# UNITED STATES <br> SECURITIES AND EXCHANGE COMMISSION <br> WASHINGTON, D.C. 20549 <br> FORM 10-Q 

For the quarterly period ended June 30, 2017
OR
TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

# For the transition period from <br> $\qquad$ to <br> $\qquad$ <br> Commission file number 1-4858 <br> INTERNATIONAL FLAVORS \& FRAGRANCES INC. 

(Exact name of registrant as specified in its charter)

## New York <br> (State or other jurisdiction of incorporation or organization)

13-1432060
(I.R.S. Employer

521 West 57th Street, New York, N.Y. 10019-2960
(Address of principal executive offices) (Zip Code)

> Registrant's telephone number, including area code (212) 765-5500

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 $\boxtimes$ No

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

| Large accelerated filer | $\square$ | Accelerated filer |
| :--- | :--- | :--- |
| Non-accelerated filer | $\square$ | Smaller reporting company |
|  |  | Emerging growth company |

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). YesNo $\downarrow$

Number of shares outstanding as of July 24, 2017: 78,975,735

## ITEM 1. FINANCIAL STATEMENTS

## PART I. FINANCIAL INFORMATION

## INTERNATIONAL FLAVORS \& FRAGRANCES INC. <br> CONSOLIDATED BALANCE SHEET <br> (DOLLARS IN THOUSANDS) (Unaudited)

|  | June 30, 2017 |  | December 31, 2016 |  |
| :---: | :---: | :---: | :---: | :---: |
| ASSETS |  |  |  |  |
| Current Assets: |  |  |  |  |
| Cash and cash equivalents | \$ | 491,386 | \$ | 323,992 |
| Trade receivables (net of allowances of \$12,772 and \$9,995, respectively) |  | 665,511 |  | 550,658 |
| Inventories: Raw materials |  | 309,544 |  | 288,629 |
| Work in process |  | 17,828 |  | 13,792 |
| Finished goods |  | 296,390 |  | 289,596 |
| Total Inventories |  | 623,762 |  | 592,017 |
| Prepaid expenses and other current assets |  | 213,267 |  | 142,347 |
| Total Current Assets |  | 1,993,926 |  | 1,609,014 |
| Property, plant and equipment, at cost |  | 2,022,866 |  | 1,913,333 |
| Accumulated depreciation |  | $(1,211,040)$ |  | $(1,137,617)$ |
|  |  | 811,826 |  | 775,716 |
| Goodwill |  | 1,145,165 |  | 1,000,123 |
| Other intangible assets, net |  | 426,064 |  | 365,783 |
| Deferred income taxes |  | 150,359 |  | 138,636 |
| Other assets |  | 91,535 |  | 127,712 |
| Total Assets | \$ | 4,618,875 | \$ | 4,016,984 |
| LIABILITIES AND SHAREHOLDERS' EQUITY |  |  |  |  |
| Current Liabilities: |  |  |  |  |
| Bank borrowings and overdrafts and current portion of long-term debt | \$ | 257,873 | \$ | 258,516 |
| Accounts payable |  | 265,900 |  | 274,815 |
| Accrued payroll and bonus |  | 53,833 |  | 64,357 |
| Dividends payable |  | 50,621 |  | 50,678 |
| Other current liabilities |  | 232,996 |  | 249,931 |
| Total Current Liabilities |  | 861,223 |  | 898,297 |
| Long-term debt |  | 1,636,338 |  | 1,066,855 |
| Deferred gains |  | 38,529 |  | 39,816 |
| Retirement liabilities |  | 251,154 |  | 243,407 |
| Other liabilities |  | 151,545 |  | 137,475 |
| Total Other Liabilities |  | 2,077,566 |  | 1,487,553 |
| Commitments and Contingencies (Note 13) |  |  |  |  |
| Shareholders' Equity: |  |  |  |  |
| Common stock $121 / 2 \phi$ par value; authorized $500,000,000$ shares; issued $115,858,190$ shares as of June 30, 2017 and December 31, 2016 and outstanding 78,975,563 and 79,213,037 shares as of June 30, 2017 and December 31, 2016 |  |  |  |  |
| Capital in excess of par value |  | 148,445 |  | 152,481 |
| Retained earnings |  | 3,909,200 |  | 3,818,535 |
| Accumulated other comprehensive loss |  | $(676,201)$ |  | $(680,095)$ |
| Treasury stock, at cost - $36,882,627$ shares as of June 30, 2017 and 36,645,153 shares as of December 31, 2016 |  | $(1,721,556)$ |  | $(1,679,147)$ |
| Total Shareholders' Equity |  | 1,674,358 |  | 1,626,244 |
| Noncontrolling interest |  | 5,728 |  | 4,890 |
| Total Shareholders' Equity including noncontrolling interest |  | 1,680,086 |  | 1,631,134 |
| Total Liabilities and Shareholders' Equity | \$ | 4,618,875 | \$ | 4,016,984 |

See Notes to Consolidated Financial Statements

## INTERNATIONAL FLAVORS \& FRAGRANCES INC.

## CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

## (AMOUNT IN THOUSANDS EXCEPT PER SHARE AMOUNTS)

(Unaudited)

|  | Three Months Ended June 30, |  |  |  | Six Months Ended June 30, |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2017 |  | 2016 |  |
| Net sales | \$ | 842,861 | \$ | 793,478 | \$ | 1,671,154 | \$ | 1,576,789 |
| Cost of goods sold |  | 468,272 |  | 427,837 |  | 931,899 |  | 850,940 |
| Gross profit |  | 374,589 |  | 365,641 |  | 739,255 |  | 725,849 |
| Research and development expenses |  | 70,320 |  | 63,252 |  | 140,031 |  | 126,637 |
| Selling and administrative expenses |  | 135,910 |  | 132,784 |  | 276,240 |  | 256,327 |
| Amortization of acquisition-related intangibles |  | 8,494 |  | 5,130 |  | 15,561 |  | 11,191 |
| Restructuring and other charges, net |  | 791 |  | - |  | 10,934 |  | - |
| Gain on sales of fixed assets |  | (68) |  | (197) |  | (89) |  | $(2,910)$ |
| Operating profit |  | 159,142 |  | 164,672 |  | 296,578 |  | 334,604 |
| Interest expense |  | 17,556 |  | 15,060 |  | 30,363 |  | 27,539 |
| Other (income) expense, net |  | (454) |  | $(2,438)$ |  | $(14,312)$ |  | 118 |
| Income before taxes |  | 142,040 |  | 152,050 |  | 280,527 |  | 306,947 |
| Taxes on income |  | 32,245 |  | 35,317 |  | 54,968 |  | 71,610 |
| Net income |  | 109,795 |  | 116,733 |  | 225,559 |  | 235,337 |
| Other comprehensive income (loss), after tax: |  |  |  |  |  |  |  |  |
| Foreign currency translation adjustments |  | 13,347 |  | $(4,689)$ |  | 10,090 |  | 9,389 |
| (Losses) gains on derivatives qualifying as hedges |  | $(11,768)$ |  | 800 |  | $(13,519)$ |  | $(9,392)$ |
| Pension and postretirement net liability |  | 3,688 |  | 2,578 |  | 7,323 |  | 5,133 |
| Other comprehensive income (loss) |  | 5,267 |  | $(1,311)$ |  | 3,894 |  | 5,130 |
| Total comprehensive income | \$ | 115,062 | \$ | 115,422 | \$ | 229,453 | \$ | 240,467 |
|  |  |  |  |  |  |  |  |  |
| Net income per share - basic | \$ | 1.39 | \$ | 1.46 | \$ | 2.85 | \$ | 2.94 |
| Net income per share - diluted | \$ | 1.38 | \$ | 1.46 | \$ | 2.84 | \$ | 2.93 |
| Average number of shares outstanding - basic |  | 79,072 |  | 79,764 |  | 79,088 |  | 79,809 |
| Average number of shares outstanding - diluted |  | 79,305 |  | 80,040 |  | 79,360 |  | 80,141 |
| Dividends declared per share | \$ | 0.64 | \$ | 0.56 | \$ | 1.28 | \$ | 1.12 |

See Notes to Consolidated Financial Statements

## INTERNATIONAL FLAVORS \& FRAGRANCES INC.

## CONSOLIDATED STATEMENT OF CASH FLOWS <br> (DOLLARS IN THOUSANDS) <br> (Unaudited)

|  | Six Months Ended June 30, |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  |
| Cash flows from operating activities: |  |  |  |  |
| Net income | \$ | 225,559 | \$ | 235,337 |
| Adjustments to reconcile to net cash provided by operating activities: |  |  |  |  |
| Depreciation and amortization |  | 55,805 |  | 49,743 |
| Deferred income taxes |  | 1,505 |  | 16,543 |
| Gain on disposal of assets |  | (89) |  | $(2,910)$ |
| Stock-based compensation |  | 12,893 |  | 13,774 |
| Pension contributions |  | $(31,557)$ |  | $(39,510)$ |
| Litigation settlement |  | $(56,000)$ |  | - |
| Foreign currency gain on liquidation of entity |  | $(12,214)$ |  | - |
| Changes in assets and liabilities, net of acquisitions: |  |  |  |  |
| Trade receivables |  | $(77,580)$ |  | $(70,361)$ |
| Inventories |  | $(4,228)$ |  | $(7,271)$ |
| Accounts payable |  | $(23,479)$ |  | $(29,167)$ |
| Accruals for incentive compensation |  | $(12,316)$ |  | $(2,001)$ |
| Other current payables and accrued expenses |  | $(3,099)$ |  | 13,400 |
| Other assets |  | 18,007 |  | 4,054 |
| Other liabilities |  | $(35,286)$ |  | $(9,335)$ |
| Net cash provided by operating activities |  | 57,921 |  | 172,296 |
| Cash flows from investing activities: |  |  |  |  |
| Cash paid for acquisitions, net of cash received |  | $(191,304)$ |  | - |
| Additions to property, plant and equipment |  | $(46,153)$ |  | $(43,236)$ |
| Proceeds from life insurance contracts |  | 1,941 |  | - |
| Maturity of net investment hedges |  | 3,016 |  | (641) |
| Proceeds from disposal of assets |  | 473 |  | 3,630 |
| Net cash used in investing activities |  | $(232,027)$ |  | $(40,247)$ |
| Cash flows from financing activities: |  |  |  |  |
| Cash dividends paid to shareholders |  | $(101,184)$ |  | $(89,463)$ |
| Increase (decrease) in revolving credit facility borrowings and overdrafts |  | 21,595 |  | $(138,142)$ |
| Deferred financing costs |  | $(5,373)$ |  | $(4,796)$ |
| Proceeds from issuance of long-term debt |  | 498,250 |  | 555,559 |
| Loss on pre-issuance hedges |  | $(5,310)$ |  | $(3,244)$ |
| Proceeds from issuance of stock under stock plans |  | 329 |  | 494 |
| Employee withholding taxes paid |  | $(11,485)$ |  | $(13,315)$ |
| Purchase of treasury stock |  | $(53,211)$ |  | $(71,714)$ |
| Net cash provided by financing activities |  | 343,611 |  | 235,379 |
| Effect of exchange rate changes on cash and cash equivalents |  | $(2,111)$ |  | $(9,424)$ |
| Net change in cash and cash equivalents |  | 167,394 |  | 358,004 |
| Cash and cash equivalents at beginning of year |  | 323,992 |  | 181,988 |
| Cash and cash equivalents at end of period | \$ | 491,386 | \$ | 539,992 |
| Interest paid, net of amounts capitalized | \$ | 21,817 | \$ | 24,971 |
| Income taxes paid | \$ | 50,962 | \$ | 52,719 |

See Notes to Consolidated Financial Statements

## Notes to Consolidated Financial Statements

## Note 1. Consolidated Financial Statements:

## Basis of Presentation

These interim statements and related management's discussion and analysis should be read in conjunction with the Consolidated Financial Statements and the related notes and management's discussion and analysis of results of operations, liquidity and capital resources included in our 2016 Annual Report on Form 10-K ("2016 Form 10-K"). These interim statements are unaudited. The year-end balance sheet data included in this Form 10-Q was derived from audited financial statements, but does not include all disclosures required by generally accepted accounting principles in the United States of America. We have historically operated and continue to operate on a $52 / 53$ week fiscal year ending on the Friday closest to the last day of the quarter. For ease of presentation, June 30 and December 31 are used consistently throughout this Form 10-Q and these interim financial statements and related notes to represent the period-end dates. For the 2017 and 2016 quarters, the actual closing dates were June 30, and July 1, respectively. The unaudited interim financial statements include all adjustments (consisting only of normal recurring adjustments) and accruals necessary in the judgment of management for a fair statement of the results for the periods presented. When used herein, the terms "IFF," the "Company," "we," "us" and "our" mean International Flavors \& Fragrances Inc. and its consolidated subsidiaries.

## Reclassifications and Revisions

Certain prior year amounts have been reclassified and revised to conform with current year presentation.
The Consolidated Statement of Comprehensive Income has been revised to properly reflect Gain on sales of fixed assets within Operating profit for the three and six months ending June 30, 2016. These amounts were previously included in Other (income) expense, net. The Consolidated Statement of Cash Flows has been revised to properly reclassify $\$ 5.4$ million from Other current payables to Other assets for the six months ending June 30, 2016. This adjustment had no impact on Net cash provided from operating activities. In addition, approximately $\$ 5.4$ million of expense was recorded during the first quarter of 2017 for a tax assessment relating to prior periods. These adjustments were not material to the current and previously-issued financial statements.

## Recent Accounting Pronouncements

In May 2017, the Financial Accounting Standards Board ("FASB") issued amendments to the Compensation - Stock Compensation guidance which clarifies which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting. This guidance is effective, and should be applied prospectively, for fiscal years beginning after December 15, 2017. Early adoption is permitted. The Company does not expect this guidance to have an impact on its Consolidated Financial Statements as it is not the Company's practice to modify the terms or conditions of a share-based payment award after it has been granted.

In March 2017, the FASB issued amendments to the Compensation - Retirement Benefits guidance which requires employers that present a measure of operating income in their statement of income to include only the service cost component of net periodic pension cost and postretirement costs in operating expenses. This guidance is effective, and should be applied retroactively, for fiscal years beginning after December 15, 2017. Early adoption is permitted as of the beginning of an annual period. The Company expects the impact that this guidance will have on its Consolidated Statement of Comprehensive Income will be an increase in operating expenses of approximately $\$ 15$ million and $\$ 30$ million for the fiscal years 2016 and 2017, respectively.

In January 2017, the FASB issued amendments to the Business Combination guidance which clarifies the definition of a business in order to assist companies when evaluating whether transactions should be accounted for as acquisitions or disposals of assets or businesses. This guidance will be effective prospectively for annual and interim periods beginning after December 15,2017. The Company is currently evaluating the impact this guidance may have on its consolidated financial statements and on accounting for future acquisitions.

In January 2017, the FASB issued an amendment to the Goodwill Impairment guidance which eliminates Step 2 from the goodwill impairment test. This guidance will be effective for fiscal years beginning after December 15, 2019. Early adoption is permitted. The Company plans to adopt this guidance in accordance with its existing annual impairment review policy in fiscal year 2017. The Company does not expect this adoption to have an impact on its consolidated financial statements.

In October 2016, the FASB issued authoritative guidance which allows for the immediate recognition of current and deferred income tax impact on intra-entity asset transfers, excluding inventory. This guidance will be effective for fiscal years beginning after December 15, 2017. The Company adopted this guidance in the first quarter of fiscal year 2017 and accordingly, recorded a cumulative-effect adjustment to Retained earnings that reduced Other assets and adjusted Deferred income taxes by a net amount of approximately $\$ 33$ million.

In August 2016, the FASB issued authoritative guidance which requires changes to the classification of certain activities within the statement of cash flows. This guidance will be effective for annual and interim periods beginning after December 15, 2017. Early adoption will be permitted for all entities. The Company does not expect this adoption to have a significant impact on its Consolidated Statement of Cash Flows.

In March 2016, the FASB issued authoritative guidance which requires changes to several aspects of the accounting for share-based payment transactions, including the treatment of income tax consequences, classification of awards as either equity or liabilities, and classification of certain items on the statement of cash flows. This guidance was effective for annual and interim periods beginning after December 15, 2016. The Company adopted this standard during the first quarter of 2017. The standard requires that employee taxes paid when an employer withholds shares be presented in the Consolidated Statement of Cash Flows as a financing activity instead of an operating activity. The Company adopted this change retrospectively, resulting in a $\$ 11.5$ million and $\$ 13.3$ million increase to Net cash provided by operating activities on the Consolidated Statement of Cash Flows as of June 30, 2017 and 2016, respectively. In addition, the standard requires that excess tax benefits presented in the Consolidated Statement of Cash Flows be classified as an operating activity instead of a financing activity. The Company adopted this change retrospectively, resulting in a $\$ 3.2$ million and $\$ 4.4$ million increase to Net cash provided by operating activities on the Consolidated Statement of Cash Flows as of June 30, 2017 and 2016, respectively.

The standard also requires all excess tax benefits/deficiencies be recognized as income tax expense/benefit in the Consolidated Statement of Comprehensive Income. This guidance has been applied prospectively. This change resulted in a $\$ 3.2$ million benefit to income tax expense for the period ended June 30, 2017. The 2016 period included a $\$ 4.2$ million benefit to equity, which has not been retrospectively adjusted. The full year 2016 benefit to equity was $\$ 5.3$ million. Additionally, the standard allows the Company to make an entity-wide accounting policy election to either estimate the number of awards that are expected to be forfeited or account for forfeitures as they occur. The Company has elected to continue to account for forfeitures using an estimate of awards expected to be forfeited.

In February 2016, the FASB issued authoritative guidance which requires changes to the accounting for leases. The new guidance establishes a new lease accounting model, that requires entities to record assets and liabilities related to leases on the balance sheet for certain types of leases. The guidance will be effective for annual and interim periods beginning after December 31, 2018. Early adoption will be permitted for all entities. The Company expects the adoption of this guidance will result in significant increases to assets and liabilities on its Consolidated Balance Sheet and is still evaluating the impact on its Consolidated Statement of Comprehensive Income.

In May 2014, the FASB issued authoritative guidance that provides for a comprehensive model to be used in accounting for revenue arising from contracts with customers. Under this standard, revenue will be recognized to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services. This guidance is applicable to all entities and is effective for annual and interim periods beginning after December 15, 2017. Companies have the option to apply the new guidance under a retrospective approach to each prior reporting period presented or a modified retrospective approach with the cumulative effect of initially applying the new guidance recognized at the date of initial application within the Consolidated Balance Sheet. The Company is evaluating the impact of the new standard, including updates to the standard that were issued by the FASB. In particular, the Company has reviewed the nature of its larger customer relationships and is in the process of reviewing the nature of potential regional variations in all aspects of its customer base regardless of size. Based on the work performed to date, the Company expects to conduct further review and analysis of certain areas that may lead to changes in the manner in which the Company recognizes revenue, including the customized nature of the product, consignment arrangements, rebates, upfront costs, shipping terms and documentation other than formal contracts. As a result, the financial statement impact has not yet been determined. The Company is also currently evaluating the method of adoption and the potential impacts to its consolidated financial statements and related disclosures.

## Accounts Receivable

The Company sells certain accounts receivable on a non-recourse basis to unrelated financial institutions under "factoring" agreements that are sponsored, solely and individually, by certain customers. The Company accounts for these transactions as sales of receivables, removes the receivables sold from its financial statements, and records cash proceeds when received by the Company. The beneficial impact on cash provided by operations from participating in these programs decreased
approximately $\$ 4.7$ million for the six months ended June 30,2017 compared to an increase of approximately $\$ 17.7$ million for the six months ended June 30,2016 . The cost of participating in these programs was immaterial to our results in all periods.

## Currency Translation Adjustment Reclassification

During the first quarter of 2017 , the Company recorded income of approximately $\$ 12.2$ million related to a foreign currency exchange gain from the release of a currency translation adjustment upon the liquidation of a foreign entity in 2017. This amount was recorded to Other (income) expense, net.

## Note 2. Net Income Per Share:

Net income per share is based on the weighted average number of shares outstanding. A reconciliation of the shares used in the computation of basic and diluted net income per share is as follows:

|  | Three Months Ended June 30, |  | Six Months Ended June 30, |  |
| :---: | :---: | :---: | :---: | :---: |
| (SHARES IN THOUSANDS) | 2017 | 2016 | 2017 | 2016 |
| Basic | 79,072 | 79,764 | 79,088 | 79,809 |
| Assumed dilution under stock plans | 233 | 276 | 272 | 332 |
| Diluted | 79,305 | 80,040 | 79,360 | 80,141 |

There were no stock options or stock-settled appreciation rights ("SSARs") excluded from the computation of diluted net income per share for the three and six months ended June 30, 2017. An immaterial amount of SSARs were excluded from the 2016 period.

The Company has issued shares of purchased restricted common stock and purchased restricted common stock units (collectively "PRSUs") which contain rights to nonforfeitable dividends while these shares are outstanding and thus are considered participating securities. Such securities are required to be included in the computation of basic and diluted earnings per share pursuant to the two-class method. The Company did not present the two-class method since the difference between basic and diluted net income per share for both unrestricted common shareholders and PRSU shareholders was less than $\$ 0.01$ per share for each period presented, and the number of PRSUs outstanding as of June 30, 2017 and 2016 was immaterial. Net income allocated to such PRSUs was $\$ 0.2$ million and $\$ 0.3$ million for the three months ended June 30,2017 and 2016 , respectively and $\$ 0.5$ million during each of the six months ended June 30, 2017 and 2016.

## Note 3. Acquisitions:

## 2017 Activity

## PowderPure

On April 7, 2017, the Company completed the acquisition of $100 \%$ of the outstanding shares of Columbia PhytoTechnology, LLC d/b/a PowderPure ("PowderPure"), a privately-held flavors company with facilities in North America. The acquisition was accounted for under the purchase method. PowderPure was acquired to expand expertise in, and product offerings of, clean label solutions within the Flavors business. The Company paid approximately $\$ 55$ million including $\$ 0.3$ million of cash acquired for this acquisition, which was funded from existing resources including use of its revolving credit facility. Additionally, the Company recorded an accrual of approximately $\$ 1.4$ million representing the current estimate of additional contingent consideration payable to the former owners of PowderPure. (The maximum earnout payable is $\$ 10$ million upon satisfaction of certain performance metrics). The purchase price exceeded the preliminary fair value of existing net assets by approximately $\$ 46.7$ million. The excess was allocated principally to identifiable intangible assets including approximately $\$ 27.5$ million to proprietary technology, approximately $\$ 4.5$ million to trade name and approximately $\$ 0.8$ million to customer relationships, and approximately $\$ 13.9$ million of goodwill (which is deductible for tax purposes). Goodwill is the excess of the purchase price over the fair value of net assets acquired and represents the value the Company expects to achieve from its increased exposure to clean label products within the Company's existing Flavors business. The intangible assets are being amortized over the following estimated useful lives: proprietary technology, 14 years, trade name, 14 years, and customer relationships, 4 years. The purchase price allocation is preliminary pending the finalization of the values of intangible assets, finalization of working capital and the finalization of estimated useful lives. The purchase price allocation is expected to be completed by the fourth quarter of 2017.

No pro forma financial information for 2017 and 2016 is presented as the acquisition was not material to the consolidated financial statements.

## Fragrance Resources

On January 17,2017 , the Company completed the acquisition of $100 \%$ of the outstanding shares of Fragrance Resources, a privately-held fragrance company with facilities in Germany, North America, France, and China. The acquisition was accounted for under the purchase method. Fragrance Resources was acquired to strengthen the North American and German Fragrances business. The Company paid approximately Euro 142.0 million (approximately $\$ 150.5$ million) including approximately Euro 13.7 million (approximately $\$ 14.5$ million) of cash acquired for this acquisition, which was funded from existing resources including use of its revolving credit facility. The purchase price exceeded the preliminary fair value of existing net assets by approximately $\$ 122.1$ million. The excess was allocated principally to identifiable intangible assets including approximately $\$ 59.6$ million related to customer relationships, approximately $\$ 6.1$ million related to proprietary technology and trade name and approximately $\$ 79.4$ million of goodwill (which is not deductible for tax purposes) and approximately $\$ 23.0$ million of net deferred tax liability. Goodwill is the excess of the purchase price over the fair value of net assets acquired and represents synergies from the addition of Fragrance Resources to the Company's existing Fragrances business. The intangible assets are being amortized over the following estimated useful lives: trade name, 2 years, proprietary technology, 5 years and customer relationships, $12-16$ years. The purchase price allocation is preliminary pending the finalization of the values of intangible assets, principally customer relationships, finalization of working capital calculations and the finalization of estimated useful lives. The purchase price allocation is expected to be completed by the third quarter of 2017.

No pro forma financial information for 2017 and 2016 is presented as the acquisition was not material to the consolidated financial statements.

## 2016 Activity

## David Michael

On October 7, 2016, the Company completed the acquisition of $100 \%$ of the outstanding shares of David Michael \& Company, Inc. ("David Michael"). The acquisition was accounted for under the purchase method. David Michael was acquired to strengthen the North American flavors business. The Company paid approximately $\$ 242.6$ million (including $\$ 5.1$ million of cash acquired) for this acquisition, which was funded from existing resources. The preliminary purchase price allocation was updated during the first quarter of 2017, resulting in a reduction in allocation of value to customer relationships. The related reduction in amortization expense was not material to the Consolidated Statement of Comprehensive Income. The purchase price allocation was finalized during the second quarter of 2017. Additionally, during the second quarter of 2017, the Company finalized the working capital adjustment and paid an additional $\$ 0.6$ million. The purchase price exceeded the fair value of existing net assets by approximately $\$ 168.7$ million. The excess was allocated principally to identifiable intangible assets including approximately $\$ 50.0$ million related to customer relationships, approximately $\$ 8.4$ million related to proprietary technology and trade name and approximately $\$ 110.2$ million of goodwill (which is deductible for tax purposes). Goodwill is the excess of the purchase price over the fair value of net assets acquired and represents synergies from the addition of David Michael to the Company's existing Flavors business. The intangible assets are being amortized over the following estimated useful lives: trade name, 2 years, proprietary technology, 5 years and customer relationships, 18-20 years.

No pro forma financial information for 2016 is presented as the impact of the acquisition was immaterial to the Consolidated Statement of Comprehensive Income.

## Note 4. Restructuring and Other Charges, Net:

## 2017 Productivity Program

On February 15, 2017, the Company announced that it was adopting a multi-year productivity program designed to improve overall financial performance, provide flexibility to invest in growth opportunities and drive long-term value creation. In connection with this program, the Company expects to optimize its global footprint and simplify its organizational structures globally. In connection with this initiative, the Company expects to incur cumulative, pre-tax cash charges of between $\$ 30-\$ 35$ million, consisting primarily of $\$ 21-\$ 22$ million in personnel-related costs and an estimated $\$ 9-\$ 13$ million in facility-related costs, such as lease termination, and integration-related costs. In addition, the Company may incur up to $\$ 5$ million of accelerated depreciation.

The Company recorded $\$ 10.1$ million and $\$ 3.1$ million of charges related to personnel-related costs and lease termination costs during the first and second quarter of 2017 , respectively, with the remainder of the personnel-related costs expected to be recognized by the end of 2017 and the other costs expected to be recognized over the following six quarters. The Company made payments of $\$ 2.1$ million and $\$ 4.5$ million related to severance in the first and second quarters of 2017 , respectively. The overall charges were split approximately evenly between Flavors and Fragrances. This initiative is expected to result in the reduction of approximately 370 members of the Company's global workforce, including acquired entities, in various parts of the organization.
2015 Severance Charges

During 2015, the Company established a series of initiatives intended to streamline its management structure, simplify decision-making and accountability, better leverage and align its capabilities across the organization and improve efficiency of its global manufacturing and operations network. As a result, the Company recorded charges for severance and related costs pertaining to approximately 150 positions that were affected. During the first quarter of 2017 , the Company made payments of $\$ 0.2$ million related to severance. During the second quarter of 2017 , the Company recorded a credit of $\$ 2.3$ million related to the reversal of severance accruals that were determined to be no longer required. No further actions are expected related to these 2015 initiatives.

Changes in employee-related restructuring liabilities during the six months ended June 30, 2017, were as follows:

| (DOLLARS IN THOUSANDS) | Employee-Related Costs |  | Other |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Balance at December 31, 2016 | \$ | 3,277 | \$ | - | \$ | 3,277 |
| Additional charges (reversals), net |  | 9,984 |  | 950 |  | 10,934 |
| Non-cash charges |  | - |  | (950) |  | (950) |
| Payments |  | $(6,776)$ |  | - |  | $(6,776)$ |
| Balance at June 30, 2017 | \$ | 6,485 | \$ | - | \$ | 6,485 |

Note 5. Goodwill and Other Intangible Assets, Net:
Goodwill
Movements in goodwill during 2017 were as follows:

| (DOLLARS IN THOUSANDS) | Goodwill |
| :--- | ---: |
| Balance at December 31,2016 | $\$ 1,000,123$ |
| Acquisitions | 93,223 |
| Foreign exchange | 15,782 |
| Other | 36,037 |
| Balance at June 30,2017 | $\mathbf{\$}$ |

Other above principally represents the increase to Goodwill associated with the update of certain customer relationship assumptions in the final purchase price allocation of David Michael, as disclosed in Note 3.

## Other Intangible Assets

Other intangible assets, net consist of the following amounts:

| (DOLLARS IN THOUSANDS) | June 30, 2017 |  | December 31,$2016$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Cost |  |  |  |  |
| Customer relationships | \$ | 407,612 | \$ | 371,270 |
| Trade names \& patents |  | 37,817 |  | 30,679 |
| Technological know-how |  | 153,090 |  | 119,544 |
| Other |  | 24,692 |  | 24,470 |
| Total carrying value |  | 623,211 |  | 545,963 |
| Accumulated Amortization |  |  |  |  |
| Customer relationships |  | $(93,289)$ |  | $(82,555)$ |
| Trade names \& patents |  | $(13,625)$ |  | $(12,198)$ |
| Technological know-how |  | $(71,404)$ |  | $(68,292)$ |
| Other |  | $(18,829)$ |  | $(17,135)$ |
| Total accumulated amortization |  | $(197,147)$ |  | $(180,180)$ |
|  |  |  |  |  |
| Other intangible assets, net | \$ | 426,064 | \$ | 365,783 |

## Amortization

Amortization expense was $\$ 8.5$ million and $\$ 5.1$ million for the three months ended June 30, 2017 and 2016, respectively and $\$ 15.6$ million and $\$ 11.2$ million for the six months ended June 30, 2017 and 2016, respectively. Annual amortization is expected to be $\$ 34.5$ million for the full year 2017 , $\$ 34.5$ million for the year 2018, $\$ 32.9$ million for the year 2019, $\$ 32.2$ million for the year 2020, $\$ 27.5$ million for the year 2021 and $\$ 25.1$ million for the year 2022.

## Note 6. Borrowings:

Debt consists of the following:

| (DOLLARS IN THOUSANDS) | Rate | Maturities | June 30, 2017 |  | December 31, 2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Senior notes - $2007{ }^{(1)}$ | 6.40\% | 2017-27 |  | 499,735 |  | 499,676 |
| Senior notes - $2013{ }^{(1)}$ | 3.20\% | 2023 |  | 298,519 |  | 297,986 |
| Euro Senior notes - $2016{ }^{(1)}$ | 1.75\% | 2024 |  | 563,981 |  | 512,764 |
| Senior notes - $2017{ }^{(1)}$ | 4.38\% | 2047 |  | 492,877 |  | - |
| Credit facility | 1.13\% | 2021 |  | 28,445 |  | - |
| Bank overdrafts and other |  |  |  | 10,275 |  | 13,599 |
| Deferred realized gains on interest rate swaps |  |  |  | 379 |  | 1,346 |
|  |  |  |  | 1,894,211 |  | 1,325,371 |
| Less: Current portion of debt |  |  |  | $(257,873)$ |  | $(258,516)$ |
|  |  |  | \$ | 1,636,338 | \$ | 1,066,855 |

${ }^{(1)}$ Amount is net of unamortized discount and debt issuance costs.
On May 18,2017 , the Company issued $\$ 500.0$ million face amount of $4.375 \%$ Senior Notes ("Senior Notes - 2017") due 2047 at a discount of $\$ 1.8$ million. The Company received proceeds related to the issuance of these Senior Notes - 2017 of $\$ 493.9$ million which was net of the $\$ 1.8$ million discount and $\$ 4.4$ million in underwriting fees (recorded as deferred financing costs). In addition, the Company incurred $\$ 0.9$ million in legal and professional costs associated with the issuance and such costs were recorded as deferred financing costs. In connection with the debt issuance, the Company entered into preissuance hedging transactions that were settled upon issuance of the debt and resulted in a loss of approximately $\$ 5.3$ million. The discount, deferred financing costs and pre-issuance hedge loss are being amortized as interest expense over the 30 year term of the debt. The Senior Notes - 2017 bear interest at a rate of $4.375 \%$ per annum, with interest payable semi-annually on June 1 and December 1 of each year, commencing on December 1 , 2017. The Senior Notes - 2017 will mature on June 1, 2047.

Upon 30 days' notice to holders of the Senior Notes - 2017, the Company may redeem the Senior Notes - 2017 for cash in whole, at any time, or in part, from time to time, prior to maturity, at redemption prices that include accrued and unpaid interest and a make-whole premium, as specified in the Indenture governing the Senior Notes - 2017. However, no make-whole premium will be paid for redemptions of the Senior Notes - 2017 on or after December $1,2046$. The Indenture provides for customary events of default and contains certain negative covenants that limit the ability of the Company and its subsidiaries to grant liens on assets, or to enter into sale-leaseback transactions. In addition, subject to certain limitations, in the event of the occurrence of both (1) a change of control of the Company and (2) a downgrade of the Senior Notes - 2017 below investment grade rating by both Moody's Investors Services, Inc. and Standard \& Poor's Ratings Services within a specified time period, the Company will be required to make an offer to repurchase the Senior Notes - 2017 at a price equal to $101 \%$ of the principal amount of the Senior Notes -2017 , plus accrued and unpaid interest to the date of repurchase.

## Commercial Paper

Commercial paper issued by the Company generally has terms of 90 days or less. As of June 30,2017 , there was no commercial paper outstanding. The revolving credit facility is used as a backstop for the Company's commercial paper program. No commercial paper was issued during the six months ended June 30, 2016.

## Note 7. Income Taxes:

## Uncertain Tax Positions

At June 30, 2017, the Company had $\$ 17.6$ million of unrecognized tax benefits recorded in Other liabilities and $\$ 5.9$ million in Other current liabilities. If these unrecognized tax benefits were recognized, the effective tax rate would be affected.

At June 30, 2017, the Company had accrued interest and penalties of $\$ 1.7$ million classified in Other liabilities and $\$ 0.5$ million in Other current liabilities.

As of June 30, 2017, the Company's aggregate provisions for uncertain tax positions, including interest and penalties, was $\$ 25.7$ million associated with various tax positions asserted in foreign jurisdictions, none of which is individually material.

The Company regularly repatriates a portion of current year earnings from select non-U.S. subsidiaries. No provision is made for additional taxes on undistributed earnings of subsidiary companies that are intended and planned to be indefinitely invested in such subsidiaries. We intend to, and have plans to, reinvest these earnings indefinitely in our foreign subsidiaries to fund local operations and/or capital projects.

The Company has ongoing income tax audits and legal proceedings which are at various stages of administrative or judicial review. In addition, the Company has open tax years with various taxing jurisdictions that range primarily from 2007 to 2016. Based on currently available information, we do not believe the ultimate outcome of any of these tax audits and other tax positions related to open tax years, when finalized, will have a material impact on our financial position.

The Company also has other ongoing tax audits and legal proceedings that relate to indirect taxes, such as value-added taxes, sales and use taxes and property taxes, which are discussed in Note 13.

## Effective Tax Rate

The effective tax rate for the three months ended June 30 , 2017 was $22.7 \%$ compared with $23.2 \%$ for the three months ended June 30 , 2016. The quarter-over-quarter decrease was largely due to a more favorable mix of earnings and the impact of the global supply chain hub, offset by unfavorable repatriation costs as compared to the prior year. The effective tax rate for the six months ended June 30, 2017 was $19.6 \%$ compared with $23.3 \%$ for the six months ended June 30, 2016. The year-over-year decrease was primarily due to various items (including certain non-taxable gains on foreign currency and the impact of adopting the new accounting guidance on the tax effect of stock compensation vesting), a more favorable mix of earnings and the impact of the global supply chain hub, offset by unfavorable repatriation costs as compared to the prior year.

## Note 8. Stock Compensation Plans:

The Company has various plans under which its officers, senior management, other key employees and directors may be granted equity-based awards. Equity awards outstanding under the plans include PRSUs, restricted stock units ("RSUs"), stock options, SSARs and Long-Term Incentive Plan awards; liability-based awards outstanding under the plans are cash-settled RSUs.

Stock-based compensation expense and related tax benefits were as follows:

| (DOLLARS IN THOUSANDS) | Three Months Ended June 30, |  |  |  | Six Months Ended June 30, |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2017 |  | 2016 |  |
| Equity-based awards | \$ | 7,074 | \$ | 7,844 | \$ | 12,893 | \$ | 13,774 |
| Liability-based awards |  | 1,298 |  | 1,739 |  | 3,051 |  | 2,332 |
| Total stock-based compensation expense |  | 8,372 |  | 9,583 |  | 15,944 |  | 16,106 |
| Less: tax benefit |  | $(2,336)$ |  | $(2,816)$ |  | $(4,549)$ |  | $(4,789)$ |
| Total stock-based compensation expense, after tax | \$ | 6,036 | \$ | 6,767 | \$ | 11,395 | \$ | 11,317 |

## Note 9. Segment Information:

The Company is organized into two operating segments: Flavors and Fragrances. These segments align with the internal structure of the Company used to manage these businesses. Performance of these operating segments is evaluated based on segment profit which is defined as operating profit before Restructuring and other charges, net, Global expenses (as discussed below) and certain non-recurring items, Interest expense, Other income (expense), net and Taxes on income.

The Global expenses caption below represent corporate and headquarters-related expenses which include legal, finance, human resources, certain incentive compensation expenses and other $R \& D$ and administrative expenses that are not allocated to individual operating segments.

Reportable segment information is as follows:

| (DOLLARS IN THOUSANDS) | Three Months Ended June 30, |  |  |  | Six Months Ended June 30, |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2017 |  | 2016 |  |
| Net sales: |  |  |  |  |  |  |  |  |
| Flavors | \$ | 414,323 | \$ | 379,504 | \$ | 820,487 | \$ | 752,012 |
| Fragrances |  | 428,538 |  | 413,974 |  | 850,667 |  | 824,777 |
| Consolidated | \$ | 842,861 | \$ | 793,478 | \$ | 1,671,154 | \$ | 1,576,789 |
| Segment profit: |  |  |  |  |  |  |  |  |
| Flavors | \$ | 100,338 | \$ | 90,337 | \$ | 198,346 | \$ | 182,151 |
| Fragrances |  | 84,860 |  | 87,596 |  | 166,557 |  | 176,833 |
| Global expenses |  | $(13,398)$ |  | $(12,268)$ |  | $(29,594)$ |  | $(26,141)$ |
| Restructuring and other charges, net ${ }^{(1)}$ |  | (791) |  | (182) |  | $(10,934)$ |  | (283) |
| Acquisition-related costs ${ }^{(2)}$ |  | $(6,278)$ |  | (213) |  | $(15,066)$ |  | $(1,249)$ |
| Operational improvement initiative costs ${ }^{(3)}$ |  | (445) |  | (831) |  | $(1,066)$ |  | $(1,099)$ |
| Legal (charges) credits ${ }^{(4)}$ |  | $(1,000)$ |  | 36 |  | $(1,000)$ |  | 1,482 |
| Gain on sales of assets (5) |  | 68 |  | 197 |  | 89 |  | 2,910 |
| Tax assessment (6) |  | 19 |  | - |  | $(5,331)$ |  | - |
| Integration-related costs ${ }^{(7)}$ |  | (731) |  | - |  | $(1,923)$ |  | - |
| FDA mandated product recall ${ }^{(8)}$ |  | $(3,500)$ |  | - |  | $(3,500)$ |  | - |
| Operating profit |  | 159,142 |  | 164,672 |  | 296,578 |  | 334,604 |
| Interest expense |  | $(17,556)$ |  | $(15,060)$ |  | $(30,363)$ |  | $(27,539)$ |
| Other income (expense) |  | 454 |  | 2,438 |  | 14,312 |  | (118) |
| Income before taxes | \$ | 142,040 | \$ | 152,050 | \$ | 280,527 | \$ | 306,947 |

(1) In 2017, charges represent severance costs related to the 2017 Productivity Program. In 2016, charges relate to accelerated depreciation which were recorded in Cost of goods sold.
(2) Represents transaction costs related to the acquisitions of Fragrance Resources and PowderPure as well as the amortization of inventory "step-up" related to David Michael, Fragrance Resources and PowderPure in the 2017 period and expense related to the amortization of inventory "step-up" and additional transaction costs related to the acquisition of Lucas Meyer in the 2016 period.
(3) Represents accelerated depreciation in Hangzhou, China in both the 2017 and 2016 periods.
(4) Represents additional charges related to litigation settlement in 2017 and income receivable from the Spanish government related to the Spanish capital tax case in 2016.
(5) Represents gains on sale of assets in Latin America in the 2017 period and in Europe in the 2016 period.
(6) Represents the reserve for a tax assessment related to commercial rent for prior periods.
(7) Represents costs related to the integration of the David Michael and Fragrance Resources acquisitions in the 2017 period.
(8) Represents an estimate of the Company's incremental direct costs and customer reimbursement obligations, in excess of the Company's sales value of the recalled products, arising from an FDA mandated recall of consumer products as a result of raw material received and identified by the Company as containing contamination. (As discussed in Note 13, the sales value of the recalled products was reserved in the first quarter of 2017). While the Company does not believe that any of the affected raw material was included in its finished products delivered to the customer, as the delivered product included raw material of the same vendor lot that tested positive, the FDA, after being notified by the Company, initiated a recall of all consumer products including raw material from the affected vendor lot due to the potential for product contamination.

Net sales are attributed to individual regions based upon the destination of product delivery. Net sales related to the U.S. for the three months ended June 30, 2017 and 2016 were $\$ 244$ million and $\$ 185$ million, respectively and for the six months ended June 30 , 2017 and 2016 were $\$ 449$ million and $\$ 365$ million, respectively. Net sales attributed to all foreign countries in total for the three months ended June 30, 2017 and 2016 were $\$ 599$ million and $\$ 608$ million, respectively and for the six months ended June 30,2017 and 2016 were $\$ 1,222$ million and $\$ 1,212$ million, respectively. No country other than the U.S. had net sales in any period presented greater than $10 \%$ of total consolidated net sales.

## Note 10. Employee Benefits:

Pension and other defined contribution retirement plan expenses included the following components:

| U.S. Plans <br> (DOLLARS IN THOUSANDS) | Three Months Ended June 30, |  |  |  | Six Months Ended June 30, |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2017 |  | 2016 |  |
| Service cost for benefits earned | \$ | 698 | \$ | 772 | \$ | 1,395 | \$ | 1,543 |
| Interest cost on projected benefit obligation |  | 4,561 |  | 6,006 |  | 9,122 |  | 12,013 |
| Expected return on plan assets |  | $(9,246)$ |  | $(8,070)$ |  | $(18,492)$ |  | $(16,139)$ |
| Net amortization and deferrals |  | 1,793 |  | 1,385 |  | 3,585 |  | 2,772 |
| Net periodic benefit cost |  | $(2,194)$ |  | 93 |  | $(4,390)$ |  | 189 |
| Defined contribution and other retirement plans |  | 2,524 |  | 2,211 |  | 4,779 |  | 4,612 |
| Total expense | \$ | 330 | \$ | 2,304 | \$ | 389 | \$ | 4,801 |


| Non-U.S. Plans <br> (DOLLARS IN THOUSANDS) | Three Months Ended June 30, |  |  |  | Six Months Ended June 30, |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2017 |  | 2016 |  |
| Service cost for benefits earned | \$ | 5,610 | \$ | 3,863 | \$ | 11,220 | \$ | 7,638 |
| Interest cost on projected benefit obligation |  | 3,911 |  | 6,372 |  | 7,822 |  | 12,737 |
| Expected return on plan assets |  | $(12,334)$ |  | $(11,985)$ |  | $(24,668)$ |  | $(23,934)$ |
| Net amortization and deferrals |  | 3,988 |  | 3,286 |  | 7,977 |  | 6,550 |
| Net periodic benefit cost |  | 1,175 |  | 1,536 |  | 2,351 |  | 2,991 |
| Defined contribution and other retirement plans |  | 1,616 |  | 1,763 |  | 2,913 |  | 3,470 |
| Total expense | \$ | 2,791 | \$ | 3,299 | \$ | 5,264 | \$ | 6,461 |

The Company expects to contribute a total of approximately $\$ 2-\$ 10$ million to its U.S. pension plans during 2017. During the six months ended June 30, 2017, no contributions were made to the qualified U.S. pension plans, $\$ 29.3$ million of contributions were made to the non-U.S. pension plans and $\$ 2.2$ million of benefit payments were made with respect to the Company's non-qualified U.S. pension plan.

As of January 1, 2017, the Company changed its approach for calculating the discount rate which is applied to the Consolidated Balance Sheet and Consolidated Statement of Comprehensive Income from a single weighted-average discount rate approach to a multiple discount rate approach. The impact of this change for the full year 2017 is estimated to be a reduction of approximately $\$ 8$ million in pension expense.

Expense recognized for postretirement benefits other than pensions included the following components:

| (DOLLARS IN THOUSANDS) | Three Months Ended June 30, |  |  |  | Six Months Ended June 30, |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2017 |  | 2016 |  |
| Service cost for benefits earned | \$ | 221 | \$ | 214 | \$ | 442 | \$ | 429 |
| Interest cost on projected benefit obligation |  | 588 |  | 787 |  | 1,176 |  | 1,574 |
| Net amortization and deferrals |  | $(1,046)$ |  | $(1,355)$ |  | $(2,092)$ |  | $(2,710)$ |
| Total postretirement benefit income | \$ | (237) | \$ | (354) | \$ | (474) | \$ | (707) |

The Company expects to contribute approximately $\$ 5$ million to its postretirement benefits other than pension plans during 2017. In the six months ended June 30, 2017, $\$ 2.2$ million of contributions were made.

## Note 11. Financial Instruments:

## Fair Value

Accounting guidance on fair value measurements specifies a hierarchy of valuation techniques based on whether the inputs to those valuation techniques are observable or unobservable. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect our market assumptions. These two types of inputs create the following fair value hierarchy:

- Level 1-Quoted prices for identical instruments in active markets.
- Level 2-Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs and significant value drivers are observable in active markets.
- Level 3-Valuations derived from valuation techniques in which one or more significant inputs or significant value drivers are unobservable.

This hierarchy requires us to use observable market data, when available, and to minimize the use of unobservable inputs when determining fair value. We determine the fair value of structured liabilities (where performance is linked to structured interest rates, inflation or currency risks) using the LIBOR swap curve and forward interest and exchange rates at period end. Such instruments are classified as Level 2 based on the observability of significant inputs to the model. We do not have any instruments classified as Level 1 or Level 3, other than those included in pension asset trusts as discussed in Note 13 of our 2016 Form 10-K.

These valuations take into consideration our credit risk and our counterparties' credit risk. The estimated change in the fair value of these instruments due to such changes in our own credit risk (or instrument-specific credit risk) was immaterial as of June 30, 2017.

The amounts recorded in the balance sheet (carrying amount) and the estimated fair values of financial instruments at June 30, 2017 and December 31 , 2016 consisted of the following:

| (DOLLARS IN THOUSANDS) | June 30, 2017 |  |  |  | December 31, 2016 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Carrying Amount |  | $\begin{gathered} \text { Fair } \\ \text { Value } \end{gathered}$ |  | Carrying Amount |  | $\begin{gathered} \text { Fair } \\ \text { Value } \end{gathered}$ |  |
| Cash and cash equivalents ${ }^{(1)}$ | \$ | 491,386 | \$ | 491,386 | \$ | 323,992 | \$ | 323,992 |
| Credit facilities and bank overdrafts ${ }^{(2)}$ |  | 38,720 |  | 38,720 |  | 13,599 |  | 13,599 |
| Long-term debt: ${ }^{(3)}$ |  |  |  |  |  |  |  |  |
| Senior notes - 2007 |  | 499,735 |  | 551,713 |  | 499,676 |  | 556,222 |
| Senior notes - 2013 |  | 298,519 |  | 306,361 |  | 297,986 |  | 302,376 |
| Euro Senior notes - 2016 |  | 563,981 |  | 611,397 |  | 512,764 |  | 546,006 |
| Senior notes - 2017 |  | 492,877 |  | 511,789 |  | - |  | - |

(1) The carrying amount of cash and cash equivalents approximates fair value due to the short maturity of those instruments.
(2) The carrying amount of our credit facilities, bank overdrafts and commercial paper approximates fair value as the interest rate is reset frequently based on current market rates as well as the short maturity of those instruments.
(3) The fair value of our long-term debt was calculated using discounted cash flows applying current interest rates and current credit spreads based on our own credit risk.

## Derivatives

The Company periodically enters into foreign currency forward contracts with the objective of reducing exposure to cash flow volatility associated with our intercompany loans, foreign currency receivables and payables, and anticipated purchases of certain raw materials used in operations. These contracts generally involve the exchange of one currency for a second currency at a future date, have maturities not exceeding twelve months and are with counterparties which are major international financial institutions.

During the six months ended June 30, 2017 and the year ended December 31, 2016, the Company entered into several forward currency contracts which qualified as net investment hedges, in order to mitigate a portion of our net European investments from foreign currency risk. The effective portions of net investment hedges are recorded in Other comprehensive income ("OCl") as a component of Foreign currency translation adjustments in the accompanying Consolidated Statement of Comprehensive Income. Realized gains (losses) are deferred in accumulated other comprehensive income ("AOCI") where they will remain until the net investments in our European subsidiaries are divested. The outstanding forward currency contracts have remaining maturities of approximately one year. Ten of these forward currency contracts matured during the six months ended June 30, 2017.

Subsequent to the issuance of the Euro Senior Notes - 2016 during the first quarter of 2016, the Company designated the debt as a hedge of a portion of its net European investments. Accordingly, the change in the value of the debt that is attributable
to foreign exchange movements is recorded in OCI as a component of Foreign currency translation adjustments in the accompanying Consolidated Statement of Comprehensive Income.

During the six months ended June 30, 2017 and the year ended December 31, 2016, the Company entered into several forward currency contracts which qualified as cash flow hedges. The objective of these hedges is to protect against the currency risk associated with forecasted U.S. dollar (USD) denominated raw material purchases made by Euro (EUR) functional currency entities which result from changes in the EUR/USD exchange rate. The effective portions of cash flow hedges are recorded in OCI as a component of gains/(losses) on derivatives qualifying as hedges in the accompanying Consolidated Statement of Comprehensive Income. Realized gains/(losses) in AOCI related to cash flow hedges of raw material purchases are recognized as a component of Cost of goods sold in the accompanying Consolidated Statement of Comprehensive Income in the same period as the related costs are recognized.

The Company has entered into interest rate swap agreements that effectively converted the fixed rate on a portion of our long-term borrowings to a variable short-term rate based on the LIBOR plus an interest markup. These swaps are designated as fair value hedges. Amounts recognized in Interest expense were immaterial for the three and six months ended June 30, 2017.

During the first quarter of 2016, the Company entered into and terminated two Euro interest rate swap agreements to hedge the anticipated issuance of fixed-rate debt. These swaps were designated as cash flow hedges. The effective portions of cash flow hedges are recorded in OCI as a component of Losses on derivatives qualifying as hedges in the accompanying Consolidated Statement of Comprehensive Income. The Company incurred a loss of Euro 2.9 million ( $\$ 3.2$ million) due to the termination of these swaps. The loss is being amortized as interest expense over the life of the Euro Senior Notes - 2016 as discussed in Note 6.

During the fourth quarter of 2016 and the first quarter of 2017, the Company entered into interest rate swap agreements to hedge the anticipated issuance of fixed-rate debt, which are designated as cash flow hedges. The various hedge instruments were settled upon issuance of the debt on May 18,2017 and resulted in a loss of approximately $\$ 5.3$ million. As discussed in Note 6 , the loss is being amortized as interest expense over the life of the Senior Notes 2017.

The effective portions of cash flow hedges are recorded in OCI as a component of Losses/gains on derivatives qualifying as hedges in the accompanying Consolidated Statement of Comprehensive Income.

The following table shows the notional amount of the Company's derivative instruments outstanding as of June 30, 2017 and December 31, 2016:

| (DOLLARS IN THOUSANDS) | June 30, 2017 |  | December 31, 2016 |  |
| :---: | :---: | :---: | :---: | :---: |
| Foreign currency contracts | \$ | 687,437 | \$ | 527,500 |
| Interest rate swaps |  | 350,000 |  | 412,500 |

The following tables show the Company's derivative instruments measured at fair value (Level 2 of the fair value hierarchy), as reflected in the Consolidated Balance Sheets as of June 30, 2017 and December 31, 2016:

| (DOLLARS IN THOUSANDS) | June 30, 2017 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fair Value of Derivatives Designated as Hedging Instruments |  | Fair Value of Derivatives Not Designated as Hedging Instruments |  | Total Fair Value |  |
| Derivative assets ${ }^{\text {(a) }}$ |  |  |  |  |  |  |
| Foreign currency contracts | \$ | 927 | \$ | 8,055 | \$ | 8,982 |
|  | \$ | 927 | \$ | 8,055 | \$ | 8,982 |
| Derivative liabilities ${ }^{(b)}$ |  |  |  |  |  |  |
| Foreign currency contracts | \$ | 7,020 | \$ | 8,852 | \$ | 15,872 |
| Interest rate swaps |  | 158 |  | - |  | 158 |
|  | \$ | 7,178 | \$ | 8,852 | \$ | 16,030 |


| (DOLLARS IN THOUSANDS) | December 31, 2016 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fair Value of Derivatives Designated as Hedging Instruments |  | Fair Value of Derivatives Not Designated as Hedging Instruments |  | Total Fair Value |  |
| Derivative assets ${ }^{\text {a }}$ |  |  |  |  |  |  |
| Foreign currency contracts | \$ | 13,765 | \$ | 7,737 | \$ | 21,502 |
| Interest rate swaps |  | 335 |  | - |  | 335 |
|  | \$ | 14,100 | \$ | 7,737 | \$ | 21,837 |
| Derivative liabilities ${ }^{\text {(b) }}$ |  |  |  |  |  |  |
| Foreign currency contracts | \$ | 46 | \$ | 2,209 | \$ | 2,255 |
| Interest rate swaps |  | 725 |  | - |  | 725 |
|  | \$ | 771 | \$ | 2,209 | \$ | 2,980 |

(a) Derivative assets are recorded to Prepaid expenses and other current assets in the Consolidated Balance Sheet.
(b) Derivative liabilities are recorded as Other current liabilities in the Consolidated Balance Sheet.

The following table shows the effect of the Company's derivative instruments which were not designated as hedging instruments in the Consolidated Statement of Comprehensive Income for the three and six months ended June 30, 2017 and 2016 (in thousands):

| Derivatives Not Designated as Hedging Instruments | Amount of Gain (Loss) Recognized in Income on Derivative |  |  |  | Location of Gain (Loss) Recognized in Income on Derivative |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Three Months Ended June 30, <br> 2017 <br> 2016 |  |  |  |  |
|  |  |  |  |  |  |
| Foreign currency contracts | \$ | $(3,054)$ | \$ | 1,395 | Other (income) expense, net |
| Derivatives Not Designated as Hedging Instruments | Amount of Gain (Loss) Recognized in Income on Derivative |  |  |  | Location of Gain (Loss) Recognized in Income on Derivative |
|  | Six Months Ended June 30, |  |  |  |  |
| Foreign currency contracts | \$ | $(13,181)$ | \$ | $(3,548)$ | Other (income) expense, net |

Most of these net gains (losses) offset any recognized gains (losses) arising from the revaluation of the related intercompany loans during the same respective periods.

The following table shows the effect of the Company's derivative instruments designated as cash flow and net investment hedging instruments in the Consolidated Statements of Comprehensive Income for the three and six months ended June 30, 2017 and 2016 (in thousands):

|  | Amount of (Loss) Gain Recognized in OCI on Derivative (Effective Portion) |  |  |  | Location of (Loss) Gain Reclassified from AOCI into Income (Effective Portion) | Amount of (Loss) Gain Reclassified from Accumulated OCI into Income (Effective Portion) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Three Months Ended June 30, |  |  |  |  | Three Months Ended June 30, |  |  |  |
|  | 2017 |  | 2016 |  |  | 2017 |  | 2016 |  |
| Derivatives in Cash Flow Hedging Relationships: |  |  |  |  |  |  |  |  |  |
| Foreign currency contracts | \$ | $(6,328)$ | \$ | 612 | Cost of goods sold | \$ | 1,789 | \$ | 2,736 |
| Interest rate swaps ${ }^{(1)}$ |  | $(5,439)$ |  | 171 | Interest expense |  | (186) |  | (171) |
| Derivatives in Net Investment Hedging Relationships: |  |  |  |  |  |  |  |  |  |
| Foreign currency contracts |  | $(2,082)$ |  | 1,934 | N/A |  | - |  | - |
| Euro Senior notes - 2016 |  | $(19,780)$ |  | 9,649 | N/A |  | - |  | - |
| Total | \$ | $\underline{(33,629)}$ | \$ | 12,366 |  | \$ | 1,603 | \$ | 2,565 |
|  |  |  |  |  |  |  |  |  |  |
|  |  | Amount of Recognized Derivative Por | $\begin{aligned} & \text { in } \\ & \text { (Eff } \\ & \text { (En) } \end{aligned}$ |  | Location of (Loss) Gain Reclassified from AOCI into Income (Effective Portion) |  | Amount of <br> Reclassi Accumula Income Por | $10$ |  |
|  |  | Six Months En | ded |  |  |  | $x$ Months E | de |  |
|  |  | 2017 |  | 16 |  |  | 017 |  |  |
| Derivatives in Cash Flow Hedging Relationships: |  |  |  |  |  |  |  |  |  |
| Foreign currency contracts | \$ | $(9,276)$ | \$ | $(6,391)$ | Cost of goods sold | \$ | 2,247 | \$ | 5,352 |
| Interest rate swaps ${ }^{(1)}$ |  | $(4,243)$ |  | $(3,001)$ | Interest expense |  | (357) |  | (257) |
| Derivatives in Net Investment Hedging Relationships: |  |  |  |  |  |  |  |  |  |
| Foreign currency contracts |  | $(3,128)$ |  | (470) | N/A |  | - |  | - |
| Euro Senior notes - 2016 |  | $(31,189)$ |  | 9,649 | N/A |  | - |  | - |
| Total | \$ | $(47,836)$ | \$ | (213) |  | \$ | 1,890 | \$ | 5,095 |

(1) Interest rate swaps were entered into as pre-issuance hedges.

No ineffectiveness was experienced in the above noted cash flow or net investment hedges during the three and six months ended June 30,2017 and 2016.

The Company expects that approximately $\$ 2.9$ million (net of tax) of derivative gains included in AOCI at June 30, 2017, based on current market rates, will be reclassified into earnings within the next 12 months. The majority of this amount will vary due to fluctuations in foreign currency exchange rates.

Note 12. Accumulated Other Comprehensive Income (Loss):
The following tables present changes in the accumulated balances for each component of other comprehensive income, including current period other comprehensive income and reclassifications out of accumulated other comprehensive income:

|  | Foreign <br> Currency <br> Translation <br> Adjustments |  | (Losses) Gains on Derivatives Qualifying as Hedges |  | Pension and Postretirement Liability Adjustment |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (DOLLARS IN THOUSANDS) |  |  |  |  |  |  |  |  |
| Accumulated other comprehensive (loss) income, net of tax, as of December 31, 2016 | \$ | $(352,025)$ | \$ | 7,604 | \$ | $(335,674)$ | \$ | $(680,095)$ |
| OCI before reclassifications |  | 22,304 |  | $(11,629)$ |  | - |  | 10,675 |
| Amounts reclassified from AOCI |  | $(12,214)$ |  | $(1,890)$ |  | 7,323 |  | $(6,781)$ |
| Net current period other comprehensive income (loss) |  | 10,090 |  | $(13,519)$ |  | 7,323 |  | 3,894 |
| Accumulated other comprehensive (loss) income, net of tax, as of June 30, 2017 | \$ | $(341,935)$ | \$ | $(5,915)$ | \$ | $(328,351)$ | \$ | $(676,201)$ |
|  |  | eign rency lation tments |  | ains on tives ng as es |  | on and irement bility stment |  | tal |
| (DOLLARS IN THOUSANDS) |  |  |  |  |  |  |  |  |
| Accumulated other comprehensive (loss) income, net of tax, as of December 31, 2015 | \$ | $(297,499)$ | \$ | 9,401 | \$ | $(325,342)$ | \$ | $(613,440)$ |
| OCI before reclassifications |  | 9,389 |  | $(4,297)$ |  | - |  | 5,092 |
| Amounts reclassified from AOCI |  | - |  | $(5,095)$ |  | 5,133 |  | 38 |
| Net current period other comprehensive income (loss) |  | 9,389 |  | $(9,392)$ |  | 5,133 |  | 5,130 |
| Accumulated other comprehensive (loss) income, net of tax, as of June 30, 2016 | \$ | $(288,110)$ | \$ | 9 | \$ | $(320,209)$ | \$ | $(608,310)$ |

The following table provides details about reclassifications out of accumulated other comprehensive income to the Consolidated Statement of Comprehensive Income:

|  | Six Months Ended June 30,2017 |  | $\begin{gathered} \text { Six Months Ended June } \\ \mathbf{3 0 , 2 0 1 6} \\ \hline \end{gathered}$ |  | Affected Line Item in the Consolidated Statement of Comprehensive Income |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (DOLLARS IN THOUSANDS) |  |  |  |  |  |
| (Losses) gains on derivatives qualifying as hedges |  |  |  |  |  |
| Foreign currency contracts | \$ | 2,568 | \$ | 6,117 | Cost of goods sold |
| Interest rate swaps |  | (357) |  | (257) | Interest expense |
|  |  | (321) |  | (765) | Provision for income taxes |
|  | \$ | 1,890 | \$ | 5,095 | Total, net of income taxes |
| (Losses) gains on pension and postretirement liability adjustments |  |  |  |  |  |
| Prior service cost | \$ | $(3,512)$ | \$ | 3,735 | (a) |
| Actuarial losses |  | $(12,982)$ |  | $(10,347)$ | (a) |
|  |  | 9,171 |  | 1,479 | Provision for income taxes |
|  | \$ | $(7,323)$ | \$ | $(5,133)$ | Total, net of income taxes |

(a) The amortization of prior service cost and actuarial loss is included in the computation of net periodic benefit cost. Refer to Note 14 of our 2016 Form $10-\mathrm{K}$ for additional information regarding net periodic benefit cost.

## Note 13. Commitments and Contingencies:

## Guarantees and Letters of Credit

The Company has various bank guarantees and letters of credit which are available for use to support its ongoing business operations and to satisfy governmental requirements associated with pending litigation in various jurisdictions.

At June 30, 2017, we had total bank guarantees and standby letters of credit of approximately $\$ 37.1$ million with various financial institutions. Included in the above aggregate amount is a total of $\$ 15.9$ million in bank guarantees which the Company has posted for certain assessments in Brazil for other diverse income tax and indirect tax disputes related to fiscal years 1998-2011. There were no material amounts utilized under the standby letters of credit as of June 30, 2017.

In order to challenge the assessments in these cases in Brazil, the Company has been required to, and has separately pledged assets, principally property, plant and equipment, to cover assessments in the amount of approximately $\$ 15.2$ million as of June 30, 2017.

## Lines of Credit

The Company has various lines of credit which are available to support its ongoing business operations. At June 30, 2017, we had available lines of credit (in addition to the $\$ 921.6$ million of capacity under the Credit Facility discussed in Note 9 of our 2016 Form 10-K) of approximately $\$ 75.0$ million with various financial institutions. There were no significant amounts drawn down pursuant to these lines of credit as of June 30,2017 .

## Litigation

The Company assesses contingencies related to litigation and/or other matters to determine the degree of probability and range of possible loss. A loss contingency is accrued in the Company's consolidated financial statements if it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Because litigation is inherently unpredictable and unfavorable resolutions could occur, assessing contingencies is highly sensitive and requires judgments about future events. On at least a quarterly basis, the Company reviews contingencies related to litigation to determine the adequacy of accruals. The amount of ultimate loss may differ from these estimates and further events may require the Company to increase or decrease the amounts it has accrued on any matter.

Periodically, we assess our insurance coverage for all known claims, where applicable, taking into account aggregate coverage by occurrence, limits of coverage, self-insured retentions and deductibles, historical claims experience and claims experience with our insurance carriers. The liabilities are recorded at management's best estimate of the probable outcome of the lawsuits and claims, taking into consideration the facts and circumstances of the individual matters as well as past experience on similar matters. At each balance sheet date, the key issues that management assesses are whether it is probable that a loss as to asserted or unasserted claims has been incurred and if so, whether the amount of loss can be reasonably estimated. We record the expected liability with respect to claims in Other liabilities and expected recoveries from our insurance carriers in Other assets. We recognize a receivable when we believe that realization of the insurance receivable is probable under the terms of the insurance policies and our payment experience to date.

## Environmental

Over the past 20 years, various federal and state authorities and private parties have claimed that we are a Potentially Responsible Party ("PRP") as a generator of waste materials for alleged pollution at a number of waste sites operated by third parties located principally in New Jersey and have sought to recover costs incurred and to be incurred to clean up the sites.
We have been identified as a PRP at eight facilities operated by third parties at which investigation and/or remediation activities may be ongoing. We analyze our potential liability on at least a quarterly basis. We accrue for environmental liabilities when they are probable and estimable. We estimate our share of the total future cost for these sites to be less than $\$ 5$ million.

While joint and several liability is authorized under federal and state environmental laws, we believe the amounts we have paid and anticipate paying in the future for clean-up costs and damages at all sites are not material and will not have a material adverse effect on our financial condition, results of operations or liquidity. This assessment is based upon, among other things, the involvement of other PRPs at most of the sites, the status of the proceedings, including various settlement agreements and consent decrees, and the extended time period over which payments will likely be made. There can be no assurance, however, that future events will not require us to materially increase the amounts we anticipate paying for clean-up costs and damages at these sites, and that such increased amounts will not have a material adverse effect on our financial condition, results of operations or cash flows.

## China Facilities

## Guangzhou Flavors plant

During 2015, the Company was notified by Chinese authorities of compliance issues pertaining to the emission of odors from several of its plants in China. As a result, the Company's Guangzhou Flavors plant in China was temporarily idled. The Company has made additional capital improvements in odor-abatement equipment at these plants to address these issues and is in the process of building a second Flavors plant in China, which is expected to begin operating in the first quarter of 2019 .

During the fourth quarter of 2016, the Company was notified that certain governmental authorities have begun to evaluate a change in the zoning of the Guangzhou Flavors plant. The zoning, if changed, would prevent the Company from continuing to manufacture product at the existing plant. The ultimate outcome of any change that the governmental authorities may propose, the timing of such a change and the nature of any compensation arrangements that might be provided to the Company are uncertain.

The net book value of the existing plant was approximately $\$ 67$ million as of June 30, 2017.

## Zhejiang Ingredients plant

The Company has received a request from the Chinese government to relocate its Fragrance Ingredients plant in Zhejiang, China. The Company is in discussions with the government regarding the timing of the requested relocation and the amount and nature of government compensation to be provided to the Company. The Company expects to conclude discussions with the Government in 2017. The net book value of the current plant was approximately $\$ 25$ million as of June 30, 2017. Depending upon the ultimate outcome of the discussions with the Chinese government, between $\$ 0-25$ million of the remaining net book value may be subject to accelerated depreciation.

## Total China Operations

The total carrying value of our six existing plants in China (two of which are currently under construction) was approximately $\$ 139$ million as of June 30, 2017.

If the Company is required to close a plant, or operate one at significantly reduced production levels on a permanent basis, the Company may be required to record charges that could have a material impact on its consolidated financial results of operations, financial position and cash flows in future periods.

## Other Contingencies

The Company has contingencies involving third parties (such as labor, contract, technology or product-related claims or litigation) as well as government-related items in various jurisdictions in which we operate pertaining to such items as value-added taxes, other indirect taxes, customs and duties and sales and use taxes. It is possible that cash flows or results of operations, in any period, could be materially affected by the unfavorable resolution of one or more of these contingencies.

The most significant government-related contingencies exist in Brazil. With regard to the Brazilian matters, we believe we have valid defenses for the underlying positions under dispute; however, in order to pursue these defenses, we are required to, and have provided, bank guarantees and pledged assets in the aggregate amount of $\$ 31.1$ million. The Brazilian matters take an extended period of time to proceed through the judicial process and there are a limited number of rulings to date.

As previously disclosed, in March 2012, ZoomEssence, Inc. filed a complaint against the Company in the U.S. District Court for the District of New Jersey alleging trade secret misappropriation, breach of contract and unjust enrichment in connection with certain spray dry technology disclosed to the Company. ZoomEssence sought an injunction and monetary damages. In November 2014, the Company filed a counterclaim against ZoomEssence alleging trade secret misappropriation, breach of contract, breach of the implied covenant of good faith and fair dealing, unjust enrichment, misappropriation of confidential and proprietary information, common law unfair competition, tortious interference with contractual relations, and conversion. During the second quarter of 2017 , the Company and ZoomEssence mutually agreed to settle all claims and counterclaims. The parties agreed to dismiss their claims against one another, with prejudice and without any admission of liability or wrongful conduct, to avoid any further expense and disruption from the litigation. The complaint was dismissed, with prejudice, on July 5, 2017. Under the settlement agreement, the Company made a one-time payment to ZoomEssence of $\$ 56$ million during the second quarter of 2017 and the parties exchanged full mutual releases. Accordingly, the Company recorded an additional charge of $\$ 1$ million during the second quarter of 2017.

The Company periodically incurs product liability claims based on product that is sold to customers that may be defective or otherwise not in accordance with the customer's requirements. As previously disclosed, in the first quarter of 2017, the Company was made aware of a claim for product that was subject to a product recall. As of June 30, 2017, the Company had recorded a total charge of approximately $\$ 5.3$ million with respect to this claim. In addition to the charge of $\$ 1.8$ million recorded in the first quarter of 2017 , an additional $\$ 3.5$ million was recorded during the second quarter of 2017 . The second
quarter charge reflects additional information on specific volumes of affected products, which information became available in the second quarter of 2017. This amount principally represents an accrual for the claim based on management's best estimate of volumes of customer products subject to the recall. Additionally, appropriate reserves have been established for all remaining inventory at the Company's manufacturing site. While it is probable that the Company will incur additional losses related to this claim, the amount of the ultimate claim that will be paid is not currently estimable as the following information is not yet available: details as to the amount of product that will ultimately be returned and the customer's direct manufacturing and other production costs; costs related to the customer's recall efforts; costs to dispose of defective product; and other claims that the customer may make. While it is not currently possible to estimate the amount of losses, such losses when recorded will affect income from operations in future individual quarters. The Company does not believe that the ultimate settlement of the claim will have a material impact on its financial condition. Separately, the Company expects to pursue reimbursement of all or a portion of costs, once incurred, from insurance and/or the supplier, however, the nature, timing and amount of any such reimbursement cannot be determined at this time.

The Company determines estimates of reasonably possible losses or ranges of reasonably possible losses in excess of related accrued liabilities, if any, when it has determined that either a loss is reasonably possible or a loss in excess of accrued amounts is reasonably possible and the amount of losses or range of losses is determinable. For all third party contingencies (including labor, contract, technology, tax, product-related claims and business litigation), the Company currently estimates that the aggregate range of reasonably possible estimable losses in excess of any accrued liabilities is $\$ 0$ to approximately $\$ 8$ million. The estimates included in this amount are based on the Company's analysis of currently available information and, as new information is obtained, these estimates may change. Due to the inherent subjectivity of the assessments and the unpredictability of outcomes of legal proceedings, any amounts accrued or included in this aggregate amount may not represent the ultimate loss to the Company from the matters in question. Thus, the Company's exposure and ultimate losses may be higher or lower, and possibly significantly so, than the amounts accrued or the range disclosed above.

We are also a party to other litigation arising in the ordinary course of our business. We do not expect the outcome of these cases, singly or in the aggregate, to have a material effect on our consolidated financial condition.

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

## Overview

## Company background

We are a leading innovator of sensorial experiences, co-creating unique products that consumers taste, smell, or feel in fine fragrances and cosmetics, detergents and household goods, and food and beverages. We take advantage of our capabilities in consumer insights, research and product development ("R\&D"), creative expertise and customer intimacy to partner with our customers in developing innovative and differentiated offerings for consumers. We believe that this collaborative approach will generate market share gains for our customers. We operate in two business segments, Flavors and Fragrances.

Flavors are the key building blocks that impart taste experiences in food and beverage products and, as such, play a significant role in determining consumer preference for the end products in which they are used. As a leading creator of flavors, we help our customers deliver on the promise of delicious and healthy foods and drinks that appeal to consumers. While we are a global leader, our flavors business is more regional in nature, with different formulas that reflect local taste preferences. Our flavors compounds are ultimately used by our customers in four end-use categories: (1) Savory, (2) Beverages, (3) Sweet and (4) Dairy.

We are a global leader in the creation of fragrance compounds that are integral elements in the world's finest perfumes and best-known consumer products, within fabric care, home care, personal wash, hair care and toiletries products. Our Fragrances business consists of Fragrance Compounds and Fragrance Ingredients. Our Fragrance Compounds are organized into two broad categories, (1) Fine Fragrances and (2) Consumer Fragrances. Consumer Fragrances consists of five end-use categories of products: (1) Fabric Care, (2) Home Care, (3) Personal Wash, (4) Hair Care and (5) Toiletries. Also included in the Fragrances business unit are Fragrance Ingredients, consisting of cosmetic active and functional ingredients. Fragrance Ingredients are used internally and sold to third parties, including customers and competitors, for use in preparation of compounds.

The flavors and fragrances market is part of a larger market which supplies a wide variety of ingredients and compounds used in consumer products. The broader market includes large multi-national companies and smaller regional and local participants that supply products such as seasonings, texturizers, spices, enzymes, certain food-related commodities, fortified products and cosmetic ingredients. The global market for flavors and fragrances has expanded consistently, primarily as a result of an increase in demand for, as well as an increase in the variety of, consumer products containing flavors and fragrances. In 2016, the flavors, fragrances and cosmetic actives and functional ingredients market, in which we compete, was estimated by management to be approximately $\$ 20.0$ billion and is forecasted to grow approximately $2-3 \%$ by 2020 , primarily driven by expected growth in emerging markets; however the exact size of the global market is not available due to fragmentation of data. We, together with the other top three companies, are estimated to represent approximately two-thirds of the total estimated sales in the global flavors and fragrances sub-segment of the broader market.

Development of new flavors and fragrance compounds is driven by a variety of sources, including requests from our customers, who are in need of a specific flavor or fragrance for use in a new or modified consumer product, or as a result of internal initiatives stemming from our consumer insights program. Our product development team works in partnership with our scientists and researchers to optimize the consumer appeal of the flavor or fragrance. It then becomes a collaborative process between our researchers, our product development team and our customers to perfect the flavor or fragrance so that it is ready to be included in the final consumer product.

On April 7, 2017, we completed the acquisition of Columbia PhytoTechnology, LLC d/b/a PowderPure ("PowderPure"), a processor of all-natural food ingredients, for approximately $\$ 55.0$ million. The purchase price was funded from existing resources including drawdown on our credit facility and proceeds from commercial paper. This acquisition was accounted for as a business combination and is not expected to have a material impact on the Consolidated Statement of Comprehensive Income for 2017.

On January 17, 2017, we completed the acquisition of Fragrance Resources, a creator of specialty fine fragrances, for approximately Euro 142.0 million (approximately $\$ 150.5$ million). The purchase price was funded from existing resources including drawdown on our credit facility and proceeds from commercial paper. The acquisition strengthened our fragrances market position in North America and Germany. This acquisition was accounted for as a business combination and is not expected to have a material impact on the Consolidated Statement of Comprehensive Income for 2017.

## 2017 Overview

Net sales during the second quarter of 2017 increased $6 \%$ on a reported basis and $8 \%$ on a currency neutral basis (which excludes the effects of changes in currency) versus the 2016 period, with the effect of acquisitions contributing approximately $6 \%$ to both reported and currency neutral growth rates. Sales growth, excluding acquisitions, reflects new win performance (net of losses) partially offset by volume declines on existing business in both Flavors and Fragrances.

Exchange rate fluctuations had a 200 basis point (bps) unfavorable impact on net sales for the second quarter, due to the strengthening of the U.S. dollar. The effect of exchange rates can vary by business and region, depending upon the mix of sales by destination country as well as the relative percentage of local sales priced in U.S. dollars versus local currencies.

Gross margins decreased year-over-year to $44.4 \%$ in the second quarter of 2017 from $46.1 \%$ in the 2016 period, driven primarily by unfavorable price versus input costs and weaker sales mix which were only partially offset by cost savings and productivity initiatives and the impact of acquisitions. Included in the second quarter of 2017 were $\$ 9.6$ million of acquisition-related amortization of inventory "step-up" costs, costs associated with product recalls, operational improvement initiative and integration-related costs compared to $\$ 1.0$ million of operational improvement initiative and restructuring costs included in the second quarter of 2016 . Excluding these items, gross margin decreased 60 bps compared to the prior year period. The overall raw material cost base continues to be relatively stable, but upward trending. We believe that we will continue to see higher prices in 2017 on certain categories (such as vanilla and citrus) and to a lesser extent oil-based derivatives. We continue to seek improvements in our margins through operational performance, cost reduction efforts and mix enhancement.

## FINANCIAL PERFORMANCE OVERVIEW

## Sales

Reported sales in the second quarter of 2017 increased approximately $6 \%$. We continued to benefit from our diverse portfolio of end-use product categories and geographies and had currency neutral growth in three of our four regions and all four of our Flavors end-use product categories. Sales growth excluding acquisitions was driven by new win performance partially offset by volume declines on existing business in both Flavors and Fragrances. Flavors achieved reported sales growth of $9 \%$ and currency neutral growth of $11 \%$, with the effect of acquisitions contributing approximately $7 \%$ to both reported and currency neutral growth rates. Fragrances achieved reported sales growth of $4 \%$ and currency neutral sales growth of $5 \%$, with the effect of acquisitions contributing approximately $4 \%$ to both reported and currency neutral growth rates. Additionally, Fragrance Ingredients sales were up $7 \%$ on a reported basis and $9 \%$ on a currency neutral basis. Overall, our second quarter 2017 results reflected flat sales growth from emerging markets and $3 \%$ growth from developed markets which each represented $50 \%$ of total sales. From a geographic perspective, for the second quarter of 2017, North America (NOAM), Europe, Africa and the Middle East (EAME) and Latin America (LA) all delivered sales growth, led by NOAM with $19 \%$. Greater Asia (GA) sales declined 3\%.

## Operating profit

Operating profit decreased $\$ 5.5$ million to $\$ 159.1$ million ( $18.9 \%$ of sales) in the 2017 second quarter compared to $\$ 164.7$ million ( $20.8 \%$ of sales) in the comparable 2016 period. The second quarter of 2017 included $\$ 12.7$ million of acquisition-related costs, costs associated with product recalls, legal charges, restructuring, integration-related and operational improvement initiative costs as well as gains on sales of fixed assets compared to $\$ 1.0$ million of acquisition-related, restructuring and operational improvement initiative costs which were partially offset by gains on sales of fixed assets and a favorable legal settlement in the prior year period. Excluding these charges, adjusted operating profit was $\$ 171.8$ million ( $20.4 \%$ of sales) for the second quarter of 2017 , an increase from $\$ 165.7$ million ( $20.9 \%$ of sales) for the second quarter of 2016 . Foreign currency changes had a $2.5 \%$ unfavorable impact on operating profit in the 2017 period compared to no impact on operating profit in the 2016 period versus the 2015 period.

## Other (income) expense, net

Other (income) expense, net decreased $\$ 2.0$ million to $\$ 0.5$ million of income in the second quarter of 2017 compared to $\$ 2.4$ million of income in the second quarter of 2016. The year-over-year decrease was primarily driven by unfavorable year-over-year foreign exchange gains/(losses) in 2017 .

## Net income

Net income decreased by $\$ 6.9$ million quarter-over-quarter to $\$ 109.8$ million for the second quarter of 2017 , driven by the factors discussed above.

## Cash flows

Cash flows from operations for the six months ended June 30,2017 were $\$ 57.9$ million or $7.0 \%$ of sales, compared to $\$ 172.3$ million or $22.0 \%$ of sales for the six months ended June 30, 2016. The decrease in cash flows from operations in 2017 was principally driven by payment of a litigation settlement of $\$ 56$ million (as discussed in Note 13 to the Consolidated Financial Statements), lower net income and higher incentive compensation payments for the 2017 period as compared to the 2016 period.

## Results of Operations

| (DOLLARS IN THOUSANDS | Three Months Ended June 30, |  |  |  | Change | Six Months Ended June 30, |  |  |  | Change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EXCEPT PER SHARE AMOUNTS) | 2017 |  | 2016 |  |  | 2017 |  | 2016 |  |  |
| Net sales | \$ | 842,861 | \$ | 793,478 | 6 \% | \$ | 1,671,154 | \$ | 1,576,789 | 6 \% |
| Cost of goods sold |  | 468,272 |  | 427,837 | $9 \%$ |  | 931,899 |  | 850,940 | 10 \% |
| Gross profit |  | 374,589 |  | 365,641 |  |  | 739,255 |  | 725,849 |  |
| Research and development (R\&D) expenses |  | 70,320 |  | 63,252 | $11 \%$ |  | 140,031 |  | 126,637 | $11 \%$ |
| Selling and administrative (S\&A) expenses |  | 135,910 |  | 132,784 | 2 \% |  | 276,240 |  | 256,327 | 8 \% |
| Amortization of acquisition-related intangibles |  | 8,494 |  | 5,130 | 66 \% |  | 15,561 |  | 11,191 | 39 \% |
| Restructuring and other charges, net |  | 791 |  | - | 100 \% |  | 10,934 |  | - | 100 \% |
| Gain on sales of fixed assets |  | (68) |  | (197) | (65)\% |  | (89) |  | $(2,910)$ | (97)\% |
| Operating profit |  | 159,142 |  | 164,672 |  |  | 296,578 |  | 334,604 |  |
| Interest expense |  | 17,556 |  | 15,060 | 17 \% |  | 30,363 |  | 27,539 | 10 \% |
| Other (income) expense |  | (454) |  | $(2,438)$ | (81)\% |  | $(14,312)$ |  | 118 | $(12,229) \%$ |
| Income before taxes |  | 142,040 |  | 152,050 |  |  | 280,527 |  | 306,947 |  |
| Taxes on income |  | 32,245 |  | 35,317 | (9)\% |  | 54,968 |  | 71,610 | (23)\% |
| Net income | \$ | 109,795 | \$ | 116,733 | (6)\% | \$ | 225,559 | \$ | 235,337 | (4)\% |
| Diluted EPS | \$ | 1.38 | \$ | 1.46 | (5)\% | \$ | 2.84 | \$ | 2.93 | (3)\% |
| Gross margin |  | 44.4\% |  | 46.1\% | (170) |  | 44.2\% |  | 46.0\% | (180) |
| R\&D as a percentage of sales |  | 8.3\% |  | 8.0\% | 30 |  | 8.4\% |  | 8.0\% | 40 |
| S\&A as a percentage of sales |  | 16.1\% |  | 16.7\% | (60) |  | 16.5\% |  | 16.3\% | 20 |
| Operating margin |  | 18.9\% |  | 20.8\% | (190) |  | 17.7\% |  | 21.2\% | (350) |
| Adjusted operating margin ${ }^{(1)}$ |  | 20.4\% |  | 20.9\% | (50) |  | 20.1\% |  | 21.1\% | (100) |
| Effective tax rate |  | 22.7\% |  | 23.2\% | (50) |  | 19.6\% |  | 23.3\% | (370) |
| Segment net sales |  |  |  |  |  |  |  |  |  |  |
| Flavors | \$ | 414,323 | \$ | 379,504 | 9 \% | \$ | 820,487 | \$ | 752,012 | 9 \% |
| Fragrances |  | 428,538 |  | 413,974 | 4 \% |  | 850,667 |  | 824,777 | 3 \% |
| Consolidated | \$ | 842,861 | \$ | 793,478 |  | \$ | 1,671,154 | \$ | 1,576,789 |  |

(1) Adjusted operating margin excludes $\$ 12.7$ million consisting of acquisition-related costs, costs associated with product recalls, legal charges, restructuring, integration-related and operational improvement initiative costs as well as gains on sales of fixed assets for the three months ended June 30,2017 and excludes $\$ 1.0$ million related to operational improvement initiative, acquisition-relation and restructuring costs which were partially offset by gains on sales of fixed assets and a favorable legal settlement for the three months ended June 30, 2016. For the six months ended June 30 , 2017 adjusted operating margin excludes $\$ 38.7$ million consisting of acquisition-related costs, costs associated with product recalls, tax assessment, legal charges, restructuring, integration-related and operational improvement initiative costs as well as gains on sales of fixed assets and excludes a benefit of $\$ 1.8$ million related to gains on sales of fixed assets and a favorable legal settlement, which were only partially offset by acquisition-related, operational improvement initiative and restructuring costs for the six months ended June 30, 2016. See "Non-GAAP Financial Measures" below.

Cost of goods sold includes the cost of materials and manufacturing expenses. R\&D expenses relate to the development of new and improved products, technical product support and compliance with governmental regulations. S\&A expenses include expenses necessary to support our commercial activities and administrative expenses supporting our overall operating activities.

## SECOND OUARTER 2017 IN COMPARISON TO SECOND OUARTER 2016

## Sales

Sales for the second quarter of 2017 totaled $\$ 842.9$ million, an increase of $6 \%$ from the prior year quarter. On a currency neutral basis sales increased $8 \%$. Sales growth reflected new win performance partially offset by volume declines on existing business in both Flavors and Fragrances. On both a reported and currency neutral basis, acquisitions accounted for approximately $6 \%$ of the net sales growth.

## Flavors Business Unit

Flavors reported sales increased $9 \%$ from the prior year period while currency neutral sales increased $11 \%$ during the second quarter of 2017 compared to the 2016 period. Acquisitions accounted for approximately $7 \%$ of the net sales growth on a reported basis and approximately $8 \%$ on a currency neutral basis. Sales growth excluding acquisitions reflected new win performance which was partially offset by volume declines on existing business. Overall growth was primarily driven by low single-digit growth in all four Flavors end-use categories. The Flavors business delivered sales growth in NOAM, LA and EAME, led by NOAM, and experienced sales declines in GA. Sales in NOAM, which included the impact of acquisitions, were led by high single-digit growth in Savory. LA sales were led by double-digit gains in Savory and Sweet and high single-digit gains in Beverage. Sales in EAME were driven by high singledigit gains in Dairy and mid single-digit gains in Beverage and Sweet. GA sales declines were driven by mid to high single-digit declines in Sweet and Dairy.

## Fragrances Business Unit

Fragrances sales increased $4 \%$ on a reported basis and $5 \%$ on a currency neutral basis for the second quarter of 2017 compared to the second quarter of 2016. Acquisitions accounted for approximately $4 \%$ of both reported and currency neutral sales growth. Excluding the effect of acquisitions, reported sales were flat reflecting new win performance offset by volume declines on existing business. Net sales reflected double-digit growth in Fine Fragrances and high single-digit growth in Fragrance Ingredients which were offset by double-digit declines in Hair Care and high single-digit declines in Toiletries.

Sales Performance by Region and Category

|  |  | Fine Fragrances | Consumer Fragrances | Ingredients | Total Frag. | Flavors | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NOAM | Reported | 12 \% | $7 \%$ | 2\% | $7 \%$ | $30 \%$ | $19 \%$ |
| EAME | Reported | 15 \% | 4 \% | 8\% | 8 \% | $2 \%$ | 6 \% |
|  | Currency Neutral ${ }^{(1)}$ | $19 \%$ | 8 \% | 11\% | $12 \%$ | $9 \%$ | $11 \%$ |
| LA | Reported | -5\% | -5\% | 35\% | -2\% | 13 \% | 3 \% |
|  | Currency Neutral (1) | -7\% | -6 \% | 34\% | -4\% | $11 \%$ | $1 \%$ |
| GA | Reported | 23 \% | -3\% | 1\% | -2 \% | -3\% | -3\% |
|  | Currency Neutral ${ }^{(1)}$ | $25 \%$ | -2\% | 3\% | -1\% | -2\% | -1\% |
| Total | Reported | 10 \% | 0 \% | 7\% | $4 \%$ | $9 \%$ | 6 \% |
|  | Currency Neutral ${ }^{(1)}$ | $11 \%$ | 1 \% | 9\% | $5 \%$ | $11 \%$ | 8 \% |

(1) Currency neutral sales growth is calculated by translating prior year sales at the exchange rates for the corresponding 2017 period.

- NOAM Flavors sales growth, which included the impact of acquisitions, primarily reflected low single-digit growth in all four end-use categories. Total Fragrances sales growth reflected double-digit gains in Fine Fragrances, mid to high single-digit gains in Fabric Care and Home Care and low single-digit gains in Fragrance Ingredients, which were only partially offset by double-digit declines in Hair Care.
- EAME Flavors sales experienced high single-digit gains in Dairy and mid single-digit gains in Beverage and Sweet. Total Fragrances sales growth was driven mainly by double-digit growth in Fine Fragrances as well as high single-digit growth in Fragrance Ingredients and low single-digit growth in Fabric Care which more than offset double-digit declines in Toiletries and high single-digit declines in Hair Care.
- LA Flavors sales growth was driven by double-digit gains in Savory and Sweet and high single-digit gains in Beverage. Total Fragrances sales declines reflected double-digit gains in Fragrance Ingredients, which were more than offset by double-digit declines in Personal Wash and Hair Care as well as high single-digit declines in Fine Fragrances and mid to low single-digit declines in Home Care and Fabric Care.
- GA Flavors sales declines were driven by mid to high single-digit declines in Sweet and Dairy. Total Fragrances sales declines were principally driven by double-digit gains in Fine Fragrances and low single-digit gains in Fragrance Ingredients which were more than offset by double-digit declines in Personal Wash and Hair Care.


## Cost of Goods Sold

Cost of goods sold, as a percentage of sales, increased 170 bps to $55.6 \%$ in the second quarter of 2017 compared to $53.9 \%$ in the second quarter of 2016, principally driven by unfavorable price versus input costs and manufacturing performance which were only partially offset by cost savings and productivity initiatives and the impact of acquisitions. Included in cost of goods sold were $\$ 9.6$ million of acquisition-related amortization of inventory "step-up" costs, costs associated with product recalls, operational improvement initiative and integration-related costs in 2017 compared to $\$ 1.0$ million of acquisition-related amortization of inventory "step-up" costs, operational improvement initiative costs and restructuring costs in 2016.

## Research and Development (R\&D) Expenses

Overall R\&D expenses, as a percentage of sales, increased slightly compared to the prior year period to $8.3 \%$ in the second quarter of 2017 versus $8.0 \%$ in the second quarter of 2016. This increase was primarily driven by costs associated with $\mathrm{R} \& \mathrm{D}$ of acquired entities.

## Selling and Administrative (S\&A) Expenses

S\&A expenses increased $\$ 3.1$ million to $\$ 135.9$ million or $16.1 \%$, as a percentage of sales, in the second quarter of 2017 compared to $\$ 132.8$ million or $16.7 \%$, as a percentage of sales, in the second quarter of 2016. The $\$ 3.1$ million increase was principally due to costs associated with S\&A expenses of acquired entities and approximately $\$ 2.2$ million of legal charges, acquisition-related and integration-related costs in 2017. Excluding the $\$ 2.2$ million included in 2017 and $\$ 0.2$ million of acquisition-related costs which were only partially offset by credits related to adjustment of a legal reserve in 2016, adjusted S\&A expenses increased by $\$ 1.1$ million and was $15.9 \%$ of sales in 2017 compared to $16.7 \%$ of sales in 2016 .

## Restructuring and Other Charges

## 2017 Productivity Program

On February 15 , 2017, the Company announced that it was adopting a multi-year productivity program designed to improve overall financial performance, provide flexibility to invest in growth opportunities and drive long-term value creation. In connection with this program, the Company expects to optimize its global footprint and simplify its organizational structures globally. In connection with this initiative, the Company expects to incur cumulative, pre-tax cash charges of between $\$ 30-\$ 35$ million, consisting primarily of $\$ 21-\$ 22$ million in personnel-related costs and an estimated $\$ 9-\$ 13$ million in facility-related costs, such as lease termination, and integration-related costs. In addition, the Company may incur up to $\$ 5$ million of accelerated depreciation.

During the second quarter of 2017, the Company recorded $\$ 3.1$ million of charges related to personnel-related costs and lease termination costs, with the remainder of the personnel-related costs expected to be recognized by the end of 2017 and the other costs expected to be recognized over the following six quarters. During the second quarter of 2017 , the Company made payments of $\$ 4.5$ million related to severance. The overall charges were split approximately evenly between Flavors and Fragrances. This initiative is expected to result in the reduction of approximately 370 members of the Company's global workforce in various parts of the organization. Once fully implemented, the Company expects to realize annual run-rate savings of between $\$ 40$ million and $\$ 45$ million from this program by 2019.

## 2015 Severance Charges

During 2015, the Company established a series of initiatives intended to streamline its management structure, simplify decision-making and accountability, better leverage and align its capabilities across the organization and improve efficiency of its global manufacturing and operations network. As a result, the Company recorded charges for severance and related costs pertaining to approximately 150 positions that were affected. During the second quarter of 2017, the Company recorded a credit of $\$ 2.3$ million related to the reversal of severance accruals that were determined to be no longer required. No further actions are expected related to these 2015 initiatives.

## Amortization of Acquisition-Related Intangibles

Amortization expenses increased to $\$ 8.5$ million in the second quarter of 2017 compared to $\$ 5.1$ million in the second quarter of 2016 . The increase was principally driven by the acquisitions of Fragrance Resources and PowderPure in 2017 and David Michael during the second half of 2016.

## Operating Results by Business Unit

We evaluate the performance of business units based on segment profit which is defined as operating profit before Restructuring and other charges, net, Global expenses (as discussed in Note 9 to the Consolidated Financial Statements) and certain non-recurring items, net, Interest expense, Other (expense) income, net and Taxes on income. See Note 9 to the Consolidated Financial Statements for the reconciliation to Income before taxes.

| (DOLLARS IN THOUSANDS) | Three Months Ended June 30, |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  |
| Segment profit: |  |  |  |  |
| Flavors | \$ | 100,338 | \$ | 90,337 |
| Fragrances |  | 84,860 |  | 87,596 |
| Global expenses |  | $(13,398)$ |  | $(12,268)$ |
| Restructuring and other charges, net |  | (791) |  | (182) |
| Acquisition and related costs |  | $(6,278)$ |  | (213) |
| Operational improvement initiative costs |  | (445) |  | (831) |
| Legal (charges) credits |  | $(1,000)$ |  | 36 |
| Gain on sales of assets |  | 68 |  | 197 |
| Tax assessment |  | 19 |  | - |
| Integration-related costs |  | (731) |  | - |
| FDA mandated product recall |  | $(3,500)$ |  | - |
| Operating profit |  | 159,142 |  | 164,672 |
| Profit margin: |  |  |  |  |
| Flavors |  | 24.2\% |  | 23.8\% |
| Fragrances |  | 19.8\% |  | 21.2\% |
| Consolidated |  | 18.9\% |  | 20.8\% |

## Flavors Segment Profit

Flavors segment profit increased to $\$ 100.3$ million in the second quarter of 2017 , or $24.2 \%$ as a percentage of sales, compared to $\$ 90.3$ million, or $23.8 \%$ as a percentage of sales, in the comparable 2016 period. The increase principally reflected favorable volume and costs savings and productivity initiatives which were only partially offset by unfavorable manufacturing variances and mix.

## Fragrances Segment Profit

Fragrances segment profit decreased approximately $3.1 \%$ to $\$ 84.9$ million in the second quarter of 2017 , or $19.8 \%$ as a percentage of sales, compared to $\$ 87.6$ million, or $21.2 \%$ as a percentage of sales, in the comparable 2016 period. The decrease in segment profit and profit margin was primarily due to unfavorable price versus input cost and the impact from acquisitions which was only partially offset by the cost savings and productivity initiatives.

## Global Expenses

Global expenses represent corporate and headquarters-related expenses which include legal, finance, human resources and R\&D and other administrative expenses that are not allocated to an individual business unit. In the second quarter of 2017 , Global expenses were $\$ 13.4$ million compared to $\$ 12.3$ million during the second quarter of 2016. The increase was principally driven by lower benefits from our currency hedging program and higher incentive compensation expense.

## Interest Expense

Interest expense increased to $\$ 17.6$ million in the second quarter of 2017 compared to $\$ 15.1$ million in the 2016 period reflecting the issuance of the Senior Notes - 2017. Average cost of debt was $4.1 \%$ for the 2017 period compared to $4.0 \%$ for the 2016 period.

## Other (Income) Expense, Net

Other (income) expense, net decreased by approximately $\$ 2.0$ million to $\$ 0.5$ million of income in the second quarter of 2017 versus $\$ 2.4$ million of income in the comparable 2016 period. The year-over-year decrease was primarily driven by unfavorable year-over-year foreign exchange gains/(losses) in 2017.

## Income Taxes

The effective tax rate for the three months ended June 30,2017 was $22.7 \%$ compared with $23.2 \%$ for the three months ended June 30 , 2016. The quarter-over-quarter decrease was largely due to a more favorable mix of earnings and the impact of the global supply chain hub, offset by unfavorable repatriation costs as compared to the prior year. Excluding $\$ 3.3$ million of benefits associated with the pre-tax acquisition-related costs, costs associated with product recalls, legal charges, restructuring, integration-related and operational improvement initiative costs as partially offset by the tax charge associated with gains on sales of fixed assets in the current quarter, the second quarter 2017 adjusted effective tax rate was $23.0 \%$, or 10 bps lower than the second quarter 2016 adjusted effective tax rate of $23.1 \%$. The 2016 adjusted effective tax rate excluded $\$ 0.1$ million of tax benefit associated with restructuring and operational improvement initiative costs which were only partially offset by tax charges associated with acquisition related costs and gains on the sales of fixed assets and a favorable legal settlement.

As a result of the adoption of ASU 2016-09, as discussed in Note 1 to our Consolidated Financial Statements, current income tax expense now includes the tax benefit of equity award vestings of $\$ 2.4$ million for the three months ended June 30, 2017.

## FIRST SIX MONTHS 2017 IN COMPARISON TO FIRST SIX MONTHS 2016

## Sales

Sales for the first six months of 2017 totaled $\$ 1,671.2$ million, an increase of $6 \%$ from the 2016 period. On a currency neutral basis sales increased $7 \%$. Sales growth reflected new win performance partially offset by volume declines on existing business in both Flavors and Fragrances and unfavorable pricing in Fragrances. On both a reported and currency neutral basis, acquisitions accounted for approximately $5 \%$ of the net sales growth.

## Flavors Business Unit

Flavors sales increased $9 \%$ on a reported basis and increased $11 \%$ on a currency neutral basis during the first six months of 2017 compared to the 2016 period. Acquisitions accounted for approximately $7 \%$ of the net sales growth on both a reported and currency neutral basis. Sales growth excluding acquisitions reflected new win performance which was partially offset by volume declines on existing business. Overall growth was primarily driven by low to high single-digit growth in all four end-use categories. The Flavors business delivered sales growth in NOAM, LA and EAME, led by NOAM, and experienced declines in GA. Sales growth in NOAM, which included the impact of acquisitions, were led by double-digit growth in Savory and Dairy. LA sales growth was led by double-digit gains in Savory and Dairy and high single-digit gains in Sweet. Sales in EAME were driven by mid to high single-digit gains in Savory and Sweet. GA sales experienced mid single-digit gains in Beverage which were more than offset by high single-digit declines in Dairy and low single-digit declines in Sweet.

## Fragrances Business Unit

Fragrances sales increased $3 \%$ on a reported basis and $4 \%$ on a currency neutral basis for the first six months of 2017 compared to the 2016 period. Acquisitions accounted for approximately $4 \%$ of both reported and currency neutral sales growth. Excluding the effect of acquisitions, reported sales declines reflected new win performance which was more than offset by volume declines on existing business and unfavorable price versus input costs. Net sales reflected double-digit gains in Fine Fragrances, mid single-digit gains in Fragrance Ingredients and low single-digit growth in Fabric Care which were more than offset by double-digit declines in Hair Care and mid single-digit declines in Toiletries and Personal Wash.

|  |  | Fine Fragrances | Consumer Fragrances | Ingredients | Total Frag. | Flavors | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NOAM | Reported | 10 \% | 6 \% | -4\% | $4 \%$ | 28 \% | $17 \%$ |
| EAME | Reported | 18 \% | $4 \%$ | $10 \%$ | $10 \%$ | $1 \%$ | 6 \% |
|  | Currency Neutral ${ }^{(1)}$ | 22 \% | 8 \% | $13 \%$ | $13 \%$ | $7 \%$ | $11 \%$ |
| LA | Reported | -9\% | -7\% | 25 \% | -5\% | $11 \%$ | 0 \% |
|  | Currency Neutral (1) | -14\% | -7\% | 24 \% | -7\% | 8 \% | -1\% |
| GA | Reported | 18 \% | 0 \% | -6\% | 0 \% | -1\% | 0 \% |
|  | Currency Neutral ${ }^{(1)}$ | 20 \% | $1 \%$ | -4\% | $1 \%$ | $0 \%$ | 0 \% |
| Total | Reported | 10 \% | $1 \%$ | $4 \%$ | $3 \%$ | $9 \%$ | 6 \% |
|  | Currency Neutral ${ }^{(1)}$ | $11 \%$ | $2 \%$ | $5 \%$ | $4 \%$ | $11 \%$ | $7 \%$ |

(1) Currency neutral sales growth is calculated by translating prior year sales at the exchange rates for the corresponding 2017 period.

- NOAM Flavors sales growth, which included the impact of acquisitions, were led by double-digit growth in Savory and Dairy. Total Fragrances sales growth, which included the impact of acquisitions, reflected double-digit gains in Fine Fragrances and mid to high single-digit growth in Home Care and Fabric Care, which was partially offset by mid single-digit declines in Fragrance Ingredients.
- EAME Flavors sales experienced mid to high single-digit gains in Savory and Sweet. Total Fragrances sales growth, which included the impact of acquisitions, was driven mainly by double-digit growth in Fine Fragrances and Fragrance Ingredients as well as mid single-digit growth in Home Care.
- LA Flavors sales growth was driven by double-digit gains in Savory and Dairy and high single-digit gains in Sweet. Total Fragrances sales declines reflected double-digit gains in Fragrance Ingredients, which were more than offset by double-digit declines in Hair Care and Personal Wash and low to high single-digit declines in Fabric Care and Home Care.
- GA Flavors sales declines were driven by mid single-digit gains in Beverage which were more than offset by high single-digit declines in Dairy and low single-digit declines in Sweet. Total Fragrances flat sales growth principally reflected double-digit gains in Fine Fragrances and low single-digit growth in Fabric Care which were offset by mid single-digit declines in Fragrance Ingredients, Hair Care and Personal Wash.


## Cost of Goods Sold

Cost of goods sold, as a percentage of sales, increased 180 bps to $55.8 \%$ in the first six months of 2017 compared to $54.0 \%$ in the 2016 period, principally driven by unfavorable manufacturing performance and price versus input costs which were only partially offset by cost savings and productivity initiatives and the impact of acquisitions. Included in cost of goods sold were $\$ 15.7$ million of acquisition-related amortization of inventory "step-up", costs associated with product recalls, operational improvement initiative and integration-related costs in 2017 compared to $\$ 2.3$ million of acquisition-related amortization of inventory "step-up", operational improvement initiative and restructuring costs in 2016.

## Research and Development (R\&D) Expenses

Overall R\&D expenses, as a percentage of sales, increased compared to the prior year period to $8.4 \%$ in the first six months of 2017 versus $8.0 \%$ in the 2016 period. This increase was primarily driven by costs associated with R\&D of acquired entities.

## Selling and Administrative (S\&A) Expenses

S\&A expenses increased $\$ 19.9$ million to $\$ 276.2$ million or $16.5 \%$, as a percentage of sales, in the first six months of 2017 compared to $16.3 \%$ in the 2016 period. The $\$ 19.9$ million increase was principally due to costs associated with S\&A expenses of acquired entities and approximately $\$ 12.0$ million of expense related to a tax assessment from prior year, legal charges and acquisition-related and integration-related costs in 2017. Excluding the $\$ 12.0$ million included in 2017 and the benefit of $\$ 1.1$ million of credits related to legal credits which were only partially offset by acquisition-related costs in 2016, adjusted S\&A expenses increased by $\$ 6.8$ million and was $15.8 \%$ of sales in 2017 compared to $16.3 \%$ in 2016 .

## Restructuring and Other Charges

## 2017 Productivity Program

During the first six months of 2017, the Company recorded charges of $\$ 13.2$ million related to personnel-related costs and lease termination costs and made payments of $\$ 6.8$ million related to severance. The overall charges were split approximately evenly between Flavors and Fragrances. This initiative is expected to result in the reduction of approximately 370 members of the Company's global workforce in various parts of the organization. Once fully implemented, the Company expects to realize annual run-rate savings of between $\$ 40$ million and $\$ 45$ million from this program by 2019 .

## 2015 Severance Charges

During the first six months of 2017, the Company made payments of $\$ 0.2$ million related to severance and recorded a credit of $\$ 2.3$ million related to the reversal of severance accruals that were determined to be no longer required. No further actions are expected related to these 2015 initiatives.

## Amortization of Acquisition-Related Intangibles

Amortization expenses increased to $\$ 15.6$ million in the first six months of 2017 compared to $\$ 11.2$ million in the 2016 period. The increase was principally driven by the acquisitions of Fragrance Resources and PowderPure in 2017 and David Michael during the second half of 2016.

## Operating Results by Business Unit

We evaluate the performance of business units based on segment profit which is defined as operating profit before Restructuring and other charges, net, Global expenses (as discussed in Note 9 to the Consolidated Financial Statements) and certain non-recurring items, net, Interest expense, Other (expense) income, net and Taxes on income. See Note 9 to the Consolidated Financial Statements for the reconciliation to Income before taxes.


## Flavors Segment Profit

Flavors segment profit increased to $\$ 198.3$ million in the first six months of 2017 , or $24.2 \%$ as a percentage of sales, compared to $\$ 182.2$ million, or $24.2 \%$ as a percentage of sales, in the comparable 2016 period. The increase in segment profit principally reflected favorable volume and costs savings and productivity initiatives which were only partially offset by unfavorable price versus input costs as well as a reserve for a product liability sales allowance.

## Fragrances Segment Profit

Fragrances segment profit decreased to $\$ 166.6$ million in the first six months of 2017 , or $19.6 \%$ as a percentage of sales, compared to $\$ 176.8$ million, or $21.4 \%$ as a percentage of sales, in the comparable 2016 period. The decrease in segment profit and profit margin was primarily due to unfavorable price versus input cost and the impact of acquisitions which was only partially offset by the cost savings and productivity initiatives.

## Global Expenses

Global expenses represent corporate and headquarters-related expenses which include legal, finance, human resources and R\&D and other administrative expenses that are not allocated to an individual business unit. In the first six months of 2017, Global expenses were $\$ 29.6$ million compared to $\$ 26.1$ million during the first six months of 2016 . The increase was principally driven by lower benefits from our currency hedging program and slightly higher incentive compensation expense.

## Interest Expense

Interest expense increased to $\$ 30.4$ million in the first six months of 2017 compared to $\$ 27.5$ million in the 2016 period reflecting the issuance of the Senior Notes - 2017. Average cost of debt was $3.8 \%$ for the 2017 period compared to $3.9 \%$ for the 2016 period.

## Other (Income) Expense, Net

Other (income) expense, net increased by approximately $\$ 14.4$ million to $\$ 14.3$ million of income in the first six months of 2017 versus $\$ 0.1$ million of expense in the comparable 2016 period. The year-over-year increase was primarily driven by the release of a currency translation adjustment (CTA) of $\$ 12.2$ million related to the liquidation of a foreign entity in 2017.

## Income Taxes

The effective tax rate for the six months ended June 30 , 2017 was $19.6 \%$ compared with $23.3 \%$ for the six months ended June 30 , 2016 . The year-overyear decrease was primarily due to various items (including certain non-taxable gains on foreign currency and the impact of adopting the new accounting guidance on the tax effect of stock compensation vesting), a more favorable mix of earnings and the impact of the global supply chain hub, offset by unfavorable repatriation costs as compared to the prior year. Excluding $\$ 11.8$ million of tax benefits associated with pre-tax restructuring, acquisition-related, product liability, integration-related and operational improvement initiative costs as well as a tax assessment which were only partially offset by the tax charge associated with gains on sales of fixed assets and the non-taxable gains on foreign currency in the first quarter, the first six months 2017 adjusted effective tax rate was $21.8 \%$, or 150 bps lower than the first six months 2016 adjusted effective tax rate of $23.3 \%$. The 2016 adjusted effective tax rate excluded $\$ 0.5$ million of tax charges associated with gains on sales of fixed assets and a favorable legal settlement which were only partially offset by tax benefits related to the pre-tax acquisition-related, restructuring and operational improvement initiative costs.

As a result of the adoption of ASU 2016-09, as discussed in Note 1 to our Consolidated Financial Statements, current income tax expense now includes the tax benefit of equity award vestings of $\$ 3.2$ million for the six months ended June 30,2017 . In recent years, the tax benefit on these vestings was $\$ 4.5$ million, $\$ 9.9$ million and $\$ 5.3$ million in fiscal 2014,2015 and 2016, respectively.

## Liquidity and Capital Resources

## Cash and Cash Equivalents

We had cash and cash equivalents of $\$ 491.4$ million at June 30,2017 compared to $\$ 324.0$ million at December 31, 2016, of which $\$ 198.5$ million of the balance at June 30,2017 was held outside the United States. Cash balances held in foreign jurisdictions are, in most circumstances, available to be repatriated to the United States; however, they would be subject to United States federal income taxes, less applicable foreign tax credits. We have not provided U.S. income tax expense on substantially all of the accumulated undistributed earnings of our foreign subsidiaries because we have the ability and plan to reinvest these indefinitely.

Effective utilization of the cash generated by our international operations is a critical component of our tax strategy. Strategic dividend repatriation from foreign subsidiaries creates U.S. taxable income, which enables us to realize deferred tax assets. The Company regularly repatriates, in the form of dividends from its non-U.S. subsidiaries, a portion of its current year earnings to fund financial obligations in the U.S.

## Cash Flows Provided By Operating Activities

Net cash from operating activities in the first six months of 2017 was $\$ 57.9$ million compared to $\$ 172.3$ million in the first six months of 2016 . The decrease in cash from operating activities for the first six months of 2017 compared to 2016 was principally driven by payment of a litigation settlement of $\$ 56$ million (as discussed in Note 13 to the Consolidated Financial Statements), lower net income and higher incentive compensation payments for the 2017 period as compared to 2016 period.

Working capital (current assets less current liabilities) totaled $\$ 1,132.7$ million at June 30,2017 , compared to $\$ 710.7$ million at December 31 , 2016 reflecting higher cash balances as a result of proceeds from the Senior Notes - 2017. The Company sold certain accounts receivable on a non-recourse basis to unrelated financial institutions under "factoring" agreements that are sponsored, solely and individually, by certain customers. We believe that participating in the factoring programs strengthens our relationships with these customers and provides operational efficiencies. The beneficial impact on cash provided by operations from participating in these programs decreased approximately $\$ 4.7$ million for the six months ended June 30,2017 compared to an increase of approximately $\$ 17.7$ million for the six months ended June 30, 2016. The cost of participating in these programs was immaterial to our results in all periods.

## Cash Flows Used In Investing Activities

Net investing activities during the first six months of 2017 used $\$ 232.0$ million compared to $\$ 40.2$ million in the prior year period. The increase in cash used in investing activities principally reflected the acquisition of Fragrance Resources and PowderPure in 2017 for approximately $\$ 136.0$ million and $\$ 54.7$ million (net of cash acquired), respectively. Additions to property, plant and equipment were $\$ 46.2$ million during the first six months of 2017 compared to $\$ 43.2$ million in the first six months of 2016 . We expect additions to property, plant and equipment will be approximately $4.5 \%-5 \%$ of our sales (net of potential grants and other reimbursements from government authorities) in 2017.

## Cash Flows Provided By Financing Activities

Net financing activities in the first six months of 2017 increased to $\$ 343.6$ million compared to $\$ 235.4$ million of cash inflows in the first six months of 2016, principally driven by higher proceeds from the revolving credit facility and the issuance of the Senior Notes - 2017 as well as lower share repurchases which were only partially offset by higher dividend payments in the 2017 period compared to the 2016 period, which included the issuance of the Euro Senior Notes - 2016.

At June 30, 2017, we had \$1,894.2 million of debt outstanding compared to \$1,325.4 million outstanding at December 31, 2016 .
We paid dividends totaling $\$ 101.2$ million in the 2017 period. We declared a cash dividend per share of $\$ 0.64$ in the second quarter of 2017 that was paid on July 7, 2017 to all shareholders of record as of June 26, 2017. In August 2017, the Board of Directors approved an increase in our quarterly dividend for the third quarter of 2017 by $8 \%$, to $\$ 0.69$ per share.

In December 2012, the Board of Directors authorized a $\$ 250$ million share repurchase program, which commenced in the first quarter of 2013. In August 2015, the Board of Directors approved an additional $\$ 250$ million share repurchase authorization and extension through December 31,2017 . Based on the total remaining amount of $\$ 56.1$ million available under the amended repurchase program, approximately 0.4 million shares, or $0.5 \%$ of shares outstanding (based on the market price and shares outstanding as of June 30, 2017) could be repurchased under the program as of June 30 , 2017. During the three months ended June 30, 2017, we repurchased 114,930 shares on the open market at an aggregate cost of $\$ 15.6$ million or an average of $\$ 135.7$ per share. During the six months ended June 30, 2017, we repurchased 427,219 shares on the open market at an aggregate cost of $\$ 53.2$ million or an average of $\$ 124.6$ per share. The purchases will be made from time to time on the open market or through private transactions as market and business conditions warrant. Repurchased shares will be placed into treasury stock. The ultimate level of purchases will be a function of the daily purchase limits established in the pre-approved program according to the share price at that time.

## Capital Resources

Operating cash flow provides the primary source of funds for capital investment needs, dividends paid to shareholders and debt repayments. We anticipate that cash flows from operations and availability under our existing credit facilities are sufficient to meet our investing and financing needs for at least the next eighteen months. We regularly assess our capital structure, including both current and long-term debt instruments, as compared to our cash generation and investment needs in order to provide ample flexibility and to optimize our leverage ratios. We believe our existing cash balances are sufficient to meet our debt service requirements.

We supplement short-term liquidity with access to capital markets, mainly through bank credit facilities and issuance of commercial paper. Commercial paper issued by the Company generally has terms of 90 days or less. The maximum commercial
paper borrowings outstanding during the first and second quarters of 2017 were approximately $\$ 107.5$ million and $\$ 50$ million, respectively. As of June 30 , 2017, there was no commercial paper outstanding. The revolving credit facility is used as a backstop for the Company's commercial paper program. No commercial paper was issued during the six months ended June 30, 2016.

We expect to contribute a total of approximately $\$ 2-\$ 10$ million to our U.S. pension plans during 2017. During the six months ended June 30 , 2017, no contributions were made to our qualified U.S. pension plans and $\$ 29.3$ million contributions were made to our non-U.S. pension plans.

On May 18, 2017, the Company issued $\$ 500.0$ million face amount of $4.375 \%$ Senior Notes ("Senior Notes - 2017") due 2047 at a discount of $\$ 1.8$ million. The Company received proceeds related to the issuance of these Senior Notes - 2017 of $\$ 493.9$ million which was net of the $\$ 1.8$ million discount and $\$ 4.4$ million in underwriting fees (recorded as deferred financing costs). In addition, the Company incurred $\$ 0.9$ million in legal and professional costs associated with the issuance and such costs were recorded as deferred financing costs. In connection with the debt issuance, the Company entered into preissuance hedging transactions that were settled upon issuance of the debt and resulted in a loss of approximately $\$ 5.3$ million. The discount, deferred financing costs and pre-issuance hedge loss are being amortized as interest expense over the 30 year term of the debt. The Senior Notes - 2017 bear interest at a rate of $4.375 \%$ per annum, with interest payable semi-annually on June 1 and December 1 of each year, commencing on December 1, 2017. The Senior Notes - 2017 will mature on June 1, 2047.

As of June 30, 2017, we had $\$ 28.4$ million of borrowings under our revolving credit facility. The amount which we are able to draw down on under the facility is limited by financial covenants as described in more detail below. Our draw down capacity on the facility was $\$ 921.6$ million at June 30 , 2017 . We expect interest expense to increase in the third quarter of 2017 as a result of a full quarter of interest related to the Senior Notes - 2017.

Under our revolving credit facility, we are required to maintain, at the end of each fiscal quarter, a ratio of net debt for borrowed money to adjusted EBITDA in respect of the previous 12-month period of not more than 3.5 to 1 . Based on this ratio, at June 30,2017 our covenant compliance provided overall borrowing capacity of $\$ 1,279$ million.

At June 30, 2017, we were in compliance with all financial and other covenants, including the net debt to adjusted EBITDA ratio. At June 30 , 2017 our Net Debt/adjusted EBITDA ${ }^{(1)}$ ratio, as defined by the debt agreements, was 1.83 to 1, well below the financial covenants of existing outstanding debt. Failure to comply with the financial and other covenants under our debt agreements would constitute default and would allow the lenders to accelerate the maturity of all indebtedness under the related agreement. If such acceleration were to occur, we would not have sufficient liquidity available to repay the indebtedness. We would likely have to seek amendments under the agreements for relief from the financial covenants or repay the debt with proceeds from the issuance of new debt or equity, and/or asset sales, if necessary. We may be unable to amend the agreements or raise sufficient capital to repay such obligations in the event the maturities are accelerated.
(1) Adjusted EBITDA and Net Debt, which are non-GAAP measures used for these covenants, are calculated in accordance with the definition in the debt agreements. In this context, these measures are used solely to provide information on the extent to which we are in compliance with debt covenants and may not be comparable to adjusted EBITDA and Net Debt used by other companies. Reconciliations of adjusted EBITDA to net income and net debt to total debt are as follows:

| (DOLLARS IN MILLIONS) | Twelve Months Ended June 30, |  |
| :---: | :---: | :---: |
| Net income | \$ | 395.3 |
| Interest expense |  | 55.8 |
| Income taxes |  | 102.0 |
| Depreciation and amortization |  | 108.3 |
| Specified items ${ }^{(1)}$ |  | 89.0 |
| Non-cash items ${ }^{(2)}$ |  | 15.8 |
| Adjusted EBITDA | \$ | 766.2 |

(1) Specified items for the 12 months ended June 30, 2017 of $\$ 89.0$ million consist of legal charges/credits, acquisition-related costs, costs associated with product recalls, operational improvement initiative costs, restructuring and other charges, gains on sales of fixed assets, integration-related costs, tax assessment and CTA realization.
(2) Non-cash items represent all other adjustments to reconcile net income to net cash provided by operations as presented on the Statement of Cash Flows, including gain on disposal of assets and stock-based compensation.

|  | June 30, <br> (DOLLARS IN MILLIONS) <br> Total debt |
| :--- | ---: |
| Adjustments: | 2017 |
| Deferred gain on interest rate swaps | $1,894.2$ |
| Cash and cash equivalents | $(0.4)$ |
| Net debt | $(491.4)$ |

As discussed in Note 13 to the Consolidated Financial Statements, at June 30, 2017, we had entered into various guarantees and had undrawn outstanding letters of credit from financial institutions. These arrangements reflect ongoing business operations, including commercial commitments, and governmental requirements associated with audits or litigation that are in process with various jurisdictions. Based on the current facts and circumstances they are not reasonably likely to have a material impact on our consolidated financial condition, results of operations, or cash flows.

## Cautionary Statement Under the Private Securities Litigation Reform Act of 1995

This Quarterly Report includes "forward-looking statements" under the Federal Private Securities Litigation Reform Act of 1995, including statements regarding (i) expected raw material costs in 2017, (ii) the expected impact of operational improvements, cost reduction efforts and mix enhancements on margins, (iii) the expected impact of the multi-year productivity program announced in 2017, (iv) cash flows to fund future operations and to meet debt service requirements, and (v) our plans and intentions to indefinitely reinvest undistributed foreign earnings in our foreign subsidiaries to fund local operations and/or capital projects. These forward-looking statements should be evaluated with consideration given to the many risks and uncertainties inherent in our business that could cause actual results and events to differ materially from those in the forward-looking statements. Certain of such forwardlooking information may be identified by such terms as "will," "expect," "anticipate," "believe," "outlook," "may," "estimate," "should," "intend," "plan"" and "predict" similar terms or variations thereof. Such forward-looking statements are based on a series of expectations, assumptions, estimates and projections about the Company, are not guarantees of future results or performance, and involve significant risks, uncertainties and other factors, including assumptions and projections, for all forward periods. Our actual results may differ materially from any future results expressed or implied by such forwardlooking statements. Such factors include, among others, the following:

- macroeconomic trends affecting the emerging markets;
- our ability to implement and adapt our Vision 2020 strategy;
- our ability to successfully identify and complete acquisitions in line with our Vision 2020 strategy, and to realize the anticipated benefits of those acquisitions;
- our ability to effectively compete in our market, and to successfully develop new and competitive products that appeal to our customers and consumers;
- changes in consumer preferences and demand for our products or a decline in consumer confidence and spending;
- our ability to benefit from our investments and expansion in emerging markets;
- the impact of currency fluctuations or devaluations in the principal foreign markets in which we operate, including the devaluation of the Euro;
- the impact of customer claims or product recalls;
- the potential adverse impact of Brexit on currency exchange rates, global economic conditions and cross-border agreements that affect our business;
- the economic and political risks associated with our international operations, including challenging economic conditions in China and Latin America;
- the impact of any failure of our key information technology systems or costs that could be incurred due to a breach of data privacy or information security;
- our ability to attract and retain talented employees;
- our ability to comply with, and the costs associated with compliance, with U.S. and foreign environmental protection laws;
- our ability to realize expected cost savings and efficiencies from our profitability improvement initiatives and other optimization activities;
- volatility and increases in the price of raw materials, energy and transportation;
- fluctuations in the quality and availability of raw materials;
- the impact of a disruption in our supply chain or our relationship with our suppliers;
- any adverse impact on the availability, effectiveness and cost of our hedging and risk management strategies;
- our ability to successfully manage our working capital and inventory balances;
- uncertainties regarding the outcome of, or funding requirements, related to litigation or settlement of pending litigation, uncertain tax positions or other contingencies;
- the effect of legal and regulatory proceedings, as well as restrictions imposed on us, our operations, or our representatives by U.S. and foreign governments;
- adverse changes in federal, state, local and international tax legislation or policies, including with respect to transfer pricing and state aid, and adverse results of tax audits, assessments, or disputes; and
- changes in market conditions or governmental regulations relating to our pension and postretirement obligations.

New risks emerge from time to time and it is not possible for management to predict all such risk factors or to assess the impact of such risks on our business. Accordingly, we undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise.

Any public statements or disclosures by the Company following this report that modify or impact any of the forward-looking statements contained in or accompanying this report will be deemed to modify or supersede such outlook or other forward-looking statements in or accompanying this report.

The foregoing list of important factors does not include all such factors, nor necessarily present them in order of importance. In addition, you should consult other disclosures made by the Company (such as in our other filings with the SEC or in company press releases) for other factors that may cause actual results to differ materially from those projected by the Company. Please refer to Part I. Item 1A., Risk Factors, of the 2016 Form $10-\mathrm{K}$ for additional information regarding factors that could affect our results of operations, financial condition and cash flow.

## Non-GAAP Financial Measures

The Company uses non-GAAP financial operating measures in this Quarterly Report, including: (i) currency neutral sales (which eliminates the effects that result from translating its international sales in U.S. dollars), (ii) adjusted gross margin (which excludes operational improvement initiative costs, acquisition-related costs, costs associated with product recalls and integration-related costs), (iii) adjusted operating profit and adjusted operating margin (which excludes legal charges/credits, acquisition-related costs, costs associated with product recalls, operational improvement initiative costs, restructuring and other charges, gains on sales of fixed assets, integration-related costs and tax assessments), (iv) adjusted selling and administrative expenses (which excludes acquisition-related costs, tax assessments, integration-related costs and legal charges/credits) and (v) adjusted effective tax rate (which excludes legal charges/credits, acquisition-related costs, costs associated with product recalls, operational improvement initiative costs, restructuring and other charges, gains on sales of fixed assets, integration-related costs, tax assessment and CTA realization). The Company also provides the non-GAAP measures adjusted EBITDA (which excludes certain specified items and non-cash items as set forth in the Company's debt agreements) and net debt (which is adjusted for deferred gain on interest rate swaps and cash and cash equivalents) solely for the purpose of providing information on the extent to which the Company is in compliance with debt covenants contained in its debt agreements.

We provide these metrics because they are used by management as one means by which we assess our financial and operational performance and are also frequently used by analysts, investors and other interested parties in providing period to period comparisons of our operational performance. In addition, we believe that these measures, when used as supplements to GAAP measures of performance, are helpful to management and investors in evaluating the effectiveness of our business strategies and to compare our performance relative to our peers. Such information is supplemental to information presented in accordance with GAAP and is not intended to represent a presentation in accordance with GAAP. Currency neutral sales, adjusted gross margin, adjusted operating profit, adjusted operating margin, adjusted selling and administrative expenses and adjusted effective tax rate should not be considered in isolation or as substitutes for analysis of our results under GAAP and may not be comparable to other companies' calculation of such metrics.

## A. Reconciliation of Non-GAAP Metrics

## Three Months Ended June 30, 2017

| (DOLLARS IN THOUSANDS) | Reconciliation of Gross Profit |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Reported <br> (GAAP) |  | Operational Improvement Initiative Costs (a) |  |  | Acquisition and Related Costs (b) |  | Integration related costs (c) |  | FDA mandated product recall (h) | Adjusted (Non-GAAP) |  |
| Gross profit | \$ | 374,589 |  |  | 445 |  | 5,606 |  | 98 | 3,500 | \$ | 384,238 |
| (DOLLARS IN THOUSANDS) |  |  | Reconciliation of Selling and Administrative Expenses |  |  |  |  |  |  |  |  |  |
|  |  |  |  | Reported (GAAP) | Acqui Relate | ion and Costs (b) | Integra <br> related c |  | Legal Charges/Credits <br> (d) | Tax Assessmen <br> (e) |  | Adjusted (NonGAAP) |
| Selling and administrative expenses |  |  |  | 135,910 |  | (672) |  | 42) | $(1,000)$ | 19 |  | 133,715 |


| $\begin{aligned} & \text { (DOLLARS IN } \\ & \text { THOUSANDS) } \end{aligned}$ | Reconciliation of Operating Profit |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Reported <br> (GAAP) | Operational <br> Improvement Initiative Costs (a) | Acquisition Related Costs (b) | Integration related costs (c) | Legal Charges/Credits (d) | Tax Assessment <br> (e) | Restructuring and Other Charges (f) | Gain on Sale of Asset (g) | FDA mandated product recall (h) | Adjusted (NonGAAP) |
| Operating profit | \$ 159,142 | 445 | 6,278 | 731 | 1,000 | (19) | 791 | (68) | 3,500 | \$ 171,800 |


| (DOLLARS IN THOUSANDS) | Reconciliation of Net Income |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Reported <br> (GAAP) | Operational <br> Improvement Initiative Costs (a) | Acquisition Related Costs (b) | Integration related costs (c) | Legal Charges/Credits (d) | Tax Assessment <br> (e) | Restructuring and Other Charges (f) | Gain on Sale of Asset (g) | FDA mandated product recall (h) | $\begin{aligned} & \text { Adjusted } \\ & \text { (Non- } \\ & \text { GAAP) } \end{aligned}$ |
| Income before taxes | \$ 142,040 | 445 | 6,278 | 731 | 1,000 | (19) | 791 | (68) | 3,500 | \$ 154,698 |
| Taxes on income (i) | \$ 32,245 | 111 | 1,472 | 243 | 354 | (7) | (75) | (22) | 1,238 | \$ 35,559 |
| Net income | \$ 109,795 | 334 | 4,806 | 488 | 646 | (12) | 866 | (46) | 2,262 | \$ 119,139 |

[^0]
## Three Months Ended June 30, 2016

| (DOLLARS IN THOUSANDS) | Reconciliation of Gross Profit |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  | Restructuring <br> and Other <br> Charges (a) | Operational <br> Improvement Initiative <br> Costs (b) | Adjusted (Non- <br> (GAAP) |  |
| Gross profit | $\$$ | 365,641 | 182 | 831 | $\mathbf{3 6 6 , 6 5 4}$ |


| (DOLLARS IN THOUSANDS) | Reconciliation of Selling and Administrative Expenses |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Reported <br> (GAAP) | Acquisition and <br> Related Costs (c) | Legal Charges/Credits <br> (d) | Adjusted (Non- <br> GAAP) |
| Selling and administrative expenses | $\$$ | 132,784 | $(213)$ | $\mathbf{1 3 2 , 6 0 7}$ |


| (DOLLARS IN THOUSANDS) | Reconciliation of Operating Profit |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Reported (GAAP) | Restructuring and Other Charges (a) | Operational Improvement Initiative Costs (b) | Acquisition Related Costs <br> (c) | Legal Charges/Credits (d) | Gain on Sale of Asset (e) | Adjusted (NonGAAP) |
| Operating profit | \$ 164,672 | 182 | 831 | 213 | (36) | (197) | 165,665 |


| (DOLLARS IN THOUSANDS) | Reconciliation of Net Income |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Reported <br> (GAAP) | Restructuring and Other Charges (a) | Operational Improvement Initiative Costs (b) | Acquisition Related Costs <br> (c) | Legal Charges/Credits <br> (d) | Gain on Sale of Asset (e) | Adjusted (NonGAAP) |
| Income before taxes | \$ 152,050 | 182 | 831 | 213 | (36) | (197) | \$ 153,043 |
| Taxes on income (f) | \$ 35,317 | 35 | 208 | (102) | (9) | (65) | \$ 35,384 |
| Net income | \$ 116,733 | 147 | 623 | 315 | (27) | (132) | \$ 117,659 |

(a) Accelerated depreciation related to restructuring activities.
(b) Accelerated depreciation and severance costs in Hangzhou, China.
(c) Additional transaction costs related to the acquisition of Lucas Meyer, included in Selling and administrative expenses.
(d) Principally related to favorable tax rulings.
(e) Principally related to gain on sale of property in Europe.
(f) The income tax expense (benefit) on non-GAAP adjustments is computed in accordance with ASC 740 using the same methodology as the GAAP provision of income taxes. Income tax effects of non-GAAP adjustments are calculated based on the applicable statutory tax rate for each jurisdiction in which such charges were incurred. For the second quarter of 2016, these non-GAAP adjustments were not subject to foreign tax credits or valuation allowances, but to the extent that such factors are applicable to any future nonGAAP adjustments we will take such factors into consideration in calculating the tax expense (benefit).

Six Months Ended June 30, 2017


|  | Reported <br> (GAAP) | Operational Improvement Initiative Costs (a) | Acquisition Related Costs (b) | Integration related costs (c) | Legal Charges/Credits <br> (d) | Tax Assessment <br> (e) | Restructuring and Other Charges (f) | Gain <br> on <br> Sale <br> of <br> Asset <br> (g) | FDA mandated product recall (i) | Adjusted <br> (Non- <br> GAAP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Operating profit | \$ 296,578 | 1,066 | 15,066 | 1,923 | 1,000 | 5,331 | 10,934 | (89) | 3,500 | \$ 335,309 |

(DOLLARS IN
THOUSANDS)
Reconciliation of Net Income

|  | Reported <br> (GAAP) | Operational Improvement Initiative Costs (a) | Acquisition Related Costs (b) | Integration related costs (c) | Legal Charges/Credits <br> (d) | Tax Assessment (e) | Restructuring and Other Charges (f) | Gain <br> on <br> Sale <br> of <br> Asset <br> (g) | CTA <br> Realization <br> (h) | FDA mandated product recall (i) | Adjusted (NonGAAP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Income before taxes | \$ 280,527 | 1,066 | 15,066 | 1,922 | 1,000 | 5,331 | 10,934 | (89) | $(12,217)$ | 3,500 | \$307,040 |
| Taxes on income (j) | \$ 54,968 | 266 | 4,610 | 606 | 354 | 1,885 | 2,892 | (29) | - | 1,238 | \$ 66,790 |
| Net income | \$ 225,559 | 800 | 10,456 | 1,316 | 646 | 3,446 | 8,042 | (60) | $(12,217)$ | 2,262 | \$240,250 |

[^1]
## Six Months Ended June 30, 2016

| (DOLLARS IN THOUSANDS) | Reconciliation of Gross Profit |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Reported <br> (GAAP) | Restructuring <br> and Other <br> Charges (a) | Operational <br> Improvement Initiative <br> Costs (b) | Acquisition and <br> Related Costs <br> (c) | Adjusted (Non- <br> GAAP) |  |
| Gross profit | $\$$ | 725,849 | 283 |  | 1,099 | 889 | $\mathbf{7 2 8 , 1 2 0}$ |


| (DOLLARS IN THOUSANDS) | Reconciliation of Selling and Administrative Expenses |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Reported <br> (GAAP) | Acquisition and <br> Related Costs (c) | Legal Charges/Credits <br> (d) | Adjusted (Non- <br> GAAP) |  |
| Selling and Administrative Expenses | $\$$ | 256,327 | $(360)$ | 1,482 | $\mathbf{2 5 7 , 4 4 9}$ |


| (DOLLARS IN THOUSANDS) | Reconciliation of Operating Profit |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Reported <br> (GAAP) | Restructuring and Other Charges (a) | Operational Improvement Initiative Costs (b) | Acquisition Related Costs <br> (c) | Legal Charges/Credits <br> (d) | Gain on Sale of Asset (e) | Adjusted (NonGAAP) |
| Operating profit | \$ 334,604 | 283 | 1,099 | 1,249 | $(1,482)$ | $(2,910)$ | 332,843 |


| (DOLLARS IN THOUSANDS) | Reconciliation of Net Income |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Reported <br> (GAAP) | Restructuring and Other Charges (a) | Operational Improvement Initiative Costs (b) | Acquisition Related Costs <br> (c) | Legal Charges/Credits <br> (d) | Gain on Sale of Asset (e) | Adjusted (NonGAAP) |
| Income before taxes | \$ 306,947 | 283 | 1,099 | 1,249 | $(1,482)$ | $(2,910)$ | \$ 305,186 |
| Taxes on income (f) | \$ 71,610 | 54 | 275 | 266 | (411) | (637) | \$ 71,157 |
| Net income | \$ 235,337 | 229 | 824 | 983 | $(1,071)$ | $(2,273)$ | \$ 234,029 |

(a) Accelerated depreciation related to restructuring activities.
(b) Accelerated depreciation and severance costs in Hangzhou, China.
(c) Expense related to the amortization of inventory step-up, included in Cost of goods sold, and additional transaction costs related to the acquisition of Lucas Meyer, included in Selling and administrative expenses.
(d) Settlements due to favorable tax rulings in jurisdictions for which reserves were previously recorded for ongoing tax disputes.
(e) Principally related to gain on sale of property in Europe.
(f) The income tax expense (benefit) on non-GAAP adjustments is computed in accordance with ASC 740 using the same methodology as the GAAP provision of income taxes. Income tax effects of non-GAAP adjustments are calculated based on the applicable statutory tax rate for each jurisdiction in which such charges were incurred. For the first six months of 2016, these non-GAAP adjustments were not subject to foreign tax credits or valuation allowances, but to the extent that such factors are applicable to any future nonGAAP adjustments we will take such factors into consideration in calculating the tax expense (benefit).

## B. Foreign Currency Reconciliation

|  | Three Months Ended June 30, |  |  | Six Months Ended June 30, |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 | 2017 | 2016 |
| Operating Profit: |  |  |  |  |  |
| \% Change - Reported (GAAP) | (3)\% |  | 11\% | (11)\% | 7\% |
| Items impacting comparability ${ }^{(1)}$ | 7\% |  | (4)\% | 12\% | (2)\% |
| \% Change - Adjusted (Non-GAAP) | 4\% |  | 7\% | 1\% | 5\% |
| Currency Impact | 3\% |  | -\% | 4\% | 2\% |
| \% Change Year-over-Year - Currency Neutral Adjusted (Non-GAAP)** | 6\% | * | 7\% | 5\% | 7\% |

(1) Includes $\$ 12.7$ million of acquisition-related costs, costs associated with product recalls, legal charges, restructuring, integration-related and operational improvement initiative costs as well as gains on sales of fixed assets and $\$ 1.0$ million related to operational improvement initiative, acquisition-relation and restructuring costs which were partially offset by gains on sales of fixed assets and a favorable legal settlement for the three months ended June 30 , 2017 and June 30,2016 , respectively. Includes $\$ 38.7$ million consisting of acquisition-related costs, costs associated with product recalls, legal charges, restructuring, integration-related and operational improvement initiative costs as well as gains on sales of fixed assets and excludes a benefit of $\$ 1.8$ million related to gains on sales of fixed assets and a favorable legal settlement, which were only partially offset by acquisition-related, operational improvement initiative and restructuring costs for the six months ended June 30, 2017 and June 30, 2016, respectively.
** Currency neutral amount is calculated by translating prior year amounts at the exchange rates used for the corresponding 2017 period. Currency neutral operating profit also eliminates the year-over-year impact of cash flow hedging.

* The sum of these items does not foot due to rounding.


## C. Acquisition Related Intangible Asset Amortization

The Company tracks the amount of amortization recorded on recent acquisitions in order to monitor its progress with respect to its Vision 2020 goals. The following amounts were recorded with respect to recent acquisitions:

| (DOLLARS IN MILLIONS) | Three Months Ended June 30, |  | Six Months Ended June 30, |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2017 | 2016 | 2017 | 2016 |
| Amortization Expense: |  |  |  |  |
| PowderPure | \$0.6 | \$- | \$0.6 | \$- |
| Fragrance Resources | 1.5 | - | 2.8 | - |
| David Michael | 1.1 | - | 1.7 | - |
| Lucas Meyer | 1.9 | 1.7 | 3.8 | 4.3 |
| Ottens Flavors | 1.6 | 1.6 | 3.1 | 3.2 |

## Item 3. Ouantitative and Oualitative Disclosures about Market Risk

There are no material changes in market risk from the information provided in our 2016 Form 10-K.

## Item 4. Controls and Procedures

The Chief Executive Officer and Chief Financial Officer, with the assistance of other members of our management, have evaluated the effectiveness of our disclosure controls and procedures as of the end of the period covered by this Quarterly Report on Form 10-Q. Based on such evaluation, the Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures are effective as of the end of the period covered by this Quarterly Report on Form 10-Q.

We have established controls and procedures designed to ensure that information required to be disclosed in the reports that we file or submit under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and is accumulated and communicated to management, including the principal executive officer and the principal financial officer, to allow timely decisions regarding required disclosure.

The Chief Executive Officer and Chief Financial Officer have also concluded that there have not been any changes in our internal control over financial reporting 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

We are subject to various claims and legal actions in the ordinary course of our business.

## Environmental

Over the past 20 years, various federal and state authorities and private parties have claimed that we are a Potentially Responsible Party ("PRP") as a generator of waste materials for alleged pollution at a number of waste sites operated by third parties located principally in New Jersey and have sought to recover costs incurred and to be incurred to clean up the sites.

We have been identified as a PRP at eight facilities operated by third parties at which investigation and/or remediation activities may be ongoing. We analyze our potential liability on at least a quarterly basis. We accrue for environmental liabilities when they are probable and estimable. We estimate our share of the total future cost for these sites to be less than $\$ 5$ million.

While joint and several liability is authorized under federal and state environmental laws, we believe the amounts we have paid and anticipate paying in the future for clean-up costs and damages at all sites are not material and will not have a material adverse effect on our financial condition, results of operations or liquidity. This assessment is based upon, among other things, the involvement of other PRPs at most of the sites, the status of the proceedings, including various settlement agreements and consent decrees, and the extended time period over which payments will likely be made. There can be no assurance, however, that future events will not require us to materially increase the amounts we anticipate paying for clean-up costs and damages at these sites, and that such increased amounts will not have a material adverse effect on our financial condition, results of operations or cash flows.

## Other

As previously disclosed, in March 2012, ZoomEssence, Inc. filed a complaint against the Company in the U.S. District Court for the District of New Jersey alleging trade secret misappropriation, breach of contract and unjust enrichment in connection with certain spray dry technology disclosed to the Company. ZoomEssence sought an injunction and monetary damages. In November 2014, the Company filed a counterclaim against ZoomEssence alleging trade secret misappropriation, breach of contract, breach of the implied covenant of good faith and fair dealing, unjust enrichment, misappropriation of confidential and proprietary information, common law unfair competition, tortious interference with contractual relations, and conversion. During the second quarter of 2017, the Company and ZoomEssence mutually agreed to settle all claims and counterclaims. The parties agreed to dismiss their claims against one another, with prejudice and without any admission of liability or wrongful conduct, to avoid any further expense and disruption from the litigation. The complaint was dismissed, with prejudice, on July 5, 2017. Under the settlement agreement, the Company made a one-time payment to ZoomEssence of $\$ 56$ million during the second quarter of 2017 and the parties exchanged full mutual releases. Accordingly, the Company recorded an additional charge of $\$ 1$ million during the second quarter of 2017.

We are also a party to other litigations arising in the ordinary course of our business. We do not expect the outcome of these cases, singly or in the aggregate, to have a material effect on our consolidated financial condition.

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

## (c) Issuer Purchases of Equity Securities

The table below reflects shares of common stock we repurchased during the second quarter of 2017.

| Period |  | Total Number of Shares Repurchased (1) | Average <br> Price Paid per Share | Total Number of Shares Purchased as Part of Publicly Announced Program | Approximate Dollar Value of Shares That May Yet be Purchased Under the Program |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | April 1-30, 2017 | 42,654 | \$133.63 | 42,654 | \$ | 65,986,090 |
|  | May 1-31, 2017 | 37,372 | 136.45 | 37,372 |  | 60,886,514 |
|  | June 1-30, 2017 | 34,904 | 137.50 | 34,904 |  | 56,087,164 |
|  | Total | 114,930 | \$135.72 | 114,930 | \$ | 56,087,164 |

(1) Shares were repurchased pursuant to the repurchase program originally announced in December 2012 and amended in August 2015 (i) to increase from $\$ 250$ million to $\$ 500$ million the total purchase price of shares that may be repurchased under the program and (ii) to extend the program through December 31, 2017. Authorization of the repurchase program may be modified, suspended, or discontinued at any time.

## Item 6. Exhibits

| 4.7 | Second Supplemental Indenture, dated as of May 18, 2017, among International Flavors \& Fragrances Inc. and U.S. Bank National <br> Association, as trustee (including the form of Notes), incorporated by reference to Exhibit 4.7 to the Registrant's Current Report on Form 8-K <br> filed on May 18, 2017. |
| :--- | :--- |
| 12 | Statement re: Computation of Ratios |
| 31.1 | Certification of Andreas Fibig pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. |
| 31.2 | Certification of Richard A. O'Leary pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. <br> 32 |
| Certification of Andreas Fibig and Richard A. O'Leary pursuant to 18 U.S.C. Section 1350 as adopted pursuant to the Sarbanes-Oxley Act of <br> 2002. |  |
| 101.INS | XBRL Instance Document |
| 101.SCH | XBRL Taxonomy Extensions Schema |
| 101.CAL | XBRL Taxonomy Extension Calculation Linkbase |
| 101.DEF | XBRL Taxonomy Extension Definition Linkbase |
| 101.LAB | XBRL Taxonomy Extension Label Linkbase |
| 101.PRE | XBRL Taxonomy Extension Presentation Linkbase |

## SIGNATURES

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

## INTERNATIONAL FLAVORS \& FRAGRANCES INC.

Dated: August 8, 2017

Dated: August 8, 2017

By: /s/ Andreas Fibig
Andreas Fibig
Chairman of the Board and Chief Executive Officer
By: /s/ Richard A. O'Leary
Richard A. O'Leary
Executive Vice President and Chief Financial Officer

## EXHIBIT INDEX

| Number | $\quad$ Description |
| :--- | :--- |
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## Computation of Ratios of Earnings to Fixed Charges

## Ratio of Earnings to Fixed Charges

| (Amounts in thousands except Ratio of Earnings to Fixed Charges) | Six months ended |  | Fiscal Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Earnings: | June 30, 2017 |  | 2016 |  | 2015 |  | 2014 |  | 2013 |  | 2012 |  |
| Add: |  |  |  |  |  |  |  |  |  |  |  |  |
| Income before taxes | \$ | 280,527 | \$ | 523,717 | \$ | 539,101 | \$ | 549,061 | \$ | 485,210 | \$ | 443,415 |
| Fixed charges |  | 38,303 |  | 68,838 |  | 63,158 |  | 63,098 |  | 64,194 |  | 59,009 |
| Amortization of capitalized interest |  | 2,500 |  | 4,723 |  | 4,198 |  | 3,734 |  | 3,087 |  | 2,864 |
| Less: |  |  |  |  |  |  |  |  |  |  |  |  |
| Capitalized interest |  | $(2,033)$ |  | $(4,035)$ |  | $(5,893)$ |  | $(5,572)$ |  | $(6,629)$ |  | $(6,762)$ |
| Total Earnings available for fixed charges | \$ | 319,297 | \$ | 593,243 | \$ | 600,564 | \$ | 610,321 | \$ | 545,862 | \$ | 498,526 |
| Fixed Charges: |  |  |  |  |  |  |  |  |  |  |  |  |
| Interest expense | \$ | 30,363 | \$ | 52,989 | \$ | 46,062 | \$ | 46,067 | \$ | 46,767 | \$ | 41,753 |
| Capitalized interest |  | 2,033 |  | 4,035 |  | 5,893 |  | 5,572 |  | 6,629 |  | 6,762 |
| Portion of rental expense which represents interest factor ${ }^{1}$ |  | 5,907 |  | 11,814 |  | 11,203 |  | 11,459 |  | 10,798 |  | 10,494 |
| Total Fixed charges | \$ | 38,303 | \$ | 68,838 | \$ | 63,158 | \$ | 63,098 | \$ | 64,194 | \$ | 59,009 |
| Ratio of Earnings to Fixed Charges |  | 8.34\% |  | 8.62\% |  | 9.51\% |  | 9.67\% |  | 8.5\% |  | 8.45\% |

${ }^{(1)}$ Represents one-third of rental expense, which we deem to be a reasonable estimate of the portion of our rental expense that is attributable to interest.

## CERTIFICATION

I, Andreas Fibig, certify that:

1. I have reviewed this Quarterly Report on Form $10-\mathrm{Q}$ of International Flavors \& Fragrances Inc.;
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 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 and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
(a)All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
(b)Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: August 8, 2017

| By: | $/$ s/ Andreas Fibig |
| :--- | :--- |
| Name: | Andreas Fibig |
| Title: | Chairman of the Board and Chief Executive Officer |

## CERTIFICATION

I, Richard A. O'Leary, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of International Flavors \& Fragrances Inc.;
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 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 and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: August 8, 2017
By: /s/ Richard A. O'Leary
Name: Richard A. O'Leary
Title: Executive Vice President and Chief Financial Officer

## CERTIFICATION OF CEO AND CFO PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO <br> SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of International Flavors \& Fragrances Inc. (the "Company") for the quarterly period ended June 30, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Andreas Fibig, as Chief Executive Officer, and Richard A. O'Leary, as Chief Financial Officer, each hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of his 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.

By: /s/ Andreas Fibig
Name: Andreas Fibig
Title: Chairman of the Board and Chief Executive Officer
Dated: August 8, 2017
By: /s/ Richard A. O'Leary
Name: Richard A. O'Leary
Title: Executive Vice President and Chief Financial Officer
Dated: August 8, 2017


[^0]:    (a) Represents accelerated depreciation and idle labor costs in Hangzhou, China.
    (b) Represents the amortization of inventory "step-up" related to the acquisitions of David Michael, Fragrance Resources and PowderPure, included in Cost of goods sold and transaction costs related to the acquisitions of Fragrance Resources and PowderPure, included in Selling and administrative expenses.
    (c) Represents costs related to the integration of the David Michael and Fragrance Resources acquisitions.
    (d) Represents additional charge related to litigation settlement.
    (e) Represents the reversal of a portion of the reserve for payment of a tax assessment related to commercial rent for prior periods.
    (f) Represents severance costs related to the 2017 Productivity Program which were partially offset by the reversal of 2015 severance charges that were no longer needed.
    (g) Represents gains on sale of assets.
    (h) Represents an estimate of the Company's incremental direct costs and customer reimbursement obligations, in excess of the Company's sales value of the recalled products, arising from an FDA mandated recall of consumer products as a result of raw material received and identified by the Company as containing contamination. (As discussed in Note 13 of the Consolidated Financial Statements, the sales value of the recalled products was reserved in the first quarter of 2017). While the Company does not believe that any of the affected raw material was included in its finished products delivered to the customer, as the delivered product included raw material of the same vendor lot that tested positive, the FDA, after being notified by the Company, initiated a recall of all consumer products including raw material from the affected vendor lot due to the potential for product contamination.
    (i) The income tax expense (benefit) on non-GAAP adjustments is computed in accordance with ASC 740 using the same methodology as the GAAP provision of income taxes. Income tax effects of non-GAAP adjustments are calculated based on the applicable statutory tax rate for each jurisdiction in which such charges were incurred. For the second quarter of 2017, these non-GAAP adjustments were not subject to foreign tax credits or valuation allowances, but to the extent that such factors are applicable to any future nonGAAP adjustments we will take such factors into consideration in calculating the tax expense (benefit).

[^1]:    (a) Represents accelerated depreciation and idle labor costs in Hangzhou, China
    (b) Represents the amortization of inventory "step-up" related to the acquisitions of David Michael, Fragrance Resources and PowderPure, included in Cost of goods sold and transaction costs related to the acquisitions of Fragrance Resources and PowderPure, included in Selling and administrative expenses.
    (c) Represents costs related to the integration of the David Michael and Fragrance Resources acquisitions.
    (d) Represents additional charge related to litigation settlement.
    (e) Represents the reserve for payment of a tax assessment related to commercial rent for prior periods.
    (f) Represents severance costs related to the 2017 Productivity Program which were partially offset by the reversal of 2015 severance charges that were no longer needed. (g) Represents gains on sale of assets.
    (h) Represents the release of CTA related to the liquidation of a foreign entity.
    (i) Represents an estimate of the Company's incremental direct costs and customer reimbursement obligations, in excess of the Company's sales value of the recalled products, arising from an FDA mandated recall of consumer products as a result of raw material received and identified by the Company as containing contamination. (As discussed in Note 13 of the Consolidated Financial Statements, the sales value of the recalled products was reserved in the first quarter of 2017). While the Company does not believe that any of the affected raw material was included in its finished products delivered to the customer, as the delivered product included raw material of the same vendor lot that tested positive, the FDA, after being notified by the Company, initiated a recall of all consumer products including raw material from the affected vendor lot due to the potential for product contamination.
    (j) The income tax expense (benefit) on non-GAAP adjustments is computed in accordance with ASC 740 using the same methodology as the GAAP provision of income taxes. Income tax effects of non-GAAP adjustments are calculated based on the applicable statutory tax rate for each jurisdiction in which such charges were incurred, except for those items which are non-taxable for which the tax expense (benefit) was calculated at $0 \%$. For the first six months of 2017, these non-GAAP adjustments were not subject to foreign tax credits or valuation allowances, but to the extent that such factors are applicable to any future non-GAAP adjustments we will take such factors into consideration in calculating the tax expense (benefit).

