protect its intellectual property rights; international business risks, including fluctuations in currency exchange rates, legal restrictions and taxes; potentially adverse tax consequences due to the international scope of the Company's operations; compliance with anti-corruption, environmental, health and safety and product registration laws; the Company's ability to accurately estimate and maintain appropriate levels of recorded liabilities for existing and future contingencies; the Company's ability to operate within the limitations of its debt covenants; downgrades to the Company's credit ratings or disruptions to the Company's ability to access well-functioning capital markets; downturns in certain industries and general economic downturns; conflicts, military actions, terrorist attacks and general instability, particularly in certain energy-producing nations, along with increased security regulations; cost overruns, delays and miscalculations in capacity needs with respect to the Company's expansion or other capital projects; interruption of, damage to or compromise of the Company's IT systems and failure to maintain the integrity of customer, colleague or Company data; unfavorable resolution of litigation against us; and the Company's ability to retain its executive management and other key personnel. These factors are not necessarily all of the important factors that could cause the Company's actual financial results, performance, achievements or prospects to differ materially from those expressed in or implied by any of its forward-looking statements. Other unknown or unpredictable factors also could harm the Company's results. All forward-looking statements attributable to the Company or persons acting on the Company's behalf are expressly qualified in their entirety by the cautionary statements set forth above. Forward-looking statements speak only as of the date they are made, and the Company does not undertake or assume any obligation to update publicly any of these forward-looking statements to reflect actual results, new information or future events, changes in assumptions or changes in other factors affecting forward-looking statements, except to the extent required by applicable laws. If the Company updates one or more forward-looking statements, no inference should be drawn that the Company will make additional updates with respect to those or other forward-looking statements. The "Company," "we," "our" or "us" means Stepan Company and one or more of its subsidiaries only.

## Overview

The Company produces and sells intermediate chemicals that are used in a wide variety of applications worldwide. The overall business comprises three reportable segments:

- Surfactants - Surfactants, which accounted for 67 percent of Company consolidated net sales for the first half of 2017, are principal ingredients in consumer and industrial cleaning products such as detergents for washing clothes, dishes, carpets, floors and walls, as well as shampoos and body washes. Other applications include fabric softeners, germicidal quaternary compounds, lubricating ingredients, emulsifiers for spreading agricultural products and industrial applications such as latex systems, plastics and composites. Surfactants are manufactured at four North American sites (United States), three European sites (United Kingdom, France and Germany), four Latin American sites (Mexico, Colombia and two sites in Brazil) and two Asian sites (Philippines and Singapore). In 2016, the Company shut down its production facility in Canada, moving the production of goods previously manufactured in Canada to other Company North American production sites. Manufacturing operations at that facility ceased in the fourth quarter of 2016. Decommissioning activities will continue throughout 2017. In October 2016, the Company's subsidiary in Brazil acquired the commercial business of Tebras Tensoativos do Brazil Ltda. (Tebras) and the
sulfonation production facility of PBC Industria Quimica Ltda (PBC). The acquisition is expected to expand and diversify the Company's customer base for sulfonated products in Brazil and to provide an opportunity to sell the Company's broader surfactant portfolio to over 1,200 new customers who could benefit from the Company's technical service and formulation support. See the "Acquisition Agreement" section in this "Overview" for a description of recent acquisition activity.
- Polymers - Polymers, which accounted for 28 percent of consolidated net sales for the first half of 2017, include polyurethane polyols, polyester resins and phthalic anhydride. Polyurethane polyols are used in the manufacture of rigid foam for thermal insulation in the construction industry and are also a base raw material for coatings, adhesives, sealants and elastomers (collectively, CASE products). Powdered polyester resins are used in coating applications. CASE and polyester resins are collectively referred to as specialty polyols. Phthalic anhydride is used in unsaturated polyester resins, alkyd resins and plasticizers for applications in construction materials and components of automotive, boating and other consumer products. In addition, the Company uses phthalic anhydride internally in the production of polyols. In the United States, polyurethane polyols and phthalic anhydride are manufactured at the Company's Millsdale, Illinois, site and specialty polyols are manufactured at the Company's Columbus, Georgia, site. In Europe, polyurethane polyols are manufactured by the Company's subsidiary at its site in Wesseling, Germany, and specialty polyols are manufactured by the Company's subsidiary at its site in Brzeg Dolny, Poland. In China, polyurethane polyols and specialty polyols are produced at the Company's Nanjing, China, manufacturing plant.
- Specialty Products - Specialty products, which accounted for five percent of consolidated net sales for the first half of 2017 , include flavors, emulsifiers and solubilizers used in food, flavoring, nutritional supplement and pharmaceutical applications. Specialty products are primarily manufactured at the Company's Maywood, New Jersey, site and, in some instances, at outside contractors.


## Acquisition Agreement

On June 13, 2017, the Company announced that it had reached an agreement with BASF Mexicana, S.A. DE C.V. (BASF) to acquire BASF's production facility in Ecatepec, Mexico, and a portion of its related surfactants business. The facility, which is near Mexico City, has over 50,000 metric tons of capacity, 124,000 square feet of warehouse space, a laboratory and office space. The acquisition is expected to be completed in the fourth quarter of 2017 , subject to applicable regulatory approvals and other closing conditions. The acquisition is not expected to have a material effect on the Company's 2017 financial results. The acquisition supports the Company's growth strategy in Latin America. The Company believes that this acquisition should enhance its market position and supply capabilities for surfactants in Mexico and positions the Company to grow in both the consumer and functional surfactants markets.

## Deferred Compensation Plans

The accounting for the Company's deferred compensation plans can cause period-to-period fluctuations in Company expenses and profits. Compensation expense results when the values of Company common stock and mutual fund investment assets held for the plans increase, and compensation income results when the values of Company common stock and mutual fund investment assets decline. The pretax effect of all deferred compensation-related activities for the three and six months ended June 30, 2017 and 2016 and the income statement line items in which the effects of the activities were recorded are displayed in the following tables:

| (In millions) | Income (Expense) For the Three Months Ended June 30 |  |  |  | Change |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  |  |  |
| Deferred Compensation (Operating expenses) | \$ | (5.0) | \$ | (2.4) | \$ | (2.6) (1) |
| Realized/Unrealized Gains on Investments (Other, net) |  | 0.9 |  | 0.1 |  | 0.8 |
| Investment Income (Other, net) |  | - |  | - |  | - |
| Pretax Income Effect | \$ | (4.1) | \$ | (2.3) | \$ | (1.8) |
| (In millions) | Income (Expense) For the Six Months Ended June 30 |  |  |  |  |  |
|  | 2017 |  | 2016 |  | Change |  |
| Deferred Compensation (Operating expenses) | \$ | (5.4) | \$ | (5.2) | \$ | (0.2) (1) |
| Realized/Unrealized Gains (Losses) on Investments (Other, net) |  | 2.5 |  | (0.2) |  | 2.7 |
| Investment Income (Other, net) |  | 0.1 |  | 0.2 |  | (0.1) |
| Pretax Income Effect | \$ | (2.8) | \$ | (5.2) | \$ | 2.4 |

(1) See the applicable Corporate Expenses section of this MD\&A for details regarding the changes in deferred compensation expense.

## Effects of Foreign Currency Translation

The Company's foreign subsidiaries transact business and report financial results in their respective local currencies. As a result, foreign subsidiary income statements are translated into U.S. dollars at average foreign exchange rates appropriate for the reporting period. Because foreign exchange rates fluctuate against the U.S. dollar over time, foreign currency translation affects period-to-period comparisons of financial statement items (i.e., because foreign exchange rates fluctuate, similar period-to-period local currency results for a foreign subsidiary may translate into different U.S. dollar results). The following table presents the effects that foreign currency translation had on the period-over-period changes in consolidated net sales and various income line items for the three and six months ended June 30, 2017 and 2016:

|  | Three Months Ended$\qquad$ |  |  |  | Increase (Decrease) |  | (Decrease) Due to Foreign Currency Translation |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (In millions) | 2017 |  | 2016 |  |  |  |  |  |
| Net Sales | \$ | 495.1 | \$ | 454.6 | \$ | 40.5 | \$ | (4.1) |
| Gross Profit |  | 90.0 |  | 92.9 |  | (2.9) |  | (0.3) |
| Operating Income |  | 39.0 |  | 42.9 |  | (3.9) |  | (0.1) |
| Pretax Income |  | 37.1 |  | 39.2 |  | (2.1) |  | (0.1) |


|  | Six Months EndedJune 30 |  |  |  | Increase (Decrease) |  | (Decrease) <br> Due to Foreign Currency Translation |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (In millions) | 2017 |  | 2016 |  |  |  |  |  |
| Net Sales | \$ | 963.4 | \$ | 900.5 | \$ | 62.9 | \$ | (8.6) |
| Gross Profit |  | 182.1 |  | 186.4 |  | (4.3) |  | (0.4) |
| Operating Income |  | 85.0 |  | 87.5 |  | (2.5) |  | (0.1) |
| Pretax Income |  | 81.4 |  | 79.7 |  | 1.7 |  | (0.2) |

## RESULTS OF OPERATIONS

Three Months Ended June 30, 2017 and 2016

## Summary

Net income attributable to the Company for the second quarter of 2017 declined two percent to $\$ 27.9$ million, or $\$ 1.19$ per diluted share, from $\$ 28.5$ million, or $\$ 1.24$ per diluted share, for the second quarter of 2016 . Adjusted net income increased one percent to $\$ 30.9$ million, or $\$ 1.32$ per diluted share, from $\$ 30.7$ million, or $\$ 1.33$ per diluted share (see the "Reconciliation of Non-GAAP Adjusted Net Income and Diluted Earnings per Share" section of this MD\&A for reconciliations between reported net income attributable to the Company and related earnings per diluted share and non-GAAP adjusted net income and related earnings per diluted share). Below is a summary discussion of the major factors leading to the quarter-over-quarter changes in net sales, profits and expenses. A detailed discussion of segment operating performance for the second quarter of 2017 compared to the second quarter of 2016 follows the summary.

Consolidated net sales increased $\$ 40.5$ million, or nine percent, between quarters. The increase was attributable to higher selling prices, which favorably affected the quarter-over-quarter change in net sales by $\$ 62.5$ million. The pass through of certain increased raw material costs led to the increased selling prices. Sales volume declined four percent, which unfavorably impacted the quarter-over-quarter change in net sales by $\$ 17.9$ million. Specialty Product sales volume increased three percent between quarters, while Surfactant and Polymer sales volumes declined three percent and seven percent, respectively. The effects of foreign currency translation negatively impacted the quarter-over-quarter net sales change by $\$ 4.1 \mathrm{million}$.

Operating income for the second quarter of 2017 decreased $\$ 4.0$ million, or nine percent, from operating income for the second quarter of 2016 . Consolidated operating income was negatively affected by deferred compensation expense which increased $\$ 2.6$ million quarter over quarter. With respect to the segments, Surfactant and Specialty Product operating incomes improved but were more than offset by a decline in Polymer results. Polymer operating income was negatively impacted by higher raw material costs and lower sales volume.

Operating expenses (including business restructuring expenses) for the second quarter of 2017 increased $\$ 1.0$ million, or two percent, over operating expenses for the second quarter of 2016 . Changes in the individual income statement line items that comprise the Company's operating expenses were as follows:

- Selling expenses declined $\$ 1.3$ million, or nine percent, quarter over quarter. The decrease was primarily attributable to lower bad debt expense ( $\$ 0.5$ million) and the accumulation of smaller decreases for a number of other expense items.
- Administrative expenses increased $\$ 0.2$ million, or one percent, quarter over quarter.
- Research, development and technical service (R\&D) expenses increased less than $\$ 0.1$ million.
- Deferred compensation expense increased $\$ 2.6$ million, or 106 percent, quarter over quarter primarily due to a larger increase in the market price of Company common stock in the second quarter of 2017 than in the second quarter of 2016. Greater investment gains from mutual fund investments held to fund the deferred compensation plan liabilities also contributed. See the 'Overview' and 'Corporate Expenses'sections of this MD\&A for further details.
- Business restructuring expenses were $\$ 0.6$ million in the second quarter of 2017 compared to $\$ 1.1$ million in the same quarter of last year. Approximately $\$ 0.5$ million of the restructuring expense related to the continued asset decommissioning for the Company's plant in Canada, which ceased operations in the fourth quarter of 2016 . The remaining $\$ 0.1$ million of restructuring expense related to a second quarter 2017 workforce reduction at the Company's Singapore plant. The reduction in positions was made to better align the number of personnel with current business requirements and to reduce costs at that site. See Note 14 to the condensed consolidated financial statements for additional information regarding the Company's restructuring activities.

Net interest expense for the second quarter of 2017 declined $\$ 0.6$ million, or 16 percent, from net interest expense for the second quarter of 2016 primarily due to lower average debt levels and higher interest income earned on excess cash.

Other, net was $\$ 1.0$ million of income for the second quarter of 2017 compared to $\$ 0.3$ million of expense for the same period of 2016 . The Company reported $\$ 1.0$ million of investment gains (including realized and unrealized gains and losses) for the Company's deferred compensation and supplemental defined contribution mutual fund assets in the second quarter of 2017 compared to $\$ 0.2$ million of income in last year's second quarter. In addition, foreign exchange losses totaled less than $\$ 0.1$ million in the second quarter of 2017 compared to losses of $\$ 0.5$ million in same period of 2016 .

The effective tax rate was 24.7 percent for the second quarter of 2017 compared to 27.3 percent for the second quarter of 2016 . The most significant contributor to the decrease was higher excess tax benefits derived from stock based compensation awards exercised or distributed in the second quarter of 2017 versus the second quarter of 2016 .

## Segment Results

| (Dollars in thousands) Net Sales | For the Three Months Ended |  |  |  | Increase |  | Percent <br> Change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { June } 30, \\ 2017 \\ \hline \end{gathered}$ |  | June 30,$2016$ |  |  |  |  |
| Surfactants | \$ | 329,334 | \$ | 298,587 | \$ | 30,747 | 10 |
| Polymers |  | 141,187 |  | 134,498 |  | 6,689 | 5 |
| Specialty Products |  | 24,580 |  | 21,518 |  | 3,062 | 14 |
| Total Net Sales | \$ | 495,101 | \$ | 454,603 | \$ | 40,498 | 9 |


| (Dollars in thousands) Operating Income | For the Three Months Ended |  |  |  | Increase (Decrease) |  | Percent <br> Change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | June 30,$2017$ |  | $\begin{gathered} \text { June } 30, \\ 2016 \\ \hline \end{gathered}$ |  |  |  |  |
| Surfactants | \$ | 31,030 | \$ | 27,232 | \$ | 3,798 | 14 |
| Polymers |  | 21,257 |  | 30,994 |  | $(9,737)$ | -31 |
| Specialty Products |  | 5,439 |  | 1,788 |  | 3,651 | 204 |
| Segment Operating Income | \$ | 57,726 | \$ | 60,014 | \$ | $(2,288)$ | -4 |
| Corporate Expenses, Excluding Deferred Compensation and Restructuring |  | 13,163 |  | 13,603 |  | (440) | -3 |
| Deferred Compensation Expense |  | 5,016 |  | 2,434 |  | 2,582 | 106 |
| Business Restructuring |  | 586 |  | 1,061 |  | (475) | -45 |
| Total Operating Income | \$ | 38,961 | \$ | 42,916 | \$ | $\underline{(3,955)}$ | -9 |

## Surfactants

Surfactant net sales for the second quarter of 2017 increased $\$ 30.7$ million, or 10 percent, over net sales for the second quarter of 2016 . Higher selling prices, resulting primarily from the pass through of higher costs for certain raw materials, had a favorable $\$ 44.4$ million effect on the quarter-over-quarter change in net sales. A three percent decline in sales volume and the unfavorable effects of foreign currency translation offset the impact of increased selling prices by $\$ 9.3$ million and $\$ 4.4$ million, respectively. The Latin America region reported improved sales volume due to sales volume associated with the October 2016 acquisitions of Tebras and PBC , while sales volumes in other regions declined. A quarter-over-quarter comparison of net sales by region follows:

| (Dollars in thousands) | For the Three Months Ended |  |  |  | Increase (Decrease) |  | Percent Change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \hline \text { June } 30, \\ 2017 \\ \hline \end{gathered}$ |  | $\begin{gathered} \hline \text { June } 30, \\ 2016 \end{gathered}$ |  |  |  |  |
| North America | \$ | 199,016 | \$ | 185,714 | \$ | 13,302 | 7 |
| Europe |  | 65,289 |  | 57,420 |  | 7,869 | 14 |
| Latin America |  | 48,559 |  | 37,720 |  | 10,839 | 29 |
| Asia |  | 16,470 |  | 17,733 |  | $(1,263)$ | -7 |
| Total Surfactants Segment | \$ | 329,334 | \$ | 298,587 | \$ | 30,747 | 10 |

Net sales for North American operations increased seven percent between quarters. Higher selling prices favorably affected the quarter-over-quarter change in net sales by $\$ 21.7$ million. A four percent decline in sales volume and the unfavorable effect of foreign currency translation offset the impact of higher selling prices by $\$ 8.0$ million and $\$ 0.4$ million, respectively. On average, selling prices increased 12 percent quarter over quarter, mainly as a result of the pass through of certain increased raw material costs to customers, and a more favorable mix of sales. Declines in sales volume for commodity products used in laundry and cleaning and personal care applications, due to lower demand from existing customers, accounted for most of the North American surfactant sales volume decrease. Increased sales volumes of products used in household, industrial and institutional (HI\&I), agricultural chemical and oilfield applications partially offset the declines in sales volumes of commodity laundry and cleaning and personal care products. The increases were principally attributable to stronger demand from major customers.

Net sales for European operations increased 14 percent due to a 24 percent increase in selling prices, partially offset by the unfavorable effects of foreign currency translation and a three percent decline in sales volume. The selling price increase, which primarily resulted from the pass through of higher costs for certain raw materials, had a $\$ 13.5$ million positive impact on the quarter-
over-quarter change in net sales, while foreign currency translation and lower sales volume unfavorably affected the net sales change by $\$ 4.0$ million and $\$ 1.6$ million, respectively. The decrease in sales volume was primarily attributable to lower demand for general surfactants sold to distributors and for commodity personal care products, partially offset by increased sales volumes for laundry and cleaning products and agricultural chemicals. The decline in commodity personal care sales volume was attributable to lost business for the period resulting from uncompetitive pricing precipitated by a disadvantaged cost position for certain raw materials. A stronger U.S. dollar relative to the British pound sterling and European euro led to the foreign currency translation effect.

Net sales for Latin American operations increased 29 percent due to higher selling prices, a nine percent increase in sales volume and the favorable effects of foreign currency translation, which accounted for $\$ 6.2$ million, $\$ 3.5$ million and $\$ 1.1$ million, respectively, of the quarter-over-quarter increase in net sales. The improved sales volume reflected new business associated with the October 2016 acquisitions of Tebras and PBC, partially offset by lower demand and lost commodity business for products used in laundry and cleaning applications. Selling prices increased 15 percent due to the pass through to customers of higher quarter-over-quarter raw material costs and a more favorable mix of sales. The foreign currency translation effect primarily resulted from the quarter-over-quarter strengthening of the Brazilian real relative to the U.S. dollar.

Net sales for Asian operations declined seven percent largely due to a 23 percent decrease in sales volume and the unfavorable effects of foreign currency translation, which negatively affected the quarter-over-quarter change in net sales by $\$ 4.2$ million and $\$ 1.1$ million, respectively. Higher selling prices, driven by the pass through of certain increased raw material costs to customers, favorably impacted the change in net sales by $\$ 4.0$ million. The sales volume decline was primarily due to weaker demand for commodity laundry and cleaning products. A weaker Philippine peso relative to the U.S. dollar caused the negative foreign currency translation effect.

Surfactant operating income for the second quarter of 2017 increased $\$ 3.8$ million, or 14 percent, over operating income for the second quarter of 2016. Gross profit increased $\$ 3.1$ million on improved results from all regions except Asia. Operating expenses decreased $\$ 0.7$ million, or three percent. Quarter-over-quarter comparisons of gross profit by region and total segment operating expenses and operating income follow:

| (Dollars in thousands) | For the Three Months Ended |  |  |  | Increase(Decrease) |  | Percent Change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { June } 30, \\ 2017 \\ \hline \end{gathered}$ |  | $\begin{aligned} & \hline \text { June } 30, \\ & 2016 \text { (a) } \\ & \hline \end{aligned}$ |  |  |  |  |
| Gross Profit |  |  |  |  |  |  |  |
| North America | \$ | 37,048 | \$ | 35,355 | \$ | 1,693 | 5 |
| Europe |  | 5,767 |  | 5,292 |  | 475 | 9 |
| Latin America |  | 7,690 |  | 6,417 |  | 1,273 | 20 |
| Asia |  | 4,034 |  | 4,413 |  | (379) | -9 |
| Surfactants Segment Gross Profit | \$ | 54,539 | \$ | 51,477 | \$ | 3,062 | 6 |
| Operating Expenses |  | 23,509 |  | 24,245 |  | (736) | -3 |
| Surfactants Segment Operating Income | \$ | 31,030 | \$ | 27,232 | \$ | 3,798 | 14 |

(a) In 2017, the Company changed its internal financial statement classification for certain transportation costs, transferring such costs from operating expenses to cost of sales. In this segment discussion, the 2016 North America gross profit and total operating expenses have been changed from the amounts presented in 2016 to make such amounts consistent with the current year classification. Surfactants segment operating income remained unchanged.

Gross profit for North American operations increased five percent quarter over quarter largely due to a more profitable sales mix of products and lower manufacturing overhead costs resulting from the closure of the Company's Canada manufacturing operations in the fourth quarter of 2016.

Gross profit for European operations increased nine percent between quarters largely due to higher second quarter 2016 expenses arising from a charge to record a customer claim, which did not recur in 2017. The lower quarter-over-quarter expense more than offset the effect of the three percent decline in sales volume and a $\$ 0.3$ million negative impact for foreign currency translation.

Gross profit for Latin American operations increased 20 percent due to the nine percent improvement in sales volume, a more profitable mix of sales and a $\$ 0.3$ million favorable effect of foreign currency translation.

Gross profit for Asia declined nine percent quarter over quarter primarily due to the 23 percent decrease in sales volume. The impact of the sales volume decline was partially offset by better sales margins precipitated by a more favorable mix of sales.

Operating expenses for the Surfactant segment declined $\$ 0.7$ million, or three percent, quarter over quarter principally due to lower U.S. marketing expenses.

## Polymers

Polymer net sales for the second quarter of 2017 increased $\$ 6.7$ million, or five percent, over net sales for the second quarter of 2016 . Higher selling prices, resulting from the pass through of increased costs for certain raw materials, favorably affected the quarter-over-quarter net sales increase by $\$ 15.3$ million. Sales volume declined seven percent, which negatively impacted the change in net sales by $\$ 8.9$ million. All polymer regions reported decreased sales volumes. The effects of foreign currency translation had a $\$ 0.3$ million positive effect on net sales. A quarter-over-quarter comparison of net sales by region follows:

| (Dollars in thousands) | For the Three Months Ended |  |  |  | Increase (Decrease) |  | Percent Change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \hline \text { June } 30, \\ 2017 \\ \hline \end{gathered}$ |  |  | $\begin{aligned} & \hline \text { ne } 30, \\ & 2016 \end{aligned}$ |  |  |  |
| North America | \$ | 86,925 | \$ | 85,131 | \$ | 1,794 | 2 |
| Europe |  | 46,854 |  | 41,364 |  | 5,490 | 13 |
| Asia and Other |  | 7,408 |  | 8,003 |  | (595) | -7 |
| Total Polymers Segment | \$ | 141,187 | \$ | 134,498 | \$ | 6,689 | 5 |

Net sales for North American operations increased two percent due to higher selling prices, partially offset by lower sales volume. Selling prices increased eight percent, which had a $\$ 6.2$ million positive effect on the quarter-over-quarter change in net sales. The pass through of certain higher quarter-over-quarter raw material costs to customers led to the increased selling prices. Sales volume declined five percent, which unfavorably impacted the net sales change by $\$ 4.4$ million. Sales volume of polyols used in rigid foam applications declined three percent mainly due to lost share from a customer. Phthalic anhydride sales volume declined 16 percent, as last year's volumes benefited from sales to a phthalic anhydride co-producer resulting from an extended maintenance shutdown that did not recur in 2017. Sales volume of specialty polyols increased five percent due to greater demand for product used in CASE applications.

Net sales for European operations increased 13 percent due to higher selling prices and the favorable effects of foreign currency translation, which accounted for $\$ 7.8$ million and $\$ 0.5$ million, respectively, of the quarter-over-quarter net sales increase. Selling prices increased 20 percent primarily due to the pass through of cost increases for certain raw materials. Sales volume declined seven percent, which had a $\$ 2.8$ million negative effect on the net sales change. Reduced demand from a number of existing customers using polyols in rigid foam insulation led to the decline in sales volume. A market-wide shortage of third-party material needed to blend and react with the Company's polyol product led to the reduced polyol demand. Sales volume for specialty polyols used in CASE applications increased 31 percent quarter over quarter, which reflected the Company's successful efforts to utilize the capacity of its new reactor in Poland.

Net sales for Asia and Other operations declined seven percent quarter over quarter due primarily to a decline in sales volume.

Polymer operating income for the second quarter of 2017 declined $\$ 9.7$ million, or 31 percent, from operating income for the same period of last year. Gross profit decreased $\$ 9.9$ million, or 26 percent, primarily due to higher material costs and lower sales volume. All regions reported lower quarter-over-quarter gross profit. Operating expenses declined $\$ 0.2$ million, or three percent, between quarters. Quarter-over-quarter comparisons of gross profit by region and total segment operating expenses and operating income follow:

| (Dollars in thousands) | For the Three Months Ended |  |  |  | Decrease |  | Percent Change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \hline \text { June } 30, \\ 2017 \end{gathered}$ |  | $\begin{aligned} & \text { June 30, } \\ & 2016 \text { (a) } \end{aligned}$ |  |  |  |  |
| Gross Profit |  |  |  |  |  |  |  |
| North America | \$ | 21,400 | \$ | 28,502 | \$ | $(7,102)$ | -25 |
| Europe |  | 7,208 |  | 8,806 |  | $(1,598)$ | -18 |
| Asia and Other |  | (166) |  | 1,066 |  | $(1,232)$ | NM |
| Polymers Segment Gross Profit | \$ | 28,442 | \$ | 38,374 | \$ | $(9,932)$ | -26 |
| Operating Expenses |  | 7,185 |  | 7,380 |  | (195) | -3 |
| Polymers Segment Operating Income | \$ | 21,257 | \$ | 30,994 | \$ | $\underline{(9,737)}$ | -31 |

(a) In 2017, the Company changed its internal financial statement classification for certain transportation costs, transferring such costs from operating expenses to cost of sales. In this segment discussion, the 2016 North America gross profit and total operating expenses have been changed from the amounts presented in 2016 to make such amounts consistent with the current year classification. Polymers segment operating income remained unchanged.

Gross profit for North American operations declined 25 percent quarter over quarter primarily due to higher raw material costs, which reduced margins, and the five percent decline in sales volume. Competitive pressure prohibited the Company from passing through the full extent of raw material increases to customers.

Gross profit for European operations declined 18 percent due to reduced sales margins driven by higher raw material costs and due to the previously discussed seven percent decrease in sales volume.

Gross profit for Asia and Other operations declined $\$ 1.2$ million due to higher overhead costs resulting from not yet fully utilizing the operating capacity at the plant in Nanjing, China, and to the 17 percent decline in sales volume. In addition, last year's second quarter benefited from production of polyol to build up inventory to support the Company's Germany plant in advance of its mandatory third quarter 2016 inspection shutdown.

Operating expenses for the Polymers segment declined $\$ 0.2$ million, or three percent, quarter over quarter. Selling expenses declined $\$ 0.4$ million primarily due to lower bad debt expense in Europe. The decrease in selling expenses was partially offset by increased R\&D expense.

## Specialty Products

Net sales for the second quarter of 2017 increased $\$ 3.1$ million, or 14 percent, over net sales for the second quarter of 2016 . A more favorable mix of sales resulting from the timing of orders for certain products used in flavor applications and a three percent increase in sales volume led to the higher net sales. Operating income increased $\$ 3.7$ million quarter over quarter due to the favorable mix of flavor products and to improved margins for food ingredient and nutritional supplement products.

## Corporate Expenses

Corporate expenses, which are comprised of deferred compensation and other operating expenses that are not allocated to the reportable segments, increased $\$ 1.7$ million between quarters to $\$ 18.8$ million for the second quarter of 2017 from $\$ 17.1$ million for the second quarter of 2016 . The increase in corporate expense was primarily attributable to higher expenses for deferred compensation ( $\$ 2.6$ million) and consulting fees ( $\$ 0.5$ million), partially offset by a decrease in the previously discussed restructuring expenses ( $\$ 0.5$ million) and the accumulation of a number of items with smaller declines.

The $\$ 2.6$ million increase in deferred compensation expense reflected an $\$ 8.33$ per share increase in the value of Company common stock in the second quarter of 2017 compared to a $\$ 4.24$ per share increase for the second quarter of 2016 . A greater quarter-over-quarter increase in the value of the mutual fund investments held for the Company's deferred compensation plans also contributed to the increased deferred compensation expense. The following table presents the quarter-end Company common stock market prices used in the computation of deferred compensation expenses for the three months ended June 30, 2017 and 2016:

|  | 2017 |  |  |  | 2016 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | June 30 |  | March 31 |  | June 30 |  | March 31 |  |
| Company Common Stock Price | \$ | 87.14 | \$ | 78.81 | \$ | 59.53 | \$ | 55.29 |

## Six Months Ended June 30, 2017 and 2016

## Summary

Net income attributable to the Company for the first half of 2017 increased six percent to $\$ 59.8$ million, or $\$ 2.56$ per diluted share, from $\$ 56.4$ million, or $\$ 2.46$ per diluted share, for the first half of 2016 . Adjusted net income increased four percent to $\$ 62.6$ million, or $\$ 2.68$ per diluted share, from $\$ 60.4$ million, or $\$ 2.63$ per diluted share (see the "Reconciliation of Non-GAAP Adjusted Net Income and Diluted Earnings per Share" section of this MD\&A for reconciliations between reported net income attributable to the Company and related earnings per diluted share and non-GAAP adjusted net income and related earnings per diluted share). Below is a summary discussion of the major factors leading to the year-over-year changes in net sales, profits and expenses. A detailed discussion of segment operating performance for the first half of 2017 compared to the first half of 2016 follows the summary.

Consolidated net sales increased $\$ 62.9$ million, or seven percent, between years, primarily due to higher selling prices that were precipitated by increased raw material costs. The increased selling prices favorably affected the year-over-year change in net sales by $\$ 105.6$ million. Sales volume declined four percent, which had a $\$ 34.1$ million unfavorable effect on the change in net sales. Sales volume declined five percent and two percent for the Surfactant and Specialty Products segments, respectively, and was flat between years for the Polymer segment. Foreign currency translation negatively impacted the net sales change by $\$ 8.6$ million. The unfavorable foreign currency translation effect reflected a stronger U.S. dollar against nearly all currencies for countries where the Company has foreign operations (excepting currencies for Colombia and Brazil).

Operating income for the first half of 2017 declined $\$ 2.5$ million, or three percent, from operating income reported for the first half of 2016 . Surfactant and Specialty Product operating incomes improved year over year but were more than offset by a decline in Polymer results. Polymer operating income was negatively impacted by higher raw material costs that could not entirely be recouped through selling price increases.

Operating expenses (including the business restructuring expenses) declined $\$ 1.9$ million, or two percent, between years. Changes in the individual income statement line items that comprise the Company's operating expenses were as follows:

- Selling expenses declined $\$ 1.5$ million, or five percent, year over year largely due to lower bad debt expense ( $\$ 0.9$ million) and the accumulation of smaller decreases for a number of other expense items.
- Administrative expenses declined $\$ 0.6$ million, or two percent, year over year. Lower U.S. expenses for legal and environmental ( $\$ 0.7$ million), hiring ( $\$ 0.4$ million), relocation ( $\$ 0.4$ million) and the accumulation of a number of smaller items, partially offset by increased expenses for consulting ( $\$ 1.4$ million), led to the decrease in administrative expenses. The decline in legal and environmental expense was principally a result of first half 2016 environmental remediation expenses that did not recur in the first half of 2017. The increase in consulting fees was primarily attributable to external resources engaged in 2017 to support certain strategic projects.
- R\&D expenses declined $\$ 0.3$ million, or one percent, year over year largely due to lower U.S. fringe benefits expense.
- Deferred compensation expense increased $\$ 0.2$ million, or five percent, year over year primarily due to a greater year-over-year increase in the value of the mutual fund investments held to fund the deferred compensation plan that was largely offset by a smaller year-over-year increase in the value of Company common stock. See the "Overview" and "Corporate Expenses" sections of this MD\&A for further details.
- Business restructuring expenses were $\$ 1.4$ million in the first half of 2017 compared to $\$ 1.1$ million in the first half of 2016. Approximately $\$ 1.3$ million of the restructuring expense related to the continued asset decommissioning for the Company's plant in Canada, which ceased operations in the fourth quarter of 2016. The remaining $\$ 0.1$ million of restructuring expense related to a second quarter 2017 workforce reduction at the Company's Singapore plant. The reduction in positions was made to better align the number of personnel with current business requirements and to reduce costs at that site. See Note 14 to the condensed consolidated financial statements for additional information regarding the Company's restructuring activities.

Net interest expense for the first half of 2017 declined $\$ 1.2$ million, or 17 percent, from net interest expense for the first half of 2016 primarily due to lower average debt levels and higher interest income earned on excess cash.

Other, net was $\$ 2.2$ million of income for the first half of 2017 compared to $\$ 0.8$ million of expense for the same period of last year. The Company posted $\$ 2.7$ million of investment gains (including realized and unrealized gains and losses) for the Company's deferred compensation and supplemental defined contribution mutual fund assets in the first half of 2017 compared to $\$ 0.1$ million of losses in the first half of 2016. In addition, the Company reported foreign exchange losses of $\$ 0.5$ million in the first half of 2017 compared to exchange losses of $\$ 0.8$ million in the first half of 2016 .

The effective tax rate was 26.5 percent for the first half of 2017 compared to 29.2 percent for the first half of 2016. The decrease was attributable to the following items: 1) higher excess tax benefits derived from stock based compensation awards exercised or distributed in the first half of 2017 versus the first half of 2016; and 2) an unfavorable tax settlement related to a foreign income tax audit recorded in the first quarter of 2016 that did not recur in 2017.

## Segment Results

| (Dollars in thousands) <br> Net Sales | For the Six Months Ended |  |  |  | Increase |  | Percent <br> Change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | June 30,$2017$ |  | June 30, 2016 |  |  |  |  |
| Surfactants | \$ | 651,937 | \$ | 608,547 | \$ | 43,390 | 7 |
| Polymers |  | 267,797 |  | 248,396 |  | 19,401 | 8 |
| Specialty Products |  | 43,636 |  | 43,557 |  | 79 | - |
| Total Net Sales | \$ | 963,370 | \$ | 900,500 | \$ | 62,870 | 7 |


| (Dollars in thousands) Operating Income | For the Six Months Ended |  |  |  | Increase <br> (Decrease) |  | Percent <br> Change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { June } 30, \\ 2017 \\ \hline \end{gathered}$ |  | June 30,$2016$ |  |  |  |  |
| Surfactants | \$ | 69,267 | \$ | 64,477 | \$ | 4,790 | 7 |
| Polymers |  | 42,656 |  | 53,191 |  | $(10,535)$ | -20 |
| Specialty Products |  | 6,714 |  | 4,121 |  | 2,593 | 63 |
| Segment Operating Income | \$ | 118,637 | \$ | 121,789 | \$ | $(3,152)$ | -3 |
| Corporate Expenses, Excluding Deferred Compensation and Restructuring |  | 26,853 |  | 28,051 |  | $(1,198)$ | -4 |
| Deferred Compensation Expense |  | 5,392 |  | 5,154 |  | 238 | 5 |
| Business Restructuring |  | 1,372 |  | 1,061 |  | 311 | 29 |
| Total Operating Income | \$ | 85,020 | \$ | 87,523 | \$ | $(2,503)$ | -3 |

## Surfactants

Surfactant net sales for the first half of 2017 increased $\$ 43.4$ million, or seven percent, over net sales for the first half of 2016 . Higher selling prices, resulting primarily from the pass through of higher costs on certain raw materials to customers, had a favorable $\$ 80.9$ million effect on the year-over-year change in net sales. A five percent decline in sales volume and the unfavorable effects of foreign currency translation offset the impact of increased selling prices by $\$ 30.0$ million and $\$ 7.5$ million, respectively. The Latin America region reported improved sales volume due to sales volume associated with the October 2016 acquisitions of Tebras and PBC while sales volumes for the other regions declined. A year-over-year comparison of net sales by region follows:

| (Dollars in thousands) | For the Six Months Ended |  |  |  | Increase |  | Percent Change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { June } 30, \\ 2017 \\ \hline \end{gathered}$ |  | $\begin{gathered} \hline \text { June } 30, \\ 2016 \\ \hline \end{gathered}$ |  |  |  |  |
| North America | \$ | 397,259 | \$ | 380,995 | \$ | 16,264 | 4 |
| Europe |  | 128,712 |  | 120,951 |  | 7,761 | 6 |
| Latin America |  | 92,064 |  | 73,803 |  | 18,261 | 25 |
| Asia |  | 33,902 |  | 32,798 |  | 1,104 | 3 |
| Total Surfactants Segment | \$ | 651,937 | \$ | 608,547 | \$ | 43,390 | 7 |

Net sales for North American operations increased four percent year over year. Higher selling prices favorably impacted the change in net sales by $\$ 39.6$ million. Sales volume declined six percent, which offset the effect of increased selling prices by $\$ 23.3$ million. Average selling prices increased 11 percent between years, reflecting the pass through of certain higher raw material costs to customers and a more favorable mix of sales. Declines in sales volume for commodity products used in laundry and cleaning and personal care applications accounted for most of the North American surfactant sales volume decrease. Sales volumes increased for products used in household, industrial and institutional (HI\&I) and oilfield applications. The increase in HI\&I sales volume was principally attributable to stronger demand from a large customer. Volumes for surfactants used in oilfield solutions also improved, largely due to increased requirements from existing customers and to sales volumes associated with new oilfield products.

Net sales for European operations increased six percent due to a 20 percent increase in selling prices, partially offset by the unfavorable effects of foreign currency translation and a five percent decline in sales volume. The higher selling prices, which resulted from the pass through to customers of certain increased raw material costs, favorably impacted the year-over-year change in net sales by $\$ 23.4$ million, while foreign currency translation and lower sales volume unfavorably affected the net sales change by $\$ 9.0$ million and $\$ 6.6$ million, respectively. A stronger U.S. dollar relative to the British pound sterling and European euro led to the foreign currency translation effect. The decrease in sales volume primarily resulted from a decline in commodity personal care sales volume that was attributable to lost business for the period resulting from uncompetitive pricing precipitated by a disadvantaged cost position for certain raw materials.

Net sales for Latin American operations increased 25 percent due to increased selling prices, the favorable effects of foreign currency translation and a four percent improvement in sales volume, which accounted for $\$ 11.7$ million, $\$ 3.6$ million and $\$ 3.0$ million, respectively, of the year-over-year increase in net sales. The higher selling prices reflected the pass through to customers of increased raw material costs and a more favorable mix of sales resulting from higher agricultural product sales volumes and lower commodity laundry and cleaning volumes. The foreign currency translation effect reflected the year-over-year strengthening of the Brazilian real and Colombian peso relative to the U.S. dollar, partially offset by a weaker Mexican peso. The improved sales volume reflected new business associated with the October 2016 acquisitions of Tebras and PBC, partially offset by lower demand and lost business for commodity products used in laundry and cleaning applications.

Net sales for Asian operations increased three percent primarily due to higher selling prices, which positively affected the year-over-year change in net sales by $\$ 8.3$ million. The pass through to customers of certain increased raw material costs led to the higher selling prices. The effect of the selling price increases was partially offset by a 16 percent decline in sales volume and the unfavorable effects of foreign currency translation, which negatively impacted the net sales change by $\$ 5.2$ million and $\$ 2.0$ million, respectively. The sales volume decline was primarily due to weaker demand for commodity laundry and cleaning products. A weaker Philippine peso relative to the U.S. dollar caused the negative foreign currency translation effect.

Surfactant operating income for the first half of 2017 increased $\$ 4.8$ million, or seven percent, over operating income for the first half of 2016 . Gross profit increased $\$ 3.4$ million, primarily due to improved results for North American operations. Operating expenses decreased $\$ 1.4$ million, or three percent. Year-over-year comparisons of gross profit by region and total segment operating expenses and operating income follow:

| (Dollars in thousands) | For the Six Months Ended |  |  |  | Increase (Decrease) |  | Percent <br> Change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { June } 30, \\ 2017 \end{gathered}$ |  | $\begin{aligned} & \hline \text { June 30, } \\ & 2016 \text { (a) } \\ & \hline \end{aligned}$ |  |  |  |  |
| Gross Profit |  |  |  |  |  |  |  |
| North America | \$ | 80,080 | \$ | 73,609 | \$ | 6,471 | 9 |
| Europe |  | 11,813 |  | 14,775 |  | $(2,962)$ | -20 |
| Latin America |  | 14,934 |  | 13,406 |  | 1,528 | 11 |
| Asia |  | 8,534 |  | 10,221 |  | $(1,687)$ | -17 |
| Surfactants Segment Gross Profit | \$ | 115,361 | \$ | 112,011 | \$ | 3,350 | 3 |
| Operating Expenses |  | 46,094 |  | 47,534 |  | $(1,440)$ | -3 |
| Surfactants Segment Operating Income | \$ | 69,267 | \$ | 64,477 | \$ | 4,790 | 7 |

(a) In 2017, the Company changed its internal financial statement classification for certain transportation costs, transferring such costs from operating expenses to cost of sales. In this segment discussion, the 2016 North America gross profit and total operating expenses have been changed from the amounts presented in 2016 to make such amounts consistent with the current year classification. Surfactants segment operating income remained unchanged.

Gross profit for North American operations increased nine percent between years. The effect of improved margins more than offset the impact of the six percent sales volume decline. The margin improvement reflected a more profitable mix of sales and reduced manufacturing overhead costs resulting from the closure of the Company's Canada manufacturing operations in the fourth quarter of 2016.

Gross profit for European operations declined 20 percent year over year primarily due to reduced sales margins, the five percent sales volume decline and a $\$ 0.7$ million unfavorable foreign currency translation impact. The lower sales margins reflected the effect of increased raw material costs that could not be entirely passed on through selling price increases. The year-over-year change in gross profit benefitted from a 2016 charge for a customer claim that did not recur in 2017.

Gross profit for Latin American operations increased 11 percent due to a $\$ 0.8$ million favorable effect for foreign currency translation, the four percent improvement in sales volume and a more profitable mix of sales primarily resulting from a larger sales volume of agricultural chemicals and from new sales related to the Tebras acquisition.

Asia gross profit declined 17 percent largely due to the 16 percent decline in sales volume and to a year-over-year decline in production volume in Singapore, which led to higher unit overhead costs. A $\$ 0.4$ million unfavorable foreign currency translation effect also contributed to the decline in gross profit. The Company's intent to lower inventory levels in the region led to the decrease in Singapore production. The impact of the sales volume and production declines were partially offset by better sales margins precipitated by a more favorable mix of sales.

Operating expenses for the Surfactant segment declined $\$ 1.4$ million, or three percent, year over year. Selling and R\&D expenses each declined $\$ 0.9$ million, due primarily to lower overall expenses in the U.S. Partially offsetting the declines in selling and
administrative expenses were higher administrative expenses that reflected operating costs for Tebras and PBC, which were acquired in October 2016.

## Polymers

Polymer net sales for the first half of 2017 increased $\$ 19.4$ million, or eight percent, over net sales for the same period of 2016 . Higher selling prices, primarily resulting from the pass through to customers of certain increased raw material costs, favorably affected the year-over-year net sales increase by $\$ 20.2$ million. Polymer sales volume was flat between years. The effects of foreign currency translation negatively impacted the net sales change by $\$ 0.8$ million. A year-over-year comparison of net sales by region follows:

| (Dollars in thousands) | For the Six Months Ended |  |  |  | Increase |  | Percent Change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { June } 30, \\ 2017 \end{gathered}$ |  |  | $\begin{aligned} & \text { ine } 30, \\ & 2016 \end{aligned}$ |  |  |  |
| North America | \$ | 165,289 | \$ | 159,758 | \$ | 5,531 | 3 |
| Europe |  | 89,257 |  | 77,253 |  | 12,004 | 16 |
| Asia and Other |  | 13,251 |  | 11,385 |  | 1,866 | 16 |
| Total Polymers Segment | \$ | $\underline{267,797}$ | \$ | 248,396 | \$ | 19,401 | 8 |

Net sales for North American operations increased three percent due to higher selling prices, which favorably affected the year-over-year net sales change by $\$ 8.5$ million. Selling prices increased five percent, largely as a result of the pass through of higher raw material costs. Sales volume declined two percent between years, which unfavorably affected the net sales change by $\$ 3.0$ million. Sales volume of polyols used in rigid foam applications increased one percent and sales volume of specialty polyols increased five percent on increased volumes for product used in CASE applications. Phthalic anhydride sales volume declined 11 percent due to less opportunity to supply product to phthalic anhydride co-producers in 2017 than in 2016.

Net sales for European operations increased 16 percent due to higher selling prices and a two percent increase in sales volume, which favorably impacted the year-over-year net sales change by $\$ 10.7$ million and $\$ 1.9$ million, respectively. Selling prices increased 13 percent primarily due to pass through certain increased raw material costs to customers. Specialty polyols used in CASE applications accounted for most of the sales volume increase, as sales volume for polyols used in rigid foam insulation and insulated metal panels was flat year-over-year. The increase in CASE sales volumes reflected the Company's successful efforts to utilize the capacity of its new reactor in Poland. The unfavorable effects of foreign currency translation offset the effects of the increased sales prices and volumes by $\$ 0.6$ million.

Net sales for Asia and Other operations increased 16 percent quarter over quarter due to higher selling prices and a five percent increase in sales volume, which accounted for $\$ 1.5$ million and $\$ 0.6$ million, respectively, of the year-over-year net sales change. Increased raw material costs drove the selling price increase. Most of the sales volume increase reflected new business for the Company's manufacturing facility in Nanjing, China, that commenced operations in early 2016 . Foreign currency translation had a $\$ 0.2$ million negative effect on the year-over-year change in net sales.

Polymer operating income for the first half of 2017 declined $\$ 10.5$ million, or 20 percent, from operating income for the first half of 2016 . Gross profit decreased $\$ 10.4$ million, or 15 percent, primarily due to higher material costs. All regions reported lower year-over-year gross profit. Operating expenses increased $\$ 0.1$ million, or one percent between years. Year-over-year comparisons of gross profit by region and total segment operating expenses and operating income follow:

| (Dollars in thousands) | For the Six Months Ended |  |  |  | Increase (Decrease) |  | Percent Change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \hline \text { June } 30, \\ 2017 \\ \hline \end{gathered}$ |  | $\begin{aligned} & \text { June 30, } \\ & 2016 \text { (a) } \end{aligned}$ |  |  |  |  |
| Gross Profit |  |  |  |  |  |  |  |
| North America | \$ | 42,654 | \$ | 49,952 | \$ | $(7,298)$ | -15 |
| Europe |  | 14,566 |  | 16,025 |  | $(1,459)$ | -9 |
| Asia and Other |  | (237) |  | 1,426 |  | $(1,663)$ | NM |
| Polymers Segment Gross Profit | \$ | 56,983 | \$ | 67,403 | \$ | $(10,420)$ | -15 |
| Operating Expenses |  | 14,327 |  | 14,212 |  | 115 | 1 |
| Polymers Segment Operating Income | \$ | 42,656 | \$ | 53,191 | \$ | $(10,535)$ | -20 |

(a) In 2017, the Company changed its internal financial statement classification for certain transportation costs, transferring such costs from operating expenses to cost of sales. In this segment discussion, the 2016 North America gross profit and total operating expenses have been changed from the amounts presented in 2016 to make such amounts consistent with the current year classification. Polymers segment operating income remained unchanged

Gross profit for North American operations declined 15 percent year over year primarily as a result of higher raw material costs, which reduced margins, and the two percent decline in sales volume. Competitive pressure prohibited the Company from passing through the full extent of raw material increases to customers.

Gross profit for European operations declined nine percent due to reduced sales margins arising from increased raw material costs that could not be entirely passed through to customers. The impact of the higher raw material costs was partially offset by the two percent increase in sales volume. Foreign currency translation had a $\$ 0.2$ million negative effect on Europe's gross profit.

Gross profit for Asia and Other operations declined $\$ 1.7$ million due to higher overhead costs resulting from not yet fully utilizing the operating capacity at the plant in Nanjing, China. In addition, last year's first half benefited from production of polyol to build up inventory to support the Company's Germany plant in advance of its mandatory third quarter 2016 inspection shutdown.

## Specialty Products

Net sales for the first half of 2017 were essentially unchanged from net sales reported for the same period of last year. Sales volume declined two percent, principally as a result of lower sales volumes of products used in food ingredient and nutritional supplement applications partially offset by an increase in sales volume of products used in flavor applications. Operating income increased $\$ 2.6$ million year over year due to a more favorable mix of sales resulting from the timing of orders for certain products used in flavoring applications.

## Corporate Expenses

Corporate expenses decreased $\$ 0.7$ million to $\$ 33.6$ million for the first half of 2017 from $\$ 34.3$ million for the first half of 2016 . The decline was primarily attributable to lower expenses for legal and environmental ( $\$ 0.7$ million), hiring ( $\$ 0.4$ million) and relocation ( $\$ 0.4$ million), partially offset by increased expenses for consulting fees ( $\$ 1.4$ million). The decline in legal and environmental expense was largely attributable to 2016 environmental remediation expenses that did not recur 2017. The increase in consulting fees reflected external resources engaged in 2017 to support certain strategic projects.

Deferred compensation expense increased $\$ 0.2$ million between years. The result reflected a greater year-over-year increase in the value of the mutual fund investments held for the Company's deferred compensation plans largely offset by a smaller year-over-year increase in the value of Company common stock ( $\$ 5.66$ per share increase for the first half of 2017 compared to $\$ 9.84$ per share increase for the first half of 2016). The following table presents the period-end Company common stock market prices used in the computation of deferred compensation expenses for the six months ended June 30 , 2017 and 2016:

|  | 2017 |  | 2016 |  |  |  | 2015 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | June 30 |  | December 31 |  | June 30 |  | December 31 |  |
| Company Common Stock Price | \$ | 87.14 | , | 81.48 | \$ | 59.53 | \$ | 49.69 |

## LIQUIDITY AND CAPITAL RESOURCES

## Overview

For the six months ended June 30,2017 , operating activities were a cash source of $\$ 60.9$ million versus a source of $\$ 76.3$ million for the comparable period in 2016. For the current year, investing cash outflows totaled $\$ 44.9$ million, as compared to an outflow of $\$ 44.2$ million in the prior year period, and financing activities were a use of $\$ 22.7$ million, as compared to a use of $\$ 19.8$ million in the prior year period. Cash and cash equivalents decreased by $\$ 1.9$ million compared to December 31, 2016, including a favorable exchange rate impact of $\$ 4.7$ million.

As of June 30,2017 , the Company's cash and cash equivalents totaled $\$ 223.8$ million, including $\$ 15.0$ million in a U.S. money market fund, which was rated AAA by Standard and Poor's. Cash in U.S. demand deposit accounts totaled $\$ 100.7$ million and cash of the Company's non-U.S. subsidiaries held outside the U.S. totaled $\$ 108.1$ million as of June 30, 2017.

## Operating Activity

Net income increased by $\$ 3.4$ million versus the comparable period in 2016 . Working capital was a cash use of $\$ 49.0$ million versus a use of $\$ 33.3$ million for the comparable year-ago period.

Year-to-date accounts receivable were a use of $\$ 33.7$ million compared to a use of $\$ 33.6$ million for the comparable period in 2016 . Inventories were a use of $\$ 1.5$ million in 2017 versus a use of $\$ 8.7$ million in 2016 . Accounts payable and accrued liabilities were a use of $\$ 11.8$ million in 2017 compared to a source of $\$ 8.6$ million for the same period in 2016.

Working capital requirements were higher year-to-date, compared to the same period in 2016 primarily due to the above noted change in accounts payable and accrued liabilities. Accrued liabilities accounted for most of the change, as balances for certain liabilities were greater at December 31,2016 than at December 31, 2015, which led to larger cash payments in the first half of 2017 to settle the liabilities than in the same period of 2016. The year-to-date accounts receivables increase was primarily due to price change. The year-to-date inventory increase was due to higher prices and quantities. It is management's opinion that the Company's liquidity is sufficient to provide for potential increases in working capital during 2017.

## Investing Activity

Cash outflows for investing activities were up by $\$ 0.6$ million year-over-year. Cash outflows from investing activities year-to-date included capital expenditures of $\$ 38.3$ million compared to $\$ 40.7$ million for the comparable period last year. Other investing activities consumed $\$ 6.5$ million in 2017 versus a use of $\$ 3.5$ million in 2016 . The increase in other investing activities was primarily attributable to the $\$ 4.3$ million purchase price working capital adjustment payment made in the first quarter of 2017 related to the 2016 fourth quarter acquisitions of Tebras and PBC.

For 2017 , the Company estimates that total capital expenditures will range from $\$ 95$ million to $\$ 105$ million including capacity expansions in the United States, Brazil and Germany.

## Financing Activity

Cash flow used for financing activities was a use of $\$ 22.7$ million in 2017 versus a use of $\$ 19.8$ million in 2016. The Company purchases its common shares in the open market from time to time to fund its own benefit plans and also to mitigate the dilutive effect of new shares issued under its benefit plans. The Company may also make open market repurchases as cash flows permit when, in management's opinion, the Company's shares are undervalued in the market. For the six months ended June 30, 2017, the Company purchased 20,093 shares in the open market at a total cost of $\$ 1.5$ million. At June 30 , 2017 , there were 697,836 shares remaining under the current share repurchase authorization.

## Debt and Credit Facilities

Consolidated balance sheet debt decreased by $\$ 12.9$ million for the current year, from $\$ 321.4$ million to $\$ 304.4$ million, primarily due to a decrease of domestic debt by $\$ 5.7$ million and foreign debt by $\$ 7.2$ million. Net debt (which is defined as total debt minus cash) decreased by $\$ 10.6$ million for the current year, from $\$ 91.3$ million to $\$ 80.6$ million.

As of June 30, 2017, the ratio of total debt to total debt plus shareholders' equity was 30.1 percent compared to 33.3 percent at December 31 , 2016. As of June 30, 2017, the ratio of net debt to net debt plus shareholders' equity was 10.2 percent, compared to 12.6 percent at December 31 , 2016. At June 30 , 2017 , the Company's debt included $\$ 305.0$ million of unsecured private placement loans with maturities ranging from 2017 through 2027. These loans are the Company's primary source of long-term debt financing and are supplemented by bank credit facilities to meet short and medium-term needs.

The Company has a committed $\$ 125.0$ million multi-currency syndicated revolving credit agreement. The credit agreement allows the Company to make unsecured borrowings, as requested from time to time, for working capital and other corporate purposes. This unsecured facility is the Company's primary source of short-term borrowings and is committed through July 10,2019 , with terms and conditions that are substantially equivalent to those of the Company's other U.S. loan agreements. As of June 30, 2017, the Company had outstanding letters of credit of $\$ 5.1$ million under the revolving credit agreement, and no borrowings, with $\$ 119.9$ million remaining available. The Company anticipates that cash from operations, committed credit facilities and cash on hand will be sufficient to fund anticipated capital expenditures, working capital, dividends and other planned financial commitments for the foreseeable future.

Certain foreign subsidiaries of the Company maintain term loans and short-term bank lines of credit in their respective local currencies to meet working capital requirements as well as to fund capital expenditure programs and acquisitions. At June 30, 2017, the Company's foreign subsidiaries had outstanding debt of $\$ 0.5$ million.

The Company has material debt agreements that require the maintenance of minimum interest coverage and minimum net worth. These agreements also limit the incurrence of additional debt as well as the payment of dividends and repurchase of treasury shares. Testing for these agreements is based on the combined financial statements of the U.S. operations of the Company, Stepan Canada Inc., Stepan Quimica Ltda., Stepan Specialty Products, LLC, Stepan Specialty Products B.V. and Stepan Asia Pte. Ltd. (the "Restricted Group"). Under the most restrictive of these debt covenants:

1. The Restricted Group must maintain a minimum interest coverage ratio, as defined within the agreements, of 1.75 to 1.00 , for the preceding four calendar quarters.
2. The Restricted Group must maintain net worth of at least $\$ 325.0$ million.
3. The Restricted Group must maintain a ratio of long-term debt to total capitalization, as defined in the agreements, not to exceed 60 percent.
4. The Restricted Group may pay dividends and purchase treasury shares after December 31, 2013, in amounts of up to $\$ 100.0$ million plus 100 percent of net income and cash proceeds of stock option exercises, measured cumulatively after June 30, 2014. The maximum amount of dividends that could have been paid within this limitation is disclosed as unrestricted retained earnings in Note 12 to the condensed consolidated financial statements.

The Company believes it was in compliance with all of its loan agreements as of June 30, 2017. Based on current projections, the Company believes it will be in compliance with its loan agreements throughout 2017.

## ENVIRONMENTAL AND LEGAL MATTERS

The Company's operations are subject to extensive federal, state and local environmental laws and regulations and similar laws in the other countries in which the Company does business. Although the Company's environmental policies and practices are designed to address compliance with these laws and regulations, these policies and practices may not be effective, or future developments and increasingly stringent environmental regulation could require the Company to make additional unforeseen environmental expenditures. The Company expects to continue to invest in the equipment and facilities necessary to comply with existing and future regulations. For the six months ended June 30, 2017 and 2016, the Company's expenditures for capital projects related to the environment were $\$ 1.2$ million and $\$ 0.7$ million, respectively. These projects are capitalized and depreciated over their estimated useful lives, which are typically 10 years. Recurring costs associated with the operation and maintenance of facilities for waste treatment and disposal and managing environmental compliance in ongoing operations at the Company's manufacturing locations were $\$ 13.0$ million and $\$ 11.2$ million for the six months ended June 30 , 2017 and 2016, respectively.

Over the years, the Company has received requests for information related to or has been named by the government as a potentially responsible party at a number of waste disposal sites where cleanup costs have been or may be incurred under CERCLA and similar state statutes. In addition, damages are being claimed against the Company in general liability actions for alleged personal injury or property damage in the case of some disposal and plant sites. The Company believes that it has made adequate provisions for the costs it may incur with respect to the sites. It is the Company's accounting policy to record liabilities when environmental assessments and/or remedial efforts are probable and the cost or range of possible costs can be reasonably estimated. When no amount within the range is a better estimate than any other amount, the minimum is accrued. Some of the factors on which the Company bases its estimates include information provided by feasibility studies, potentially responsible party negotiations and the development of remedial action plans. After partial remediation payments at certain sites, the Company has estimated a range of possible environmental and legal losses of $\$ 25.0$ million to $\$ 45.8$ million at June 30, 2017 compared to $\$ 25.7$ million to $\$ 46.5$ million at December 31, 2016. At June 30, 2017, and December 31, 2016, the Company's accrued liability for such losses, which represented the Company's best estimate within the estimated range of possible environmental and legal losses, was $\$ 25.0$ million and $\$ 25.8$ million, respectively. During the six-month period ended June 30, 2017, cash outlays related to legal and environmental matters approximated $\$ 1.0$ million compared to $\$ 0.6$ million for the same period in 2016.

For certain sites, the Company has responded to information requests made by federal, state or local government agencies but has received no response confirming or denying the Company's stated positions. As such, estimates of the total costs, or range of possible costs, of remediation, if any, or the Company's share of such costs, if any, cannot be determined with respect to these sites. Consequently, the Company is unable to predict the effect thereof on the Company's financial position, cash flows and results of operations. Based upon the Company's present knowledge with respect to its involvement at these sites, the possibility of other viable entities' responsibilities for cleanup, and the extended period over which any costs would be incurred, the Company believes that these matters, individually and in the aggregate, will not have a material effect on the Company's financial position. However, in the event of one or more adverse determinations with respect to such sites in any annual or interim period, the effect on the Company's cash flows and results of operations for those periods could be material. Certain of these matters are discussed in Item 1, Part 2, Legal Proceedings, in this report and in other filings of the Company with the Securities and Exchange Commission, which are available upon request from the Company. See also Note 7 to the condensed consolidated financial statements for a summary of the environmental proceedings related to certain environmental sites.

## OUTLOOK

After achieving record first half net income, the Company remains optimistic about the balance of the year. The Company believes that its diversification efforts and enhanced internal efficiencies should continue to positively impact the remainder of 2017. The global rigid polyol market remains strong. Although competitive activity in North America will persist, the second half of the year
should benefit from the partial recovery of higher raw material costs and lower manufacturing costs. Overall, management believes the Company earnings for the year should grow.

## CRITICAL ACCOUNTING POLICIES

There have been no changes to the critical accounting policies disclosed in the Company's 2016 Annual Report on Form 10-K.

## RECONCILIATIONS OF NON-GAAP ADJUSTED NET INCOME AND EARNINGS PER SHARE



The Company believes that certain non-GAAP measures, when presented in conjunction with comparable GAAP measures, are useful for evaluating the Company's operating performance and provide better clarity on the impact of non-operational items. Internally, the Company uses this non-GAAP information as an indicator of business performance and evaluates management's effectiveness with specific reference to these indicators. These measures should be considered in addition to, not a substitute for or superior to, measures of financial performance prepared in accordance with GAAP. The cumulative tax effect was calculated using the statutory tax rates for the jurisdictions in which the noted transactions occurred.

## RECONCILIATION OF NON-GAAP NET DEBT

| (In millions) | $\begin{gathered} \text { June } 30, \\ 2017 \end{gathered}$ |  | $\begin{gathered} \text { December 31, } \\ 2016 \\ \hline \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Current Maturities of Long-Term Debt as Reported | \$ | 21.2 | \$ | 28.1 |
| Long-Term Debt as Reported |  | 283.2 |  | 288.9 |
| Total Debt as Reported |  | 304.4 |  | 317.0 |
| Less Cash and Cash Equivalents as Reported |  | (223.8) |  | (225.7) |
| Net Debt | \$ | 80.6 | \$ | 91.3 |

Management uses the non-GAAP net debt metric to gain a more complete picture of the Company's overall liquidity, financial flexibility and leverage level. This adjusted measure should be considered supplemental to and not a substitute for financial information prepared in accordance with GAAP. The Company's definition of this adjusted measure may differ from similarly titled measures used by other entities.

## Item 3 - Quantitative and Qualitative Disclosures about Market Risk

There have been no material changes to the market risks disclosed in the Company's 2016 Annual Report on Form 10-K.

## Item 4 - Controls and Procedures

a. Evaluation of Disclosure Controls and Procedures

We have conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, as of June 30, 2017. Based on this evaluation of our disclosure controls and procedures, our Chief Executive Officer and our Chief Financial Officer have concluded that our disclosure controls and procedures were effective as of June 30, 2017, such that the information required to be disclosed in our Securities and Exchange Commission reports is recorded, processed, summarized and reported within the time periods specified by the rules and forms of the Exchange Act and is accumulated and communicated to management, including our Chief Executive Officer and our Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosures.
b. Changes in Internal Control Over Financial Reporting

There were no changes in the Company's internal controls over financial reporting (as defined in Rule 13a-15(f) under Exchange Act) that occurred during the quarter ended June 30, 2017, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

## Part II OTHER INFORMATION

## Item 1 - Legal Proceedings

On March 22, 2017, the Company received a prefiling notice from USEPA for alleged violations of the Federal Insecticide, Fungicide, and Rodenticide Act associated with three of the Company's biocide products sold by a licensed distributor. The prefiling notice informed the Company of USEPA's intent to seek a $\$ 178,600$ penalty from the Company. The Company is not able to estimate the final penalty at this time.

There have been no other material changes to the legal proceedings disclosed in the Company's 2016 Annual Report on Form 10-K.

## Item 1A - Risk Factors

There have been no material changes to the risk factors disclosed in the Company's 2016 Annual Report on Form 10-K.

## Item 2 - Unregistered Sales of Equity Securities and Use of Proceeds

Below is the summary by month of shares purchases by the Company during the second quarter ended June 30, 2017:

| Month | Total Number of Shares Purchased | Average Price Paid per Share |  | Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs | Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs |
| :---: | :---: | :---: | :---: | :---: | :---: |
| April 2017 | 1,181 | (a) $\$$ | 84.85 | - | - |
| May 2017 | 1,161 | (a) \$ | 85.87 | - | - |
| June 2017 | - |  | - | - | - |
| Total | 2,342 | ${ }^{(a)} \$$ | 85.36 |  |  |

(a) Represents shares of Company common stock tendered by employees to settle statutory withholding taxes related to the exercise of SARS.

## Item 3 - Defaults Upon Senior Securities

None
Item 4 - Mine Safety Disclosures
Not applicable
Item 5 - Other Information
None

## Item 6 - Exhibits

| Exhibit No. | $\underline{\text { Description }}$ |
| :--- | :--- |
| 31.1 | - Certification of President and Chief Executive Officer pursuant to Exchange Act Rule 13a- |
|  | $14(\mathrm{a}) / 15 \mathrm{~d}-14(\mathrm{a})$ |
| 31.2 | - Certification of Vice President and Chief Financial Officer pursuant to Exchange Act Rule 13a-14(a)/15d-14(a) |
| 32 | - Certification pursuant to 18 U.S.C. Section 1350 |
| $101 . \mathrm{INS}$ | - XBRL Instance Document |
| 101.SCH | - XBRL Taxonomy Extension Schema Document |
| 101.CAL | - XBRL Taxonomy Extension Calculation Linkbase Document |
| 101.DEF | - XBRL Taxonomy Extension Definition Document |
| 101.LAB | $-X B R L$ Taxonomy Extension Presentation Linkbase Document |
| 101.PRE |  |

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

## STEPAN COMPANY

Date: July 28, 2017
/s/ Scott D. Beamer

Vice President and Chief Financial Officer (Authorized Officer and Principal Financial Officer)

## CERTIFICATION OF PRESIDENT AND CHIEF EXECUTIVE OFFICER PURSUANT TO EXCHANGE ACT RULE 13a-14(a)/15d-14(a)

I, F. Quinn Stepan, Jr., certify that:

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

Date: July 28, 2017
/s/ F. Quinn Stepan, Jr.
F. Quinn Stepan, Jr.

Chairman, President and Chief Executive Officer

## CERTIFICATION OF VICE PRESIDENT AND CHIEF FINANCIAL OFFICER <br> PURSUANT TO EXCHANGE ACT RULE 13a-14(a)/15d-14(a)

I, Scott D. Beamer, certify that:

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

Date: July 28, 2017
/s/ Scott D. Beamer
Scott D. Beamer
Vice President and Chief Financial Officer

## CERTIFICATION PURSUANT TO

18 U.S.C. SECTION 1350

In connection with the Quarterly Report of Stepan Company (the "Company") on Form 10-Q for the period ended June 30, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned officers of the Company certifies, pursuant to 18 U.S.C. § 1350 , as adopted pursuant to $\S 906$ of the Sarbanes-Oxley Act of 2002, that, to such officer's knowledge:
(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: July 28, 2017
/s/ F. Quinn Stepan, Jr.
Name: F. Quinn Stepan, Jr.
Title: Chairman, President and Chief Executive Officer
/s/ Scott D. Beamer
Name: Scott D. Beamer
Title: Vice President and Chief Financial Officer

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350 and is not being filed as part of the Report or as a separate disclosure document.

