UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

☑ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2016

OR

¬ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to

Commission File Number 1-4858

INTERNATIONAL FLAVORS & FRAGRANCES INC.

(Exact name of registrant as specified in its charter)

NEW YORK	**13-1432060**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*
521 WEST 57TH STREET, NEW YORK, N.Y.	**10019**
(Address of principal executive offices)	*(Zip Code)*

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

SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE ACT:

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, par value 12 1/2¢ per share	New York Stock Exchange

SECURITIES REGISTERED PURSUANT TO SECTION 12(g) OF THE ACT:

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☑ No ¬

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ¬ No ☑

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

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendments to this Form 10-K. ¬

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

Large accelerated filer ☑ Accelerated filer ¬ Non-accelerated filer ¬ Smaller reporting company ¬

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ¬ No ☑

For the purpose of reporting the following market value of registrant's outstanding common stock, the term "affiliate" refers to persons, entities or groups which directly or indirectly control, are controlled by, or are under common control with the registrant and does not include individual executive officers, directors or less than 10% shareholders. The aggregate market value of registrant's common stock not held by affiliates as of June 30, 2016 was $10,040,332,045.

As of February 15, 2017, there were 79,037,680 shares of the registrant's common stock, par value 12 1/2¢ per share, outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's proxy statement for the 2017 Annual Meeting of Shareholders (the "IFF 2017 Proxy Statement") are incorporated by reference in Part III of this Form 10-K.

INTERNATIONAL FLAVORS & FRAGRANCES INC.

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PART I

When used in this report, the terms "IFF," "the Company," "we," "us" and "our" mean International Flavors & Fragrances Inc., and its subsidiaries.

ITEM 1. BUSINESS.

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. Our approximately 7,300 team members globally (including our recent acquisition of Fragrance Resources) 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.

Leveraging our international footprint, including 42 manufacturing facilities (of which 11 were acquired since 2014) and 70 creative centers and application laboratories (of which 14 were acquired since 2014) located in 35 different countries, we collaborate with our customers to develop over 35,000 products that we provide to our customers in approximately 160 countries. We believe we are well-positioned to serve both our global customers and the increasing number of regional and specialty consumer goods producers.

We principally compete in the flavors and fragrances market, which is part of a larger market that 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, and 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.

In 2016, we achieved sales of approximately $3.1 billion, making us one of the top four companies in the global flavors and fragrances sub-segment of the broader consumer products ingredients and compounds market. Within the flavors and fragrances sub-segment of this broader market, the top four companies represent approximately two-thirds of the total estimated sales. We believe that our diversified business platform, expansive geographic coverage, broad product portfolio and global and regional customer base, positions us to achieve long-term growth as the flavors and fragrances markets expand.

We operate in two business segments, Flavors and Fragrances. In 2016, our Flavors business represented 48% of our sales, while our Fragrances business represented 52% of sales. Our business is geographically diverse, with sales to customers in the four regions set forth below:

Region	% of 2016 Sales
Europe, Africa, Middle East	31%
Greater Asia	28%
North America	25%
Latin America	16%

We are committed to winning in emerging markets. We believe that more significant future growth potential for the flavors and fragrances industry, and for our business, exists in the emerging markets (all markets except North America, Japan, Australia, and Western, Southern and Northern Europe). Over the past five years our currency neutral sales growth rate in emerging markets has outpaced that of developed markets. We expect this long-term trend to continue for the foreseeable future.

We have had operations in some of the largest emerging markets for multiple decades. As a result of these established operations, sales in emerging markets represented 51% of 2016 and 2015 sales. As our customers seek to grow their businesses in emerging markets, they will have the ability to leverage our long-standing presence and our extensive market knowledge to help drive their brands in these markets. During 2016, our 25 largest customers accounted for 52% of our sales. Sales to our largest customer accounted for 12% of our sales for each of the last three fiscal years. These sales were principally in our Fragrances business.

For financial information about our operating segments and the geographic areas in which we do business, please see Note 13 of our Consolidated Financial Statements included in this Form 10-K.

Vision 2020 Strategy

During 2016, we continued to execute against the four pillars of our Vision 2020 strategy originally announced in 2015, which focuses on building differentiation and accelerating growth:

(1) **Innovating Firsts** - We seek to strengthen our position and drive differentiation in priority R&D platforms. In 2016, we launched four captive fragrance molecules and four new flavor modulators. We also continued to see sales growth with respect to products using our encapsulation technology.

(2) **Winning Where We Compete** - Our ambition is to achieve a #1 or #2 market leadership position in key markets and categories and with specific customers. In 2016, we grew our sales in both our Flavors and Fragrances businesses in North America and the Middle East and Africa.

(3) **Becoming Our Customers' Partner of Choice** - Our goal is to attain commercial excellence by providing our customers with in-depth local consumer understanding, industry-leading innovation, outstanding service and the highest quality products. In 2016, we achieved “core list” status with two key customers and received awards for business excellence from several customers. In addition, we received several business excellence awards from top customers and were rated gold by EcoVadis for sustainability, ranked top supplier.

(4) **Strengthening and Expanding the Portfolio** - We actively pursue value-creation through partnerships, collaborations, and acquisitions within flavors, fragrances and adjacencies. We prioritize opportunities that provide (i) access to new technologies, (ii) the ability to increase our market share in key markets and with key customers or (iii) access to adjacent products or services that will position us to leverage our expertise in science and technology and our customer base. During 2016, we acquired David Michael to strengthen our share of the North American flavors business and announced our acquisition of Fragrance Resources, which was completed in January 2017. We expect these acquisitions to strengthen our market share position within the key markets of North America and Germany.

Our Product Offerings

Flavors

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 flavor compounds, 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. We create our flavors in our regional creative centers which allow us to satisfy local taste preferences, while also helping to ensure regulatory compliance and production standards. We develop thousands of different flavors and taste offerings for our customers, most of which are tailor-made. We continually develop new formulas in order to meet changing consumer preferences and customer needs.

Our Flavors compounds are ultimately used by our customers in the following four end-use categories of consumer goods: (1) Savory, for use in soups, sauces, condiments, prepared meals, meat and poultry, potato chips and other savory snacks; (2) Beverages, for use in juice drinks, carbonated beverages, flavored waters and spirits, (3) Sweet, for use in bakery products, candy, chewing gum and cereal and (4) Dairy, for use in all dairy products such as yogurt, ice cream and cheese and other products that have a creamy flavor. We also offer a wide range of quality vanilla extracts and a variety of flavor solutions that build on our understanding of vanilla.

We continue to build upon our strengths and to focus on addressing industry trends that will allow us to differentiate ourselves from our competitors and deliver accelerated growth consistent with our Vision 2020 strategy. These trends include:

- *Continued Consumer Demand for Fresh, Clean and Authentic Products.* Consumers in developed markets increasingly want to make food choices that promote a healthy lifestyle and are moving towards products with “all natural” or healthier ingredients. In addition, consumers, non-governmental organizations and governmental agencies are seeking more transparency in product labeling. In response, many of our customers are announcing initiatives to provide "clean label" products (products that do not include any artificial ingredients). As a result of these trends, we believe our Vision 2020 strategy's focus on innovation, including our modulation technology, delivery systems and our naturals and proprietary ingredients will help our customers address changing consumer demands.

- *Expansion of Consumer Food Companies*. The number of participants in the food industry continues to expand, with mid-sized regional companies and companies focused on niche-product categories joining the traditional global companies to drive and accelerate product innovation. As a result, larger food and beverage companies are seeing slower growth than in previous years. We continue to look for innovative and value-creating methods for serving this growing customer base as evidenced by our recent acquisitions of Ottens Flavors and David Michael. We believe these acquisitions will permit us to further penetrate small and mid-sized customers, primarily in North America.

Fragrances

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. Our Fragrance business is a vertically integrated operation, originating with the development in our research laboratories of naturals, synthetic and proprietary molecules and innovative delivery systems, progressing to our manufacturing facilities that produce these ingredients in a consistent, high-quality and cost-effective manner and transitioning to our creative centers and application laboratories where our perfumers partner with our customers to create unique fragrance compounds for use in a variety of end-use products.

By providing our fragrance development teams with an extensive portfolio of innovative, high-quality and effective ingredients to support their creativity, we are able to provide our customers with a unique identity for their brands. These ingredients or fragrance compounds can then be combined with our innovative delivery systems, including our proprietary encapsulation technology, which consists of individual fragrance droplets coated with a protective polymetric shell to deliver superior fragrance performance throughout a product's lifecycle. These delivery systems are key differentiators in the growth of our consumer fragrance compounds.

Our Fragrances business derives revenue from two sources, Fragrance Compounds and Ingredients.

Fragrance Compounds. Fragrance Compounds are unique and proprietary combinations of multiple ingredients that are ultimately used by our customers in their consumer goods. Our creative and commercial teams within Fragrance Compounds are organized into two broad categories, Fine Fragrances and Consumer Fragrances.

- *Fine Fragrances* - Fine Fragrances focuses on perfumes and colognes. IFF's scientists and perfumers collaborate to develop new molecules, new natural extractions, and innovative processes that enliven perfumers' palettes and help them create unique, inspiring fragrances. We have created some of the industry-leading fine fragrance classics as well as cutting-edge niche fragrances, as evidenced by the number of top sellers.

- *Consumer Fragrances* - Our Consumer Fragrances include five end-use categories of products:
    - Fabric Care - laundry detergents, fabric softeners and specialty laundry products;
    - Home Care - household cleaners, dishwashing detergents and air fresheners;
    - Personal Wash, including bar soap and shower gel;
    - Hair Care; and
    - Toiletries.

Ingredients. Fragrance Ingredients consists of active and functional ingredients that are used internally and sold to third parties, including customers and competitors, for use in preparation of compounds. While the principal role of our Fragrance Ingredients facilities is to support our Fragrance Compounds business, we utilize our excess manufacturing capacity to manufacture and sell certain fragrance ingredients to third parties. We believe that this business allows us to leverage our fixed costs while maintaining the security of supply for our perfumers and ultimately our customers. Fragrance Ingredients available for sale to third parties include innovative ingredients that leverage our manufacturing experience as well as a limited amount of cost-competitive, commodity ingredients. As our Fragrance Compounds business grows, we expect that the percentage of capacity allocated to the production of Fragrance Ingredients for sale to third parties may decrease. Fragrance Ingredients also includes our cosmetic active and functional ingredients, which provide biologists and cosmetic chemists with innovative solutions to address cosmetic challenges such as skin aging and hair protection.

With approximately 1,300 separate fragrance and active and functional cosmetic ingredients (excluding our recent acquisition of Fragrance Resources), plus additional botanicals and delivery systems, we believe we are a leader in the industry with the breadth of our product portfolio.

Consistent with our Vision 2020 strategy, Fragrances continues to build upon our strengths to differentiate ourselves from our competitors, address evolving consumer demands and deliver accelerated growth. Specifically, we intend to focus on:

(1) *Consumer Demand for Natural and Organic Products*. Increased demand for natural ingredients is a primary driver of future growth in Fine Fragrances. We believe that our in-house naturals operations, led by Laboratoire Monique Rémy (“LMR”) in Grasse, France, are industry leading in the processing of quality materials and offer decades of experience understanding natural products and perfecting the process of transforming naturals, such as narcissus, jasmine and blackcurrant bud, into pure absolutes that retain the unique fragrance of their origin. Our objective is to expand our naturals capabilities by offering our clients naturals and proprietary ingredients.

(2) *Transparency in Labeling*. As consumers worldwide seek to require transparency in labeling, our customers will progressively seek to differentiate their products through proprietary molecules. A major emphasis of our research program is the creation of new proprietary molecules and ingredients.

(3) *Delivery Systems.* We continue to invest in our delivery system technologies, including expansion of our market-leading encapsulation technology, which we believe will allow us to differentiate our products and those of our customers. Our encapsulation technology extends, controls the release of and increases aromas in a variety of consumer products. We have expanded our portfolio to offer multi-functional delivery systems with cosmetic actives that work to enhance skin penetration, protect the active against interactions with other ingredients, provide long-lasting release, facilitate formulation of challenging ingredients and allow a better-targeted action.

Research and Product Development Process

Consumer Insights

We believe that the first step to creating a unique scent or taste experience begins with gaining insight into the consumer. By developing a deep understanding of what consumers value and prefer, we are better able to focus our R&D and creative efforts. Our quest to bring new, exciting, and winning ideas to our clients begins with insight into the consumer.

Our consumer insight and marketing teams work tirelessly interpreting trends, monitoring product launches, analyzing quantitative market data, and conducting several hundred thousand consumer interviews annually. Our sensory experts direct research programs exploring topics such as fragrance performance, the psychophysics of sensory perception (including chemesthetic properties such as warming, cooling, and tingling), the genetic basis for flavor and fragrance preference, and the effects of aromas on mood, performance, health, and well-being.

Based on this information, we develop innovative programs to evaluate potential products that enable us to understand the emotional connections between a prospective product and the consumer. We believe this ability to pinpoint the likelihood of a product’s success translates into stronger brand equity, resulting in increased returns and greater market share gains for our customers as well as IFF.

Research and Development

We consider our R&D infrastructure to be one of our key competencies and we focus and invest substantial resources in the research and development of new and innovative compounds, formulas and technologies and the application of these to our customers’ products. We spend approximately 8% of our sales on the research, development and implementation of new molecules, compounds and technologies that help our customers respond to changing consumer preferences. Using the knowledge gained from our Consumer Insights program, we strategically focus our resources around key R&D platforms that address consumer needs or preferences, or anticipate future preferences. By aligning our resources around these platforms, we ensure the proper support and focus for each program so that it can be further developed and eventually accepted for commercial application. As a result of this investment, we have been granted 315 patents in the United States since 2000, including 9 in 2016, and we have developed many unique molecules and delivery systems for our customers that are used as the foundations of successful flavors and fragrances around the world.

We principally conduct our R&D activities in Union Beach, New Jersey, where we employ scientists and application engineers who collaborate with our five other R&D centers around the world, to support the:

- discovery of new materials;

- development of new technologies, such as delivery systems;
- creation of new compounds; and
- enhancement of existing ingredients and compounds.

As of December 31, 2016, we employed about 1,500 people globally in R&D activities. We spent $254.3 million, $246.1 million and $253.6 million, or approximately 8.2%, 8.1% and 8.2% of sales in 2016, 2015 and 2014, respectively, on R&D activities.

Our ingredients research program discovers molecules found in natural substances and creates new molecules that are subsequently tested for their sensorial value. To broaden our offerings of natural, innovative and unique products, we seek collaborations with research institutions and other companies throughout the world. We have established a number of such collaborations to strengthen our innovation pipeline. We may also consider acquiring companies that could provide access to new technologies, consistent with our Vision 2020 strategy.

The development of new and customized flavor and fragrance compounds is a complex process calling upon the combined knowledge of our scientists, flavorists and perfumers. Scientists from various disciplines work in project teams with flavorists and perfumers to develop flavor and fragrance compounds with consumer preferred performance characteristics. The development of new flavor and fragrance compounds requires (i) an in-depth knowledge of the flavor and fragrance characteristics of the various ingredients we use, (ii) an understanding of how the many ingredients in a consumer product interact and (iii) the creation of controlled release and delivery systems to enhance flavor and fragrance performance. To facilitate this process, we have a scientific advisory board comprised of five leading scientists that provide external perspectives and independent feedback on our R&D initiatives.

Creative Application

We also have a network of 70 creative centers and application laboratories (including 14 acquired since 2014) around the world where we create or adapt the basic flavors or fragrances that we have developed in the R&D process to commercialize for use in our customers' consumer products. Our global creative teams consist of perfumers, fragrance evaluators and flavorists, as well as marketing, consumer insights and technical application experts, from a wide range of cultures and nationalities. In close partnership with our customers' product development groups, our creative teams create the sensorial experiences that our customers are seeking in order to satisfy consumer demands in each of their markets.

Development of new flavors and fragrances 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. A collaborative process between our researchers, our product development team and our customers then follows to perfect the flavor or fragrance so that it is ready to be included in the final consumer product.

In addition to creating new flavors and fragrances, our researchers and product development teams advise customers on ways to improve their existing products by adjusting or substituting current ingredients with more readily accessible or less expensive materials or by modifying the current ingredients to produce an enhanced yield. This often results in creating a better value proposition for our customers.

Our flavor and fragrance compound formulas are treated as trade secrets and remain our proprietary asset. Our business is not materially dependent upon any individual patent, trademark or license.

Supply Chain

We strive to provide our customers with consistent quality products on a timely and cost-effective basis by managing all aspects of the supply chain, from raw material sourcing through manufacturing, quality assurance, regulatory compliance and distribution.

Procurement

We use both natural and synthetic ingredients in our compounds. We purchase approximately 9,000 different raw materials from about 2,500 domestic and international suppliers and distributors (excluding our recent acquisitions of David Michael and Fragrance Resources). Approximately half of the materials we purchase are naturals or crop-related items and the other half are synthetics and chemicals. Natural ingredients are derived from flowers, fruits and other botanical products as well as from animal products. They contain varying numbers of organic chemicals that are responsible for the fragrance or flavor of the natural product. Natural products are purchased in processed or semi-processed form. Some are used in compounds in the state in which they are purchased and others are used after further processing. Natural products, together with various chemicals, are also used as raw materials for the manufacture of synthetic ingredients by chemical processes. Our flavor products also include extracts and seasonings derived from various fruits, vegetables, nuts, herbs and spices as well as microbiologically-derived ingredients. We manufacture most of our synthetic ingredients for use in our fragrance compounds as well as for sale to others.

In order to ensure our supply of raw materials, achieve favorable pricing and provide timely transparency regarding inflationary trends to our customers, we continue to be focused on (i) implementing a forward-buy strategy, (ii) entering into supplier relationships to gain access to supplies that we do not have, (iii) implementing indexed pricing, (iv) reducing the complexity of our formulations and (v) evaluating whether it is more profitable to buy or make an ingredient. We are also concentrating on local country sourcing with our own procurement professionals.

Manufacturing and Distribution

We have 42 manufacturing sites (including 11 acquired since 2014) around the world that support more than 35,000 products. Our major manufacturing facilities are located in the United States, the Netherlands, Spain, Great Britain, Indonesia, Turkey, Brazil, Mexico, China, India, and Singapore. Our supply chain initiatives in developing markets are focused on increasing capacity and investments in key technologies. Within our more mature markets, we tend to focus on consolidation and cost optimization as well as implementing new technologies. In addition to our own manufacturing facilities, we develop relationships with third parties, including contract manufacturing organizations, that permit us to expand access to the technologies, capabilities and capacity that we need to better serve our customers.

Based on the regional nature of the Flavors business and the concerns regarding the transportability of raw materials, we have established smaller manufacturing facilities in our local markets that are focused on local needs. Products within the Fragrances business are typically composed of compounds that are more stable and more transportable around the world. Consequently, we have fewer manufacturing facilities within our Fragrances business, which produce compounds and ingredients for global distribution.

In 2016, we continued to invest in our facilities. We completed construction of a new manufacturing facility in Jakarta, Indonesia. In addition to a new capital project to construct a second Flavors manufacturing facility in China, we also expect to complete relocation of a Fragrance Ingredients facility in China in the second half of 2017. We also continue to assess our existing footprint and manufacturing capabilities that serve the Indian and Mexican markets. In addition, we are evaluating a request to relocate a second Fragrance Ingredients plant in China.

Sustainability

As a leading global creator of flavors and fragrances for a wide variety of consumer products, sustainability has been an important part of how we do business. Our sustainability strategy is centered on three main aspects: Positive Principles, Regenerative Products and Sensational People.

- *Positive Principles* - We seek to embed the principles of eliminating the concept of waste, using clean renewable energy, and celebrating diversity into our company and culture.
- *Regenerative Products* - We strive to intentionally design our products to continuously support well-being and have a positive contribution to society and the environment in a circular economy.
- *Sensational People* - We seek to engage our employees and stakeholders to make a positive difference in the world.

In 2016, we released the first-ever Cradle to Cradle Certified fragrance, PuraVita, a proof of concept for an innovative approach to sustainable fragrance creation, and launched the flavor and fragrance industry’s first-ever on-site wind turbine at our Tilburg, Netherlands manufacturing facility. Also, we entered into Vetiver Together, a unique partnership to enhance the livelihoods of farmers in Haiti, while securing our supply chain. In addition, we were identified, for the second consecutive year, as a global leader for our actions and strategies regarding climate change and awarded a leadership position on the Climate “A” list by the CDP.

Governmental Regulation

We develop, produce and market our products in a number of jurisdictions throughout the world and are subject to federal, regional and local legislation and regulations in each of the various countries. Our flavor and many of our fragrance products are intended for the food, beverage and pharmaceutical industries, which are subject to strict quality and regulatory standards. As a result, we are required to meet these strict standards which, in recent years, have become increasingly stringent.

Our products and operations are subject to regulation by governmental agencies in each of the markets in which we operate. These agencies include (1) the Food and Drug Administration and equivalent international agencies that regulate flavors and other ingredients in consumer products, (2) the Environmental Protection Agency and equivalent international agencies that regulate our manufacturing facilities, (3) the Occupational Safety and Health Administration and equivalent international agencies that regulate the working conditions in our manufacturing, research laboratories and creative centers, (4) local and international agencies that regulate trade and customs, (5) the Drug Enforcement Administration and other local or international agencies that regulate controlled chemicals that we use in our operations and (6) the Chemical Registration/Notification authorities that regulate chemicals that we use in, or transport to, the various countries in which we manufacture and/or market our products. We have seen an increase in registration and reporting requirements concerning the use of certain chemicals in a number of countries, such as Registration, Evaluation, Authorisation and Restriction of Chemicals ("REACH") regulations in the European Union.

In addition, we are subject to various rules relating to health, work safety and the environment at the local and international levels in the various countries in which we operate. Our manufacturing facilities throughout the world are subject to environmental standards relating to air emissions, sewage discharges, the use of hazardous materials, waste disposal practices and clean-up of existing environmental contamination. In recent years, there has been a significant increase in the stringency of environmental regulation and enforcement of environmental standards, and the costs of compliance have risen significantly, a trend we expect will continue in the future.

Competition

The flavors and fragrances market is part of a larger market which supplies a variety of ingredients and components that consumer products companies utilize in their products. The broader market includes large multi-national companies or smaller regional and local participants which supply products such as seasonings, texturizers, spices, enzymes, certain food-related commodities, fortified products and cosmetic ingredients.

The market for flavors and fragrances is highly competitive. Based on annual sales, our main competitors consist of (1) the three other large global flavor and fragrance manufacturers, Givaudan, Firmenich and Symrise, (2) mid-sized companies, (3) numerous local and regional manufacturers and (4) consumer product companies who may develop their own flavors or fragrances. We, together with the other top three companies, represent approximately two-thirds of the total estimated sales in the global flavors and fragrances sub-segment of the broader market.

We believe that our ability to compete successfully in the flavors and fragrances sub-market is based on (1) our understanding of consumers, (2) innovation, arising from the creative skills of our perfumers and flavorists and the technological advances resulting from our research and development activities, (3) our ability to create products which are tailor-made for our customers' needs, (4) developing strong customer intimacy and (5) driving efficiency in all that we do.

Large multi-national customers and, increasingly, mid-sized customers, may limit the number of their suppliers by placing some on "core lists," giving them priority for development and production of their new or modified products.

To compete more successfully in this environment, we must make continued investments in customer relationships and tailor our research and development efforts to anticipate customers' needs, provide effective service and secure and maintain inclusion on certain "core lists."

Employee Relations

At December 31, 2016, we had approximately 6,900 employees worldwide, of whom approximately 1,800 are employed in the United States. We believe that relations with our employees are good.

Availability of Reports

We make available free of charge on or through the Investor Relations link on our website, www.iff.com, all materials that we file electronically with the Securities and Exchange Commission ("SEC"), including our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports, filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, as soon as reasonably practicable after electronically filing such materials with, or furnishing them to, the SEC. During the period covered by this Form 10-K, we made all such materials available through our website as soon as reasonably practicable after filing such materials with the SEC.

You may also read and copy any materials filed by us with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549, and you may obtain information on the operation of the Public Reference Room by calling the SEC in the United States at 1-800-SEC-0330. In addition, the SEC maintains an Internet website, www.sec.gov, that contains reports, proxy and information statements and other information that we file electronically with the SEC.

A copy of our Corporate Governance Guidelines, Code of Business Conduct and Ethics, and the charters of the Audit Committee, Compensation Committee and Nominating and Governance Committee of the Board of Directors are posted on the Investor Relations section of our website, www.iff.com.

Our principal executive offices are located at 521 West 57th Street, New York, New York 10019 (212-765-5500).

Executive Officers of Registrant

The current executive officers of the Company, as of February 28, 2017, are listed below.

Andreas Fibig	55	Chairman of the Board and Chief Executive Officer
Richard A. O'Leary	56	Executive Vice President and Chief Financial Officer
Nicolas Mirzayantz	54	Group President, Fragrances
Matthias Haeni	51	Group President, Flavors
Gregory Yep	52	Executive Vice President, Chief Global Scientific & Sustainability Officer
Susana Suarez-Gonzalez	47	Executive Vice President, Chief Human Resources Officer
Anne Chwat	57	Executive Vice President, General Counsel and Corporate Secretary
Francisco Fortanet	48	Executive Vice President, Operations

Andreas Fibig has served as our Chairman since December 2014 and Chief Executive Officer since September 2014. Mr. Fibig has been a member of our Board of Directors since 2011. From 2008 to 2014, Mr. Fibig served as President and Chairman of the Board of Management of Bayer HealthCare Pharmaceuticals, the pharmaceutical division of Bayer AG. Prior to this position, Mr. Fibig held a number of positions of increasing responsibility at Pfizer Inc., a research-based pharmaceutical company, including as Senior Vice President in the US Pharmaceutical Operations group from 2007 through 2008 and as President, Latin America, Africa and Middle East from 2006 through 2007.

Richard A. O'Leary has served as our Executive Vice President and Chief Financial Officer since October 2016. Mr. O'Leary originally joined our Company in July 2007. Mr. O'Leary was our Senior Vice President, Controller and Chief Accounting Officer from July 2015 until his appointment as Chief Financial Officer, and served as our Vice President and Controller from May 2009 to November 2014. Mr. O'Leary served as our Interim Chief Financial Officer from November 2014 to July 2015 and from July 2008 to May 2009. Mr. O'Leary was Vice President, Corporate Development from July 2007 to May 2009. Prior to joining our Company, Mr. O'Leary served in various positions at International Paper Co., a paper and packaging company, which he originally joined in 1986, including, as Chief Financial Officer of International Paper Company (Brazil) from June 2004 to June 2007. Prior to International Paper, Mr. O'Leary was with Arthur Young & Co.

Nicolas Mirzayantz has served as our Group President, Fragrances since January 2007, and originally joined our Company in 1988. Prior to his appointment as Group President, Fragrances, he served as a member of our Temporary Office of the Chief Executive Officer from October 1, 2009 until February 2010, our Senior Vice President, Fine Fragrance and Beauty Care and Regional Manager North America, from March 2005 to December 2006, our Senior Vice President, Fine Fragrance and Beauty Care from October 2004 to February 2005, and our Vice President Global Fragrance Business Development from February 2002 to September 2004.

Matthias Haeni has served as our Group President, Flavors since April 2014. Mr. Haeni joined us in 2007 in the role of Regional General Manager, Flavors Greater Asia. In 2010, Mr. Haeni transferred to Hilversum, The Netherlands where he served as Regional General Manager for Flavors Europe, Africa, and the Middle East (EAME).

Gregory Yep has served as our Executive Vice President, Chief Global Scientific & Sustainability Officer since June 2016. Prior to joining our Company, Dr. Yep was Senior Vice President of Research, Development & Applications with The Kerry Group from January 2015 to June 2016, where he was responsible for creating strategy and implementation of technical platforms in the taste and nutrition, food and beverage and the biotechnology industry. Previously, he was Senior Vice President of R&D at PepsiCo from June 2009 to December 2015 and was Global Vice President, Application Technologies at Givaudan Flavors and Fragrances from December 2005 to June 2009. Earlier in his career, Dr. Yep was at McCormick & Company, where he held executive roles of increasing responsibility in food science. Dr. Yep holds a bachelor's degree in biology and chemistry from the University of Pennsylvania, and master's degree and Ph.D. in organic chemistry from Johns Hopkins University.

Susana Suarez-Gonzalez has served as our Executive Vice President, Chief Human Resources Officer since November 2016. Prior to joining our Company, Ms. Gonzalez was Senior Vice President Global Operations, Human Resources of Fluor Corporation from July 1991 to November 2016, and was responsible for the global execution of HR services as well as all corporate HR functions, encompassing global benefits, compensation, talent development, recruiting and human resources information systems. Ms. Gonzalez was at Fluor for 25 years, where she held leadership positions across several business groups and functions including construction, marketing, sales, project engineering and human resources.

Anne Chwat has served as our Executive Vice President, General Counsel and Corporate Secretary since August 2015 and as our Senior Vice President, General Counsel and Corporate Secretary from April 2011 to August 2015. Prior to joining us, Ms. Chwat served as Executive Vice President and General Counsel of Burger King Holdings, Inc., a fast food hamburger restaurant company, from September 2004 to April 2011. From September 2000 to September 2004, Ms. Chwat served in various positions at BMG Music (now Sony Music Entertainment), including as Senior Vice President, General Counsel and Chief Ethics and Compliance Officer.

Francisco Fortanet has served as Executive Vice President, Operations since August 2015 and as Senior Vice President, Operations from February 27, 2012 to August 2015. Mr. Fortanet joined our Company in 1995, and has served as our Vice President, Global Manufacturing Compounding from January 2007 to February 2012, our Vice President, Global Manufacturing from January 2006 to January 2007, our Regional Director of North America Operations from December 2003 to January 2005, the Project Manager of a Special Project in IFF Ireland from May 2003 to December 2003 and as our Plant Manager in Hazlet, New Jersey from October 1999 to May 2003.

ITEM 1A. RISK FACTORS.

We routinely encounter and address risks in conducting our business. Some of these risks may cause our future results to be different - sometimes materially different - than we presently anticipate. Below are material risks we have identified that could adversely affect our business. How we react to material future developments, as well as how our competitors and customers react to those developments, could also affect our future results.

Our business is highly competitive, and if we are unable to compete effectively our sales and results of operations will suffer.

The market for flavors and fragrances is highly competitive. We face vigorous competition from companies throughout the world, including multi-national and specialized flavor, fragrance and cosmetic ingredients companies, as well as consumer product companies who may develop their own flavors, fragrances or cosmetic ingredients. In the flavors industry, we also face increasing competition from ingredient suppliers that have expanded their portfolios to include flavor offerings. Some of our competitors specialize in one or more of our product sub-segments, while others participate in many of our product sub-segments. In addition, some of our global competitors may have greater resources than we do or may have proprietary products that could permit them to respond to changing business and economic conditions more effectively than we can. Consolidation of our competitors may exacerbate these risks. With our recent entry into cosmetic ingredients, we may face greater competition-related risks in this market than with our core historic flavor and fragrances businesses.

Competition in our business is based on innovation, product quality, regulatory compliance, pricing, quality of customer service, the support provided by marketing and application groups, and understanding of consumers. It is difficult for us to predict the timing, scale and success of our competitors' actions in these areas. The discovery and development of new flavors and fragrance compounds and ingredients, protection of the Company's intellectual property and development and retention of key employees are important issues in our ability to compete in our business. Increased competition by existing or future competitors, including aggressive price competition, could result in the potential loss of substantial sales or create the need for us to reduce prices or increase spending and this could have an adverse impact on sales and profitability.

During 2016, our 25 largest customers accounted for 52% of our sales, and sales to our largest customer accounted for 12% of our sales in each of the last three fiscal years. Disruption of sales to this customer or any of our other large customers for an extended period of time could adversely affect our business or financial results.

Large multi-national customers, and increasingly, mid-sized customers are unilaterally limiting the number of their suppliers or rationalizing the number of products that they offer to increase their margins and profitability. As part of these initiatives, these customers are creating “core lists” of suppliers and giving these “core lists” suppliers priority for new or modified products. Recently, these customers are making inclusion on their “core lists” contingent upon a supplier providing more favorable commercial terms which may adversely affect our margins. These, and other profitability initiatives being pursued by our customers, reduce the market opportunity for which we compete and subject the volume and pricing of the remaining suppliers to downward pressure. To compete more successfully in this environment, we must continue to make investments in customer relationships and tailor product research and development in order to anticipate customers’ needs, deliver supplies that contribute to our customers’ profitability, provide effective customer service and offer competitive cost-in-use solutions to secure and maintain inclusion on certain “core lists” and our share of our customers’ purchases. If we are unable to do so, it could adversely impact our future results of operations.

We may not be able to successfully identify and complete sufficient acquisitions to meet our Vision 2020 strategy, and even if we are able to do so, we may not realize the anticipated benefits of these acquisitions.

As part of our Vision 2020 strategy, we intend to add between $500 million and $1.0 billion of sales growth through acquisitions within the flavors and fragrances industries and adjacencies. During 2015, we completed two acquisitions which align with this strategic objective, acquiring Ottens Flavors, a flavor supplier and developer, and Lucas Meyer Cosmetics, a developer, manufacturer and marketer of cosmetic active and functional ingredients. In 2016, we acquired David Michael, a privately-held flavors company, and announced our acquisition of Fragrance Resources, a privately-held fragrance company.

Identifying suitable acquisition candidates can be difficult, time-consuming and costly, and we may not be able to identify suitable candidates or complete acquisitions in a timely manner, on a cost-effective basis or at all.

Even if we complete an acquisition, we may not realize the anticipated benefits of such acquisition. Our recent acquisitions have required, and any similar future transactions may also require, significant efforts and expenditures, including with respect to integrating the acquired business with our historical business. We may encounter unexpected difficulties, or incur unexpected costs, in connection with acquisition activities and integration efforts, which include:

- diversion of management attention from managing our historical core business;
- potential disruption of our historical core business or of the acquired business;
- the strain on, and need to continue to expand, our existing operational, technical, financial and administrative infrastructure;
- challenges related to the lack of experience in operating in the geographical or product markets of the acquired business;
- challenges in controlling additional costs and expenses in connection with and as a result of the acquisition;
- difficulties in assimilating employees and corporate cultures or in integrating systems and controls;
- difficulties in anticipating and responding to actions that may be taken by competitors;
- difficulties in realizing the anticipated benefits of the transaction;
- potential loss of key employees, key customers, suppliers or other partners of the acquired business; and
- the assumption of and exposure to unknown or contingent liabilities of acquired businesses.

If any of our acquisitions do not perform as anticipated for any of the reasons noted above or otherwise, there could be a negative impact on our results of operations and financial condition.

The interruption or failure of key information technology systems or a loss of data, malicious attack or other breach of security of our information technology systems, may have a material adverse effect on our ability to conduct our business, subject us to increased operating costs, damage our reputation and expose us to litigation.

We rely on information technology systems, including some managed by third-party providers, to conduct business and support our business processes, including product formulas, product development, sales, order processing, production, distribution, internal communications and communications with third parties throughout the world, processing transactions, summarizing and reporting results of operations, complying with regulatory, tax or legal requirements, and collecting and storing customer, supplier, employee and other stakeholder information. These systems may be susceptible to disruptions or outages due to fire, floods, power loss, telecommunications failures, natural disasters, cyber attacks, failed upgrades or other similar events, or due to the poor performance of third-party providers. Effective response to such disruptions will require effort and diligence on the part of our employees and third-party providers to avoid any adverse impact to our business. In addition, our systems and proprietary data stored electronically may be vulnerable to computer viruses, cybercrime, computer hacking and similar information security breaches, which in turn could result in the unauthorized release or misuse of confidential or proprietary information about our business (including, but not limited to, the trade secrets upon which we rely to protect our proprietary fragrance and flavor formulations), employees, or customers, and disrupt our operations. Depending on their nature and scope, these threats could potentially lead to improper use of our systems and networks, manipulation and destruction of data or product non-compliance. The occurrence of any of these events could have a material adverse effect on our sales, subject us to increased operating costs, damage our reputation and expose us to litigation or regulatory proceedings.

The industries in which our Flavors customers operate are expanding and becoming increasingly decentralized, and if we and/or our customers are unable to adjust, our operating results and future growth may be adversely affected.

Our customers include large food and beverage companies, which operate in highly competitive industries and rely on continued consumer demand for their products. In recent years many of our customers have faced growing competition from mid-size regional companies and companies focused on niche-product categories driving and accelerating product innovation. Consequently, the food and beverage industry is expanding and becoming increasingly decentralized. If our customers fail to adequately address the challenges pertaining to this expansion and decentralization of business, it may adversely affect their operations or financial performance, and could have a corresponding material adverse effect on our Flavors business. If our global customers' market shares continue to erode and we are unable to gain market share with small and mid-sized customers in this evolved environment, our operating results and future growth could be adversely affected.

We may not successfully develop and introduce new products that meet our customers' needs, which may adversely affect our results of operations.

Our ability to differentiate ourselves and deliver growth in line with our Vision 2020 strategy largely depends on our ability to successfully develop and introduce new products and product improvements that meet our customers' needs, and ultimately appeal to consumers. Innovation is a key element of our ability to develop and introduce new products. We cannot be certain that we will be successful in achieving our innovation goals, such as the development of new molecules, new and expanded delivery systems and other technologies. We currently spend approximately 8% of our sales on research and development; however, such investments may only generate future revenues to the extent that we are able to develop products that meet our customers' specifications, can be delivered at an acceptable cost and are accepted by the targeted consumer market. Furthermore, there may be significant lag times from the time we incur R&D costs to the time that these R&D costs may result in increased revenue. Consequently, even when we "win" a project, our ability to generate revenues as a result of these investments is subject to numerous customer, economic and other risks that are outside of our control, including delays by our customers in the launch of a new product, the level of promotional support for the launch, poor performance of our third-party vendors, anticipated sales by our customers not being realized or changes in market preferences or demands, or disruptive innovations by competitors.

Increasing awareness of health and wellness are driving changes in the consumer products industry, and if we are unable to react in a timely and cost-effective manner, our results of operations and future growth may be adversely affected.

We must continually anticipate and react, in a timely and cost-effective manner, to changes in consumer preferences and demands, including changes in demand driven by increasing awareness of health and wellness and demands for transparency with respect to product ingredients. Consumers, especially in developed economies such as the United States and Western Europe, are shifting away from products containing artificial ingredients to "all natural," healthier alternatives. In addition, there has been a growing demand by consumers, non-governmental organizations and, to a lesser extent, governmental agencies to provide more transparency in product labeling and our customers have been taking steps to address this demand, including by voluntarily providing product-specific ingredients disclosure. These two trends could affect the types and volumes of our flavors and fragrances that our customers include in their product offerings. If we are unable to react to or anticipate these trends in a timely and cost-effective manner, our results of operations and future growth may be adversely affected.

We may not succeed in establishing and maintaining collaborations, joint ventures or partnerships, and such arrangements may not lead to development or commercialization of products, which may limit our ability to execute our Vision 2020 strategy and adversely affect our future growth.

From time to time and in line with our Vision 2020 strategy, we may evaluate and enter into collaborations, joint ventures or partnerships to enhance our research and development efforts. Our ability to generate revenues from such collaborations will depend on our partners' abilities and efforts to successfully perform the functions assigned to them in these arrangements. The process of establishing and maintaining collaborative relationships is difficult, time-consuming to negotiate, document and implement. We may not be successful in our efforts to establish and implement collaborations or other alternative arrangements should we choose to enter into such arrangements, and the terms of the arrangements may not be favorable to us. Additionally, collaborations may not lead to development or commercialization of products in the most efficient manner, or at all. If we are unable to establish and maintain collaborative relationships on acceptable terms or to successfully transition terminated collaborative agreements, it could limit our ability to execute our Vision 2020 strategy and adversely affect our future growth.

We have made investments in and continue to expand our business into emerging markets, which exposes us to certain risks.

As part of our growth strategy, we have increased our presence in emerging markets by expanding our manufacturing presence, sales organization and product offerings in these markets, and we expect to continue to expand our business in these markets. In addition to the currency and international operation risks described below, our operations in these markets may be subject to a variety of other risks. Emerging markets typically have a consumer base with limited or fluctuating disposable income and customer demand in these markets may fluctuate accordingly. As a result, decrease in customer demand in emerging markets may have an adverse effect on our ability to execute our growth strategy. In addition, emerging markets may have weak legal systems which may affect our ability to enforce our intellectual property and contractual rights, exchange controls, unstable governments and privatization or other government actions that may affect taxes, subsidies and incentive programs and the flow of goods and currency. In conducting our business, we move products from one country to another and may provide services in one country from a subsidiary located in another country. Accordingly, we are vulnerable to abrupt changes in customs and tax regimes that may have significant negative impacts on our financial condition and operating results.

The impact of currency fluctuation or devaluation in the international markets in which we operate may negatively affect our results of operations.

We have significant operations outside the United States, the results of which are reported in the local currency and then translated into United States dollars at applicable exchange rates for inclusion in our consolidated financial statements. The exchange rates between these currencies and the United States dollar have fluctuated and will continue to do so in the future. Changes in exchange rates between these local currencies and the United States dollar will affect the recorded levels of sales, profitability, assets and/or liabilities. For example, the weakening of the Euro and several emerging market currencies in 2016 resulted in approximately $14 million impact on operating profit versus 2015. Additionally, volatility in currency exchange rates may adversely impact our financial condition, cash flows or liquidity. Although we employ a variety of techniques to mitigate the impact of exchange rate fluctuations, including sourcing strategies and a limited number of foreign currency hedging activities, we cannot guarantee that such hedging and risk management strategies will be effective, and our results of operations could be adversely affected.

Our international operations are subject to regulatory, political and other risks that could materially and adversely affect our revenues, cash flows or financial position.

We operate on a global basis, with manufacturing and sales facilities in the United States, Europe, Africa, the Middle East, Latin America, and Greater Asia. During 2016, 76% of our net sales were to customers outside the United States and we intend to continue expansion of our international operations. As a result, our business is increasingly exposed to risks inherent in international operations. These risks, which can vary substantially by location, include the following:

- governmental laws, regulations and policies adopted to manage national economic and macroeconomic conditions, such as increases in taxes, austerity measures that may impact consumer spending, monetary policies that may impact inflation rates, currency fluctuations and sustainability of resources;

- changes in environmental, health and safety regulations, such as the continued implementation of the European Union's REACH regulations, and the burdens and costs of our compliance with such regulations;

- the imposition of or changes in tariffs, quotas, trade barriers, other trade protection measures and import or export licensing requirements, by the United States or other Countries, which could adversely affect our cost or ability to import raw materials or export our flavors or fragrances to surrounding markets;

- risks and costs arising from language and cultural differences;

- changes in the laws and policies that govern foreign investment in the countries in which we operate, including the risk of expropriation or nationalization, and the costs and ability to repatriate the profit that we generate in these countries;

- risks and costs associated with political and economic instability, bribery and corruption, and social and ethnic unrest in the countries in which we operate;

- difficulty in recruiting and retaining trained local personnel;

- natural disasters, pandemics or international conflicts, including terrorist acts, or national and regional labor strikes in the countries in which we operate, which could interrupt our operations or endanger our personnel; or

- the risks of operating in developing or emerging markets in which there are significant uncertainties regarding the interpretation, application and enforceability of laws and regulations and the enforceability of contract rights and intellectual property rights.

The occurrence of any one or more of these factors could increase our costs and adversely affect our results of operations.

Volatility and challenging economic conditions may adversely affect demand for consumer products using flavors and fragrances and this may have a negative impact on our operating results and future growth.

Our flavors and fragrance compounds and ingredients are components of a wide assortment of global consumer products throughout the world. Historically, demand for consumer products using flavors and fragrances was stimulated and broadened by changing social habits and consumer needs, population growth, an expanding global middle-class and general economic growth, especially in emerging markets. The global economy has experienced significant recessionary pressures and declines in consumer confidence and economic growth. While some segments of the global economy appear to be recovering, the ongoing global recessionary economic environment in Europe has, and may in the near future, increase unemployment and underemployment, decrease salaries and wage rates, increase inflation or result in other market-wide cost pressures that will adversely affect demand for consumer products in both developed and emerging markets.

In addition, growth rates in the emerging markets have moderated from previous levels. Reduced consumer spending may cause changes in our customer orders including reduced demand for our flavors and fragrances, or order cancellations. For example, recent challenging economic conditions in China and Latin America, which culminated in the weakening of the Chinese yuan, Brazilian real and Argentinian peso, have undermined consumer confidence and resulted in our customers throughout the emerging markets taking a more cautious approach to managing their inventory.

The timing of placing of orders and the amounts of these orders are generally at our customers' discretion. Customers may cancel, reduce or postpone orders with us on relatively short notice. Significant cancellations, reductions or delays in orders by customers could affect our quarterly results.

It is currently anticipated that these challenging economic conditions will continue during 2017. To the extent that the volatility in global economic conditions continues, our sales, profitability and overall operating results could be adversely affected.

Our success depends on attracting and retaining talented people within our business. Significant shortfalls in recruitment or retention could adversely affect our ability to compete and achieve our strategic goals.

Attracting, developing, and retaining talented employees, including our perfumers and flavorists, is essential to the successful delivery of our products and success in the marketplace. Competition for these employees can be intense. The ability to attract and retain talented employees is critical in the development of new products and technologies which is an integral component of our growth strategy. However, we may not be able to attract and retain such employees in the future. If we experience significant shortfalls in recruitment or retention, our ability to effectively compete with our competitors and to grow our business could be adversely affected.

Failure to comply with environmental protection laws may cause us to close, relocate or operate one or more of our plants at reduced production levels, which could adversely affect our operating results and future growth.

Our business operations and properties are subject to extensive and increasingly stringent federal, state, local and foreign laws and regulations pertaining to protection of the environment, including air emissions, sewage discharges, the use of hazardous materials, waste disposal practices and clean-up of existing environmental contamination. Failure to comply with these laws and regulations or any future changes to them may result in significant consequences to us, including the need to close or relocate one or more of our production facilities, administrative, civil and criminal penalties, liability for damages and negative publicity. If we are unable to meet production requirements, we can lose customer orders, which can adversely affect our future growth or we may be required to make incremental capital investments to ensure supply. For example, in 2015 Chinese authorities notified us of compliance issues pertaining to the emission of odors from several of our plants in China and, consequently, we invested approximately $6.5 million in odor-abatement equipment at these facilities and have located a site for construction of a second flavors manufacturing facility in China, with an estimated cost of $45 million. We are also in discussions with the Chinese government concerning the relocation of a second Ingredients plan in China. Such idling of facilities or production modifications has caused or may cause customers to seek alternate suppliers due to concerns regarding supply interruptions and these customers may not return or may order at reduced levels even once issues are remediated. If these non-compliance issues reoccur in China or occur or in any other jurisdiction, we may lose business and may be required to incur capital spending above previous expectations, close a plant, or operate a plant at significantly reduced production levels on a permanent basis, and our operating results and cash flows from operations may be adversely affected.

Our ongoing optimization of our manufacturing facilities may not be as effective as we anticipate, and we may fail to realize the expected cost savings and increased efficiencies.

As part of our strategy, we seek to enhance our manufacturing efficiency and align our geographic manufacturing footprint with our expectations of future growth and technology needs. Many of our facilities are located in close proximity to our customers in order to minimize both our customers' and our own costs. However, we may not have sufficient demand to utilize all of our production capacity and may be required to ship excess products to other regions in which we operate, which will increase our costs and decrease our margins. To operate more efficiently and control costs, from time to time we also execute rationalization activities, which include manufacturing facility consolidations. For example, we are in the midst of relocating our Ingredients facility in Hangzhou, China, constructing a new facility in Indonesia and expect to begin relocating a second Ingredients facility in China. We have also initiated a study regarding our existing footprint and manufacturing capabilities that serve the Indian market. The spending associated with these projects may result in capital spending above previous expectations. Our ability to realize anticipated cost savings, synergies and revenue enhancements from these activities may be affected by a number of factors and may pose significant risks, including:

- the risk that we may be unable to integrate successfully the relocated manufacturing operations;
- the risk that we may be unable to effectively reduce overhead, coordinate management and integrate and retain employees of the relocated manufacturing operations;
- the risk that we may face difficulties in implementing and maintaining consistent standards, controls, procedures, policies and information systems;
- potential strains on our personnel, systems and resources and diversion of attention from other priorities; and
- unforeseen or contingent liabilities of the relocated manufacturing operations.

Furthermore, our rationalization and consolidation actions may not be as effective as we anticipate, and we may fail to realize the cost savings we expect from these actions. Actual charges, costs and adjustments due to these activities may vary materially from our estimates, and these activities may require cash and non-cash integration and implementation costs or charges in excess of budgeted amounts, which could offset any such savings and other synergies and therefore could have an adverse effect on our margins.

Volatility and increases in the price of raw materials, energy and transportation could harm our profits.

We use many different raw materials for our business, including essential oils, extracts and concentrates derived from fruits, vegetables, flowers, woods and other botanicals, animal products, raw fruits, organic chemicals and petroleum-based chemicals. Historically, we have experienced a considerable amount of price volatility in natural products that represent approximately half of our raw material purchases, and in 2016 we experienced increases in the prices of certain naturals, including citrus and vanilla. Availability and pricing of these natural products can be impacted by crop size and quality, weather, alternative land use, and other factors which we cannot control.

If we are unable to increase the prices to our customers of our fragrance or flavor products to offset raw material and other input cost increases, or if we are unable to achieve cost savings to offset such cost increases, we could fail to meet our cost expectations and our profits and operating results could be adversely affected. Increases in prices of our products to customers may lead to declines in volume, and we may not be able to accurately predict the volume impact of price increases, which could adversely affect our financial condition and results of operations.

Similarly, commodities and energy prices are subject to significant volatility caused by market fluctuations, supply and demand, currency fluctuations, production and transportation disruptions, and other world events. As we source many of our raw materials globally to help ensure quality control, if the cost of energy, shipping or transportation increases and we are unable to pass along these costs to our customers, our profit margins would be adversely affected. Furthermore, increasing our prices to our customers could result in long-term sales declines or loss of market share if our customers find alternative suppliers or choose to reformulate their consumer products to use fewer ingredients, which could have an adverse long-term impact on our results of operations.

To mitigate our sourcing risk, we maintain strategic stock levels for critical items. However, if we do not accurately estimate the amount of raw materials that will be used for the geographic region in which we will need these materials, our margins could be adversely affected.

Our reliance on a limited base of suppliers may result in a disruption to our business and may adversely affect our financial results.

For certain raw materials, we rely on a limited number of suppliers and we may not have readily available alternatives. If we are unable to maintain our supplier arrangements and relationships and are unable to obtain the quantity, quality and price levels needed for our business, or if any of our key suppliers becomes insolvent or experiences other financial distress, or if we are unable to identify new suppliers in response to any of these events, we could experience disruptions in production and our financial results could be adversely affected.

If we are unable to maintain the integrity of our raw materials, supply chain and finished goods, or fail to comply with applicable regulations, it may result in regulatory non-compliance, litigation costs, customer loss and harm to our reputation, all of which may adversely impact sales and our results of operations.

The development, manufacture and sale of our products are subject to various regulatory requirements in each of the countries in which our products are developed, manufactured and sold. In addition, we are subject to product safety and compliance requirements established by the industry or similar oversight bodies. We use a variety of strategies, methodologies and tools to (i) identify current product standards, (ii) assess relative risks in our supply chain that can impact product integrity, (iii) monitor internal and external performance and (iv) test raw materials and finished goods to minimize the likelihood of product or process non-compliance.

Gaps in our operational processes could adversely affect the quality of our finished products and result in a regulatory non-compliance event. If a product non-compliance event were to go undetected, it could subject us to customer claims, recalls, penalties, litigation costs and settlements, remediation costs or loss of sales. As our flavors and fragrance compounds and ingredients are used in many products intended for human use or consumption, these consequences would be exacerbated if we or our customer did not identify the defect before the product reaches the consumer and there was a resulting impact at the consumer level. Such a result could lead to potentially large scale adverse publicity, negative effects on consumer's health, recalls and potential consumer litigation. In addition, if we do not have adequate insurance or contractual indemnification from suppliers or other third parties, or if insurance or indemnification is not available, the liability relating to product or possible third-party claims arising from defective products could adversely affect our business, financial condition or results of operations. Furthermore, adverse publicity about our products, or our customers' products that contain our ingredients, including concerns about product safety or similar issues, whether real or perceived, could harm our reputation and result in an immediate adverse effect on our sales and customer relationships, as well as require us to utilize significant resources to rebuild our reputation.

A disruption in our operations or our supply chain could adversely affect our business and financial results.

As a company engaged in research and development, manufacturing and distribution on a global scale, we are subject to the risks inherent in such activities, including industrial accidents, environmental events, strikes and other labor disputes, disruptions in supply chain or information systems, disruption or loss of key research or manufacturing sites, product quality control, safety, licensing requirements and other regulatory issues, as well as natural disasters, international conflicts, terrorist acts and other external factors over which we have no control. While we have research and development and manufacturing facilities throughout the world, many of these facilities are extremely specialized and certain of our facilities are the sole source of a specific ingredient or product. If our research and development activities or the manufacturing of ingredients or products were disrupted, the cost of relocating or replacing these activities or reformulating these ingredients or products may be substantial, which could result in production or development delays or otherwise have an adverse effect on our margins, operating results and future growth.

Our performance may be adversely impacted if we are not successful in managing our inventory and/or working capital balances.

We evaluate our inventory balances of materials based on shelf life, expected sourcing levels, known uses and anticipated demand based on forecasted customer order activity and changes in our product/sales mix. Efficient inventory management is a key component of our business success, financial returns and profitability. To be successful, we must maintain sufficient inventory levels and an appropriate product/sales mix to meet our customers' demands, without allowing those levels to increase to such an extent that the costs associated with storing and holding other inventory adversely impact our financial results. If our buying decisions do not accurately predict sourcing levels, customer trends or our expectations about customer needs are inaccurate, we may have to take unanticipated markdowns or impairment charges to dispose of the excess or obsolete inventory, which can adversely impact our financial results. Additionally, we believe excess inventory levels of raw materials with a short shelf life in our manufacturing facilities subjects us to the risk of increased inventory shrinkage. If we are not successful in managing our inventory balances and shrinkage, our results of and cash flows from operations may be negatively affected.

We sell 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 cost of participating in these programs was immaterial to our results in all periods. Should we choose not to participate, or if these programs were no longer available, it could reduce our cash flows from operations in the period in which the arrangement ends.

We could be adversely affected by violations of the U.S. Foreign Corrupt Practices Act or similar U.S. or foreign anti-bribery and anti-corruption laws and regulations in the jurisdictions in which we operate.

The global nature of our business, the significance of our international revenue and our focus on emerging markets create various domestic and local regulatory challenges and subject us to risks associated with our international operations. The U.S. Foreign Corrupt Practices Act, or FCPA, and similar anti-bribery and anti-corruption laws and regulations in other countries generally prohibit companies and their intermediaries from making improper payments to foreign officials for the purpose of obtaining or keeping business or for other commercial advantage. In addition, U.S. public companies are required to maintain records that accurately and fairly represent their transactions and have an adequate system of internal accounting controls. Under the FCPA, U.S. companies may be held liable for the corrupt actions taken by directors, officers, employees, agents, or other strategic or local partners or representatives. As such, if we or our intermediaries fail to comply with the requirements of the FCPA or similar legislation, governmental authorities in the United States and elsewhere could seek to impose substantial civil and/or criminal fines and penalties which could have a material adverse effect on our business, reputation, operating results and financial condition.

We operate or may pursue opportunities in some jurisdictions, such as China, India, Brazil and Africa, which pose potentially elevated risks of fraud or corruption or increased risk of internal control issues. In certain jurisdictions, compliance with anti-bribery laws may conflict with local customs and practices. From time to time, we have conducted and will conduct internal investigations of the relevant facts and circumstances, control testing and compliance reviews, and take remedial actions, when appropriate, to help ensure that we are in compliance with applicable corruption and similar laws and regulations. Detecting, investigating and resolving actual or alleged violations of the FCPA or similar laws is expensive and could consume significant time and attention of our senior management. We could be subject to inquiries or investigations by government and other regulatory bodies. Any allegations of non-compliance with the FCPA or similar laws could have a disruptive effect on our operations in such jurisdiction over the near term, including interruptions of business or loss of third-party relationships, which may negatively impact our results of operations or financial condition. Any determination that our operations or activities are not in compliance with the FCPA or similar laws could expose us to severe criminal or civil penalties or other sanctions, significant fines, termination of necessary licenses and permits, and penalties or other sanctions that may harm our business and reputation.

Our ability to compete effectively depends on our ability to protect our intellectual property rights.

We rely on patents and trade secrets to protect our intellectual property rights. We often rely on trade secrets to protect our proprietary fragrance and flavor formulations, as this does not require us to publicly file information regarding our intellectual property. From time to time, a third party may claim that we have infringed upon or misappropriated their intellectual property rights, or a third party may infringe upon or misappropriate our intellectual property rights. We could incur significant costs in connection with legal actions to assert our intellectual property rights against third parties or to defend ourselves from third party assertions of invalidity, infringement or misappropriation or other claims. Any settlement or adverse judgment resulting from such litigation could require us to obtain a license to continue to use the intellectual property rights that are the subject of the claim, or otherwise restrict or prohibit our use of such intellectual property rights. Any required licensing fees may not be available to us on acceptable terms, if at all. For those intellectual property rights that are protected as trade secrets, this litigation could result in even higher costs, and potentially the loss of certain rights, since we would not have a perfected intellectual property right that precludes others from making, using or selling our products or processes. The ongoing trend among our customers towards more transparent labeling could further diminish our ability to effectively protect our proprietary flavor formulations.

For intellectual property rights that we seek to protect through patents, we cannot be certain that these rights, if obtained, will not later be opposed, invalidated, or circumvented. In addition, even if such rights are obtained in the United States, the laws of some of the other countries in which our products are or may be sold do not protect intellectual property rights to the same extent as the laws of the United States. If other parties were to infringe on our intellectual property rights, or if a third party successfully asserted that we had infringed on their intellectual property rights, it could materially and adversely affect our future results of operations by (i) reducing the price that we could obtain in the marketplace for products which are based on such rights, (ii) increasing the royalty or other fees that we may be required to pay in connection with such rights or (iii) limiting the volume, if any, of such products that we can sell.

Our results of operations may be negatively impacted by the outcome of uncertainties related to litigation.

From time to time we are involved in a number of legal claims and litigation, including claims related to intellectual property, product liability, environmental matters and indirect taxes. We cannot predict the ultimate outcome of such litigation. In addition, we cannot provide assurance that future events will not result in an increase in the number of claims or require an increase in the amount accrued for any such claims, or require accrual for one or more claims that has not been previously accrued. In addition, if we were found liable, we could be subject to certain indemnification claims. There can be no assurance that our insurance will be adequate to protect us from all material expenses related to pending and future claims or that such levels of insurance will be available in the future at economical prices.

The level of returns on pension and postretirement plan assets and the actuarial assumptions used for valuation purposes could affect our earnings and cash flows in future periods. Changes in government regulations could also affect our pension and postretirement plan expenses and funding requirements.

The funding obligations for our pension plans are impacted by the performance of the financial markets, particularly the equity markets, and interest rates. Funding obligations are determined under government regulations and are measured each year based on the value of assets and liabilities on a specific date. If the financial markets do not provide the long-term returns that are expected under the governmental funding calculations, we could be required to make larger contributions. The equity markets can be very volatile, and therefore our estimate of future contribution requirements can change dramatically in relatively short periods of time. Similarly, changes in interest rates and legislation enacted by governmental authorities can impact the timing and amounts of contribution requirements. An adverse change in the funded status of the plans could significantly increase our required contributions in the future and adversely impact our liquidity.

Assumptions used in determining projected benefit obligations and the fair value of plan assets for our pension and other postretirement benefit plans are determined by us in consultation with outside consultants and advisors. In the event that we determine that changes are warranted in the assumptions used, such as the discount rate, expected long-term rate of return on assets, or expected health care costs, our future pension and postretirement benefit expenses could increase or decrease. Due to changing market conditions or changes in the participant population, the assumptions that we use may differ from actual results, which could have a significant impact on our pension and postretirement liabilities and related costs and funding requirements.

Any future impairment of our tangible or intangible long-lived assets may adversely impact our profitability.

A significant portion of our assets consists of long-lived assets, including tangible assets such as our manufacturing facilities, and intangible assets and goodwill. As of December 31, 2016, we had recorded $1.4 billion of intangible assets and goodwill including goodwill and intangible assets related to our acquisitions. Long-lived assets are subject to an impairment analysis whenever events or changes in circumstances indicate the carrying amount of the asset may not be recoverable. Additionally, goodwill is subject to an impairment test at least annually. Indicators such as underperformance relative to historical or projected future operating results, changes in the Company's strategy for its overall business or use of acquired assets, unexpected negative industry or economic trends, decreased market capitalization relative to net book values, unanticipated competitive activities, change in consumer demand, loss of key personnel and acts by governments and courts may signal that an asset has become impaired. To the extent any of our acquisitions do not perform as anticipated, whether due to internal or external factors, the value of such assets may be negatively affected and we may be required to record impairment charges. Our results of operations and financial position in future periods could be negatively impacted should future impairments of our long-lived assets, including intangible assets or goodwill occur.

Changes in our tax rates, the adoption of new United States or international tax legislation, or changes in existing tax laws could expose us to additional tax liabilities that may affect our future results.

We are subject to taxes in the United States and numerous foreign jurisdictions. Our future effective tax rates could be affected by changes in the mix of earnings in countries with differing statutory tax rates, changes in the valuation of deferred tax assets and liabilities, changes in liabilities for uncertain tax positions, cost of repatriations or changes in tax laws or their interpretation. Any of these changes could have a material adverse effect on our profitability.

We have and will continue to implement transfer pricing policies among our various operations located in different countries. These transfer pricing policies are a significant component of the management and compliance of our operations across international boundaries and overall financial results. Many countries routinely examine transfer pricing policies of taxpayers subject to their jurisdiction, challenge transfer pricing policies aggressively where there is potential non-compliance and impose significant interest charges and penalties where non-compliance is determined. There can be no assurance that a governmental authority will not challenge these policies more aggressively in the future or, if challenged, that we will prevail. We could suffer significant costs related to one or more challenges to our transfer pricing policies.

We are subject to the continual examination of our income tax returns by the Internal Revenue Service and foreign tax authorities in those countries in which we operate, and we may be subject to assessments or audits in the future in any of the countries in which we operate. The final determination of tax audits and any related litigation could be materially different from our historical income tax provisions and accruals, and while we do not believe the results that follow would have a material adverse effect on our financial condition, such results could have a material effect on our income tax provision, net income or cash flows in the period or periods in which that determination is made.

In addition, a number of international legislative and regulatory bodies have proposed legislation and begun investigations of the tax practices of multi-national companies and, in the European Union ("EU"), the tax policies of certain EU member states. One of these efforts has been led by the OECD, an international association of 34 countries including the United States, which has finalized recommendations to revise corporate tax, transfer pricing, and tax treaty provisions in member countries. Since 2013, the European Commission ("EC") has been investigating tax rulings granted by tax authorities in a number of EU member states with respect to specific multi-national corporations to determine whether such rulings comply with EU rules on state aid, as well as more recent investigations of the tax regimes of certain EU member states. Under EU law, selective tax advantages for particular taxpayers that are not sufficiently grounded in economic realities may constitute impermissible state aid. If the EC determines that a tax ruling or tax regime violates the state aid restrictions, the tax authorities of the affected EU member state may be required to collect back taxes for the period of time covered by the ruling. In late 2015 and early 2016, the EC declared that tax rulings, related to other companies, by tax authorities in Luxembourg, the Netherlands and Belgium did not comply with the EU state aid restrictions. If the EC were to successfully challenge tax rulings applicable to us in any of the EU member states in which we are subject to taxation, we could be exposed to increased tax liabilities.

Our operations may be affected by greenhouse emissions and climate change and related regulations.

The availability of raw materials and energy supplies fluctuate in markets throughout the world. Climate change may also affect the availability and price of key raw materials, including natural products used in the manufacture of our products. In order to mitigate the risk of price increases and shortages, our procurement team has developed various sourcing strategies, including multiple suppliers, inventory management systems, various geographic suppliers and long-term agreements to mitigate risk.

In addition to market forces, there are various regulatory efforts relating to climate change that may increase the cost of raw materials, particularly energy used to operate our facilities, that could materially impact our financial condition, results of operations and cash flows.

The potential government regulation of certain of our product development initiatives is uncertain, and we may be subject to adverse consequences if we fail to comply with applicable regulations.

As part of our ingredients research program, we seek to collaborate with research institutions and companies throughout the world, including biotechnology companies. However, it is unclear whether any of our product developments will be classified as genetically modified food products subject to regulation as a biotechnology product. The manufacture of biotechnology products is subject to applicable Current Good Manufacturing Practice (CGMP) regulations as prescribed by the Food and Drug Administration and the applicable standards prescribed by European Commission and the competent authorities of European Union Member States and to other rules and regulations prescribed by foreign regulatory authorities. Compliance with these regulations can be expensive and time consuming. Such regulation could also subject us to requirements for labeling and traceability, which may cause our customers to avoid our affected products and seek our competitors' products. This may result in our inability to realize any benefit from our investment and have an adverse effect on our operating results.

The United Kingdom's impending departure from the European Union could have an adverse effect on us.

In June 2016, the United Kingdom held a referendum in which a majority of voters voted to exit the European Union, commonly referred to as "Brexit." As a result of the referendum, it is expected that the British government will commence negotiations to determine the terms of the U.K.'s withdrawal from the European Union. A withdrawal could, among other outcomes, disrupt the free movement of goods, services and people between the U.K. and the European Union, undermine bilateral cooperation in key geographic areas and significantly disrupt trade between the U.K. and the European Union or other nations as the U.K. pursues independent trade relations. In addition, Brexit could lead to legal uncertainty and potentially divergent national laws and regulations as the U.K. determines which European Union laws to replace or replicate. The effects of Brexit will depend on any agreements the U.K. makes to retain access to European Union or other markets either during a transitional period or more permanently. Given the lack of comparable precedent, it is unclear what financial, trade and legal implications the withdrawal of the U.K. from the European Union would have and how such withdrawal would affect us. Adverse consequences concerning Brexit or the European Union could include deterioration in global economic conditions, instability in global financial markets, political uncertainty, volatility in currency exchange rates, or adverse changes in the cross-border agreements currently in place, any of which could have an adverse impact on our financial results in the future.

ITEM 1B. UNRESOLVED STAFF COMMENTS.

None.

ITEM 2. PROPERTIES.

Our principal properties are as follows:

Location	Operation
United States	
Carrollton, TX[(1)]	Production of flavor compounds; flavor laboratories.
Hazlet, NJ[(1)]	Production of fragrance compounds; fragrance laboratories.
Jacksonville, FL	Production of fragrance ingredients.
New York, NY[(1)]	Fragrance laboratories; corporate headquarters.
South Brunswick, NJ[(1)]	Production of flavor compounds and ingredients; flavor laboratories.
Union Beach, NJ	Research and development center.
France	
Neuilly[(1)]	Fragrance laboratories.
Grasse	Production of fragrance ingredients.
Great Britain	
Haverhill	Production of flavor compounds and ingredients, and fragrance ingredients; flavor laboratories.
Netherlands	
Hilversum	Flavor and fragrance laboratories.
Tilburg	Production of flavor compounds and ingredients, and fragrance compounds.
Spain	
Benicarló	Production of fragrance ingredients.
Argentina	
Garin	Production of flavor and fragrance compounds; flavor and fragrance laboratories.
Brazil	
Rio de Janeiro	Production of fragrance compounds.
São Paulo	Flavor and fragrance laboratories.
Taubate	Production of flavor compounds and ingredients.
Mexico	
Tlalnepantla	Production of flavor and fragrance compounds; flavor and fragrance laboratories.
India	
Mumbai[(2)]	Flavor and fragrance laboratories.
Chennai[(2)]	Production of flavor compounds and ingredients, and fragrance compounds; flavor laboratories.
Australia	
Dandenong	Production of flavor compounds and flavor ingredients.
China	
Guangzhou[(3)]	Production of flavor compounds.
Guangzhou[(3)]	Production of fragrance compounds.
Shanghai[(4)]	Flavor and fragrance laboratories.
Xin'anjiang[(5)]	Production of fragrance ingredients.
Zhejiang[(3)]	Production of fragrance ingredients.

Location	Operation
Indonesia	
Jakarta	Production of flavor compounds and ingredients; flavor and fragrance laboratories.
Japan	
Gotemba	Production of flavor compounds.
Tokyo	Flavor and fragrance laboratories.
Singapore	
Jurong(4)	Production of flavor and fragrance compounds.
Science Park(1)	Flavor and fragrance laboratories.
Turkey	
Gebze	Production of flavor compounds.
Israel	
Kibbutz Givat-Oz(3)	Production of fragrance ingredients.
Germany	
Hamburg	Production of fragrance compounds.

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(1) Leased.
(2) We have a 93.4% interest in the subsidiary company that owns this facility.
(3) Land is leased and building and machinery and equipment are owned.
(4) Building is leased and machinery and equipment are owned.
(5) We have a 90% interest in the subsidiary company that leases the land and owns the buildings and machinery.

Our principal executive offices and New York laboratory facilities are located at 521 West 57th Street, New York City.

ITEM 3. LEGAL PROCEEDINGS.

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

Tax Claims

The Spanish tax authorities alleged claims for a capital tax and the Appellate Court rejected one of the two bases upon which we based our capital tax position. On January 22, 2014, we filed an appeal and in order to avoid future interest costs in the event our appeal was unsuccessful, we paid Euro 9.8 million ($11.2 million, representing the principal amount) during the first quarter of 2014. On February 24, 2016, we received a favorable ruling on our appeal from the Spanish Supreme Court which overruled a lower court ruling. As a result of this decision, we reversed the previously recorded provision of Euro 9.8 million ($10.5 million) for the year ended December 31, 2015. During 2016, we recorded additional income of $2.3 million related to the finalization of amounts received from the authorities. This amount has been principally reflected as a reduction of administrative expense.

We do not currently believe that any of our pending tax assessments, even if ultimately resolved against us, would have a material impact on our financial condition.

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

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. ZoomEssence initially sought a temporary restraining order and preliminary injunction, but the Court denied these applications in an order entered on September 27, 2013, finding that ZoomEssence had not demonstrated a likelihood of success on the merits of its claims. On November 3, 2014, ZoomEssence amended its complaint against the Company to include allegations of breach of the duty of good faith and fair dealing, fraud in the inducement, and misappropriation of confidential and proprietary information. On November 13, 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 third quarter of 2016, the Court stayed the case and directed the parties to mediate. During the fourth quarter of 2016, the parties engaged in mediation and various settlement discussions which have not resulted in a resolution of the litigation to date. If the case is not settled, we expect that a trial on the merits of the case will occur during 2017. Based on expert assessment of potential exposure and the status of the settlement discussions, the Company recorded an additional reserve of $50 million during 2016.

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 losses in excess of any accrued liabilities is $0 to approximately $28 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 4. MINE SAFETY DISCLOSURES.

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES.

Market Information.

Our common stock is traded principally on the New York Stock Exchange. The high and low stock prices for each quarter during the last two years were:

	2016		2015	
Quarter	High	Low	High	Low
First	$ 122.38	$ 97.24	$ 123.08	$ 97.59
Second	131.30	114.65	120.61	108.82
Third	143.43	124.77	118.87	100.02
Fourth	143.64	116.64	122.64	106.91

Approximate Number of Equity Security Holders.

Title of Class	Number of shareholders of record as of February 15, 2017
Common stock, par value 12 1/2¢ per share	1,878

Dividends.

Cash dividends declared per share for each quarter during the two most recent fiscal years were as follows:

Quarter	2016	2015
First	$ 0.56	$ 0.47
Second	0.56	0.47
Third	0.64	0.56
Fourth	0.64	0.56

Our current intention is to return 50%-60% of adjusted Net Income through a combination of dividends and share repurchases; however, the payment of dividends and share repurchases is determined by our Board of Directors ("Board") at its discretion based on various factors, and no assurance can be provided as to future dividends.

Performance Graph.

Total Return To Shareholders[(1)]
(Includes reinvestment of dividends)

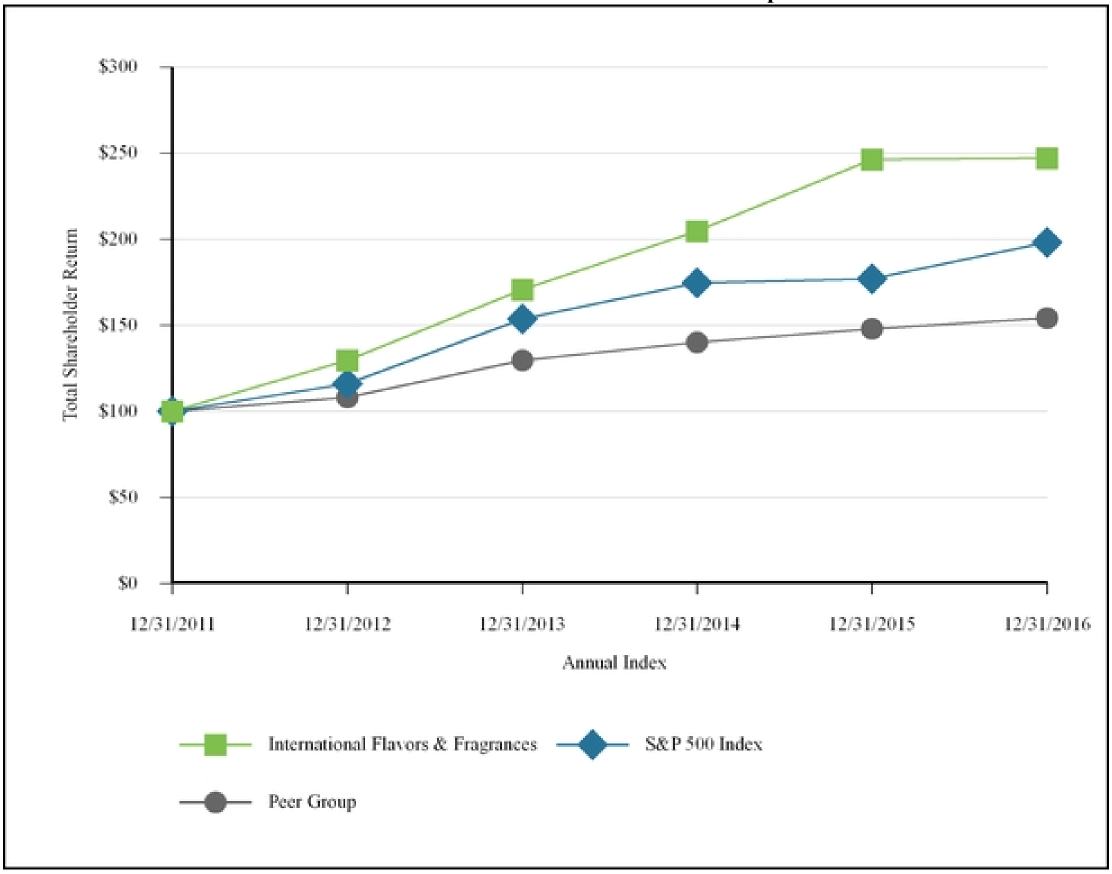
	ANNUAL RETURN PERCENTAGE Years Ending				
Company Name / Index	2012	2013	2014	2015	2016
International Flavors & Fragrances	29.72	31.59	19.95	20.22	0.40
S&P 500 Index	16.00	32.39	13.69	1.38	11.96
Peer Group	8.21	19.83	7.98	5.54	4.34

	INDEXED RETURNS Years Ending					
Company Name / Index	Base Period 2011	2012	2013	2014	2015	2016
International Flavors & Fragrances	$ 100	$ 129.72	$ 170.70	$ 204.75	$ 246.15	$ 247.13
S&P 500 Index	100	116.00	153.57	174.60	177.01	198.18
Peer Group	100	108.21	129.66	140.01	147.78	154.19

Peer Group Companies(2)

Avon Products Inc.	Hormel Foods Corp.
Campbell Soup Co.	Kellogg Co.
Church & Dwight Co. Inc.	Estee Lauder Companies, Inc.
Clorox Company	McCormick & Company, Inc.
Coca-Cola Company	McDonald's Corp.
Colgate-Palmolive Co.	Nestle SA
ConAgra Foods, Inc.	Pepsico Inc.
Edgewell Personal Care (included since 7/1/15)	Procter & Gamble Co.
General Mills Inc.	Revlon Inc.
Heinz (HJ) Co. (included through 6/7/13)	Sensient Technologies Corp.
Hershey Company	Unilever NV
Hillshire Brands Co. (included through 8/28/14)	YUM! Brands Inc.

Total Shareholder Return Performance Graph



(1) The Cumulative Shareholder Return assumes that the value of an investment in our Common Stock and each index was $100 on December 31, 2011, and that all dividends were reinvested.

(2) Due to the international scope and breadth of our business, we believe that a Peer Group comprising international public companies, which are representative of the customer group to which we sell our products, is the most appropriate group against which to compare shareholder returns. In July 2012, Sara Lee Corp. spun off certain of its businesses and changed its name to Hillshire Brands Co. Heinz (HJ) Co. was acquired by Hawk Acquisition Holding Corp on June 7, 2013 and has only been included through that date. Hillshire Brands Co. was acquired by Tyson Foods on August 28, 2014 and has

only been included through that date. Edgewell Personal Care has been included starting from July 1, 2015 when it spun off from Energizer Holdings.

Issuer Purchases of Equity Securities.

The table below reflects shares of common stock we repurchased during the fourth quarter of 2016.

Period	Total Number of Shares Repurchased (1)		Average 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
October 1 - 31, 2016	56,167	$	133.62	56,167	$	135,088,381
November 1 - 30, 2016	79,335		123.41	79,335		125,297,344
December 1 - 31, 2016	132,985		120.31	132,985		109,297,809
Total	**268,487**	**$**	**124.01**	**268,487**	**$**	**109,297,809**

(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. SELECTED FINANCIAL DATA.

INTERNATIONAL FLAVORS & FRAGRANCES INC.
QUARTERLY FINANCIAL DATA (UNAUDITED)

The following selected consolidated financial data is derived from our Consolidated Financial Statements. This data should be read in conjunction with the Consolidated Financial Statements and Notes thereto, and with Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations.

(DOLLARS IN THOUSANDS EXCEPT PER SHARE DATA)							Net Income Per Share			
	Net Sales		Gross Profit[a]		Net Income[b]		Basic		Diluted[c][d]	
Quarter	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015
First	$ 783,312	$ 774,907	$ 360,209	$ 346,277	$ 118,603	$ 128,258	$ 1.48	$ 1.58	$ 1.47	$ 1.57
Second	793,478	767,541	365,641	345,040	116,733	105,374	1.46	1.30	1.46	1.29
Third	777,001	765,092	346,268	347,126	89,777	106,447	1.13	1.32	1.12	1.31
Fourth[d]	762,559	715,649	326,952	313,156	79,918	79,168	1.00	0.99	1.00	0.98
	$ 3,116,350	$ 3,023,189	$ 1,399,070	$ 1,351,599	$ 405,031	$ 419,247	$ 5.07	$ 5.19	$ 5.05	$ 5.16

** See the following chart for (a)-(d) footnote explanations.*

Included in the above quarterly results are the following:

(DOLLARS IN THOUSANDS EXCEPT PER SHARE DATA)	Footnotes Gross Profit(a)	 Net Income(b)	 Diluted EPS (c)	Description
Q1 2016				
Operational improvement initiatives	$ 268	$ 201	$ —	Accelerated depreciation in Hangzhou, China.
Restructuring and other charges	101	82	—	Accelerated depreciation related to restructuring initiatives.
Acquisition related costs and adjustments	889	669	0.01	Expense related to the fair value step up of inventory and additional transaction costs related to the acquisition of Lucas Meyer.
Legal charges/credits	—	(1,044)	(0.01)	Amounts expected to be received related to the Spanish capital tax settlement.
Q2 2016				
Operational improvement initiatives	831	623	0.01	Accelerated depreciation in Hangzhou, China and severance costs in Guangzhou, China.
Restructuring and other charges	182	147	—	Accelerated depreciation and severance costs related to restructuring initiatives.
Acquisition related costs and adjustments	—	315	—	Additional transaction costs related to the acquisition of Lucas Meyer.
Q3 2016				
Operational improvement initiatives	791	602	0.01	Accelerated depreciation and dismantling costs in Hangzhou, China and severance costs in Guangzhou, China.
Restructuring and other charges	190	154	—	Accelerated depreciation costs related to restructuring initiatives.
Acquisition related costs and adjustments	—	510	0.01	Transaction costs related to the acquisition of David Michael.
Legal charges/credits	—	16,250	0.20	Legal charge related to litigation accrual.
Q4 2016				
Operational improvement initiatives	502	379	—	Accelerated depreciation, dismantling and idle labor costs in Hangzhou, China and the partial reversal of severance accruals related to prior year operational initiatives in Europe.
Restructuring and other charges	185	(158)	—	Accelerated depreciation related to restructuring initiatives, severance costs related to the termination of a former executive officer and the partial reversal of restructuring accruals recorded in the prior year.
Acquisition related costs and adjustments	6,759	6,586	0.08	Transaction costs related to the acquisition of David Michael and Fragrance Resources as well as expense related to the fair value step up of inventory on the David Michael acquisition.
Gain on Asset Sale	—	(5,160)	(0.06)	Gain from sale of property in Brazil.
Legal charges/credits	—	16,250	0.20	Legal charge related to litigation accrual.
Q1 2015				
Operational improvement initiatives	281	211	—	Accelerated depreciation in Hangzhou, China.
Restructuring and other charges	—	121	—	Restructuring costs associated with the Fragrance Ingredients Rationalization.
Acquisition related costs and adjustments	—	325	—	Transaction costs related to the acquisition of Ottens Flavors.
Tax settlements	—	(10,478)	(0.13)	Settlements due to favorable tax rulings in jurisdictions for which reserves were previously recorded for ongoing tax disputes.
Q2 2015				
Operational improvement initiatives	281	211	—	Accelerated depreciation in Hangzhou, China.
Restructuring and other charges	—	(233)	—	Restructuring costs associated with the Fragrance Ingredients Rationalization.
Acquisition related costs and adjustments	844	5,691	0.07	Transaction costs related to the acquisition of Ottens Flavors and Lucas Meyer as well as expense related to the fair value step up of inventory on the Ottens Flavors acquisition.
Q3 2015				
Operational improvement initiatives	279	209	—	Accelerated depreciation in Hangzhou, China.
Acquisition related costs and adjustments	2,465	6,001	0.07	Transaction costs related to the acquisition of Ottens Flavors and Lucas Meyer as well as expense related to the fair value step up of inventory on the Lucas Meyer acquisition.
Q4 2015				
Operational improvement initiatives	274	205	—	Accelerated depreciation in Hangzhou, China.
Restructuring and other charges	—	5,402	0.07	Severance costs associated with various restructuring activities.
Acquisition related costs and adjustments	3,515	99	—	Transaction costs related to the acquisition of Ottens Flavors and Lucas Meyer as well as expense related to the fair value step up of inventory on the Lucas Meyer acquisition.
Accelerated contingent consideration	—	7,192	0.09	Represents the acceleration of the contingent consideration payment related to the Aromor acquisition.
Legal charges/credits	—	(7,582)	(0.09)	To reverse the previously recorded provision related to the Spanish capital tax case as a result of the favorable ruling received on February 24, 2016.

(d) The sum of the 2015 Net Income per diluted share by quarter does not equal the earnings per share for the full year due to rounding.

INTERNATIONAL FLAVORS & FRAGRANCES INC.
FIVE-YEAR SUMMARY
(DOLLARS IN THOUSANDS EXCEPT PER SHARE AMOUNTS)

	2016	2015	2014	2013	2012
Consolidated Statement of Income Data					
Net sales	$ 3,116,350	$ 3,023,189	$ 3,088,533	$ 2,952,896	$ 2,821,446
Cost of goods sold[(a)]	1,717,280	1,671,590	1,726,383	1,668,691	1,645,912
Gross profit	1,399,070	1,351,599	1,362,150	1,284,205	1,175,534
Research and development expenses	254,263	246,101	253,640	259,838	233,713
Selling and administrative expenses[(b)]	566,224	494,517	507,563	499,805	447,463
Restructuring and other charges, net[(c)]	(1,700)	7,594	1,298	2,151	1,668
Amortization of acquisition-related intangibles	23,763	15,040	7,328	6,072	6,072
Gain on sales of fixed assets[(d)]	(10,836)	—	—	—	—
Operating profit	567,356	588,347	592,321	516,339	486,618
Interest expense	52,989	46,062	46,067	46,767	41,753
Other (income) expense, net[(e)]	(9,350)	3,184	(2,807)	(15,638)	1,450
Income before taxes	523,717	539,101	549,061	485,210	443,415
Taxes on income[(f)]	118,686	119,854	134,518	131,666	189,281
Net income	$ 405,031	$ 419,247	$ 414,543	$ 353,544	$ 254,134
Percentage of net sales	13.0	13.9	13.4	12.0	9.0
Percentage of average shareholders' equity	25.1	26.9	27.7	26.0	21.5
Net income per share — basic	$ 5.07	$ 5.19	$ 5.09	$ 4.32	$ 3.11
Net income per share — diluted	$ 5.05	$ 5.16	$ 5.06	$ 4.29	$ 3.09
Average number of diluted shares (thousands)	79,981	80,891	81,494	81,930	81,833
Consolidated Balance Sheet Data					
Cash and cash equivalents	$ 323,992	$ 181,988	$ 478,573	$ 405,505	$ 324,422
Receivables, net	550,658	537,896	493,768	524,493	499,443
Inventories	592,017	572,047	568,729	533,806	540,658
Property, plant and equipment, net	775,716	732,794	720,268	687,215	654,641
Goodwill and intangible assets, net	1,365,906	1,247,393	752,041	696,197	702,270
Total assets	4,016,984	3,702,010	3,494,621	3,331,731	3,246,192
Bank borrowings, overdrafts and current portion of long-term debt	258,516	132,349	8,090	149	150,071
Long-term debt	1,066,855	935,373	934,232	932,665	881,104
Total Shareholders' equity[(g)]	1,631,134	1,594,989	1,522,689	1,467,051	1,252,555
Other Data					
Current ratio[(h)]	1.8	2.0	3.3	2.9	2.5
Additions to property, plant and equipment	$ 126,412	$ 101,030	$ 143,182	$ 134,157	$ 126,140
Depreciation and amortization expense	102,469	89,597	89,354	83,227	76,667
Cash dividends declared per share	$ 2.40	$ 2.06	$ 1.72	$ 1.46	$ 1.30
Number of shareholders of record at year-end	1,892	2,013	2,105	2,255	2,430
Number of employees at year-end	6,932	6,732	6,211	6,000	5,715

(a) The 2016 amount includes $7,648 ($5,139 after tax) of costs related to the fair value step-up for the David Michael and Lucas Meyer acquisitions, $2,391 ($1,803 after tax) of operational improvement initiative costs consisting of accelerated depreciation and $658 ($533 after tax) of accelerated depreciation related to restructuring activities. The 2015 amount includes $6,825 ($4,516 after tax) of costs related to the fair value step-up of inventory for the Ottens Flavors and Lucas Meyer acquisitions and $1,115 ($836 after tax) of operational improvement initiative costs in Europe and Asia. The 2014 amount includes $7,641 ($5,221 after tax) of accelerated depreciation associated with the Fragrance Ingredients rationalization and operational improvement initiative costs in Europe and Asia. The 2013 amount includes $8,770 ($6,084 after tax) of accelerated depreciation associated with the Fragrance Ingredients rationalization and several locations in Asia.

(b) The 2016 amount includes $48,518 ($31,429 after tax) of legal charges/credits principally related to litigation accrual, $4,547 ($2,940 after tax) of acquisition-related costs related to the acquisitions of Lucas Meyer, David Michael and Fragrance Resources and $1,364 ($822 after tax) of severance costs related to the termination of a former executive officer. The 2015 amount includes $10,530 ($7,582 after tax) of reversal of the previously recorded provision for the Spanish capital tax case, $7,192 of expense for the acceleration of the contingent consideration payments related to the Aromor acquisition and $11,517 ($7,601 after tax) of acquisition-related costs for the Ottens and Lucas Meyer acquisitions. The 2013 amount includes $13,011 ($9,108 after tax) of expense associated with the Spanish capital tax case.

(c) Restructuring and other charges after tax of $5,292 in 2015, $844 in 2014, $1,398 in 2013 and $1,047 in 2012, were the result of various restructuring and reorganization programs of the Company.

(d) The 2016 amount includes $7,818 ($5,160 after tax) of gains related to the sale of property in Brazil.

(e) The 2014 amount includes $723 ($470 after tax) and the 2013 amount includes $14,155 ($8,522 after tax) of net gains related to the sale of non-operating assets.

(f) The 2015 amount includes $10,478 of settlements due to favorable tax rulings in jurisdictions for which reserves were previously recorded for ongoing tax disputes. The 2012 amount includes after tax charges of $72,362 related to the overall Spanish tax settlement.

(g) Includes noncontrolling interest for all periods presented.

(h) Current ratio is equal to current assets divided by current liabilities.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

(UNLESS INDICATED OTHERWISE, DOLLARS IN MILLIONS EXCEPT PER SHARE AMOUNTS)

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. Our flavors and fragrance compounds combine a number of ingredients that are blended, mixed or reacted together to produce proprietary formulas created by our flavorists and perfumers.

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 of 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 defined into 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. In addition, Fragrance Ingredients, that are used internally and sold to third parties, including customers and competitors, for use in preparation of compounds, and cosmetic active ingredients, which consist of active and functional ingredients, are included in the Fragrances business unit.

The flavors and fragrances market is part of a larger market which supplies a wide variety of ingredients and compounds that are used in consumer products. The broader market includes large multinational companies or smaller regional and local participants which supply products such as seasonings, texturizers, spices, enzymes, certain food-related commodities, fortified products and cosmetic active 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 January 17, 2017, we completed the acquisition of Fragrance Resources for approximately Euro 142 million (approximately $150.5 million). The acquisition had no impact on our consolidated financial statements for 2016. The acquisition is expected to strengthen our fragrances market position in North America and Germany.

2016 Overview

Our 25 largest customers accounted for 52% of total sales in 2016; this percentage has remained fairly constant for several years. Sales to our largest customer across all end-use categories accounted for 12% of our sales for each of the last three fiscal years. A key factor for commercial success is inclusion on our strategic customers' core supplier lists, which provides opportunities to win new business. We are on the core supplier lists of a large majority of our global and strategic customers within Fragrances and Flavors.

Sales in 2016 increased 3% on a reported basis and 5% on a currency neutral basis (which excludes the effects of changes in currency), with the effects of acquisitions contributing approximately 2% to both reported and currency neutral growth rates. Flavors achieved reported sales growth of 4% and currency neutral sales growth of 6%, with the effect of acquisitions contributing approximately 3% to both reported and currency neutral growth rates. Fragrances achieved reported sales growth of 3% and currency neutral growth of 4% in 2016, with the effect of acquisitions contributing approximately 2% to both reported and currency neutral growth rates. Sales growth excluding acquisitions was driven by new win performance (net of losses) in both Flavors and Fragrance Compounds. Additionally, Fragrance Ingredients sales were up 9% on a reported basis and 10% on a currency neutral basis, which were driven entirely by the inclusion of acquisitions. Overall, our 2016 results continued to be driven by our strong emerging market presence that represented 51% of total sales and experienced 4% currency neutral growth in 2016. From a geographic perspective, North America (NOAM), Europe, Africa and Middle East (EAME) and Greater Asia (GA) all delivered sales growth on a consolidated basis in 2016; led by NOAM. Latin America (LA) sales declined in 2016.

During the fourth quarter of 2016, we completed the acquisition of 100% of the outstanding shares of David Michael & Company, Inc. ("David Michael") for approximately $242.0 million. The acquisition did not have a material impact on our Consolidated Statement of Income and Comprehensive Income for 2016. The acquisition strengthened our flavors market position in the targeted North American market.

The year 2014 included an extra week of activity, due to the timing of our fiscal year-end (as discussed in Note 1 of the Consolidated Financial Statements). The impact of this week was not material to our results of operations for the year ended December 31, 2014.

2016 Sales by Business Unit

Sales by Destination (DOLLARS IN MILLIONS)	2016	Percent of sales	2015	Percent of sales	2014	Percent of sales
Europe, Africa and Middle East (EAME)	$ 965	31%	$ 946	31%	$ 1,042	34%
Greater Asia (GA)	880	28%	839	28%	856	28%
North America (NOAM)	769	25%	718	24%	690	22%
Latin America (LA)	502	16%	520	17%	501	16%
Total net sales, as reported	$ 3,116		$ 3,023		$ 3,089	

	Year Ended December 31,		
Sales by Category	2016	2015	2014
Flavor Compounds	48%	48%	47%
Consumer Fragrances	32%	32%	32%
Fine Fragrances	10%	10%	11%
Fragrance Ingredients	10%	10%	10%
Total Net Sales	100%	100%	100%

FINANCIAL PERFORMANCE OVERVIEW

Reported sales for 2016 increased 3% year-over-year (including approximately 2% growth from acquisitions). We continue to benefit from our diverse portfolio of end-use product categories and geographies and had sales growth in three of our four regions and in Consumer Fragrances, Fragrance Ingredients and Flavor Compounds. Both Flavors and Fragrances benefited from new win performance (net of losses) and the effect of acquisitions. Exchange rate variations represented a 2% decrease in year-over-year sales. The effect of exchange rates can vary by business and region depending upon the mix of sales by country as well as the relative percentage of local sales priced in U.S. dollars versus local currencies. Currency neutral sales growth, including acquisitions, was 5% in 2016. We saw currency neutral sales growth during each quarter of 2016. We believe that market conditions and the macro-economic environment will continue to be challenging in many markets in 2017. This lower growth environment combined with a stronger U.S. dollar and the reset of the incentive compensation program is expected to pressure our currency neutral operating profit growth in 2017.

On a long-term basis, we expect that sales growth for the industry will generally be in line with the underlying assumptions that support our long-term strategic goals, albeit with some risk in the near term given the continuing global economic uncertainty. We believe changing social habits resulting from increased disposable income, improved focus on personal health and wellness awareness should help drive growth of our consumer product customers' businesses.

Gross margin increased 20 basis points (bps) year-over-year. Included in 2016 was $7.6 million of acquisition-related inventory "step-up" costs, $2.4 million of costs associated with operational improvement initiatives and $0.7 million of costs related to accelerated depreciation included in Cost of goods sold, compared to $6.8 million of acquisition-related inventory "step-up" costs and $1.1 million of costs related to operational improvement initiatives included in 2015. Excluding these items, adjusted gross margin increased 20 bps compared to the prior year period. The increase was principally driven by productivity initiatives. We ended 2016 in a relatively stable, but upward trending raw material cost environment. We believe that we will continue to see higher prices on certain categories (such as vanilla and citrus) and to a lesser extent oil-based derivatives that are expected to continue in 2017. We continue to seek improvements in our margins through operational performance, cost reduction efforts and mix enhancement.

Operating profit decreased $21.0 million to $567.4 million (18.2% of sales) in 2016 compared to $588.3 million (19.5% of sales) in 2015. Included in 2016 were net legal charges/credits of $48.5 million, acquisition-related costs of $12.2 million, gain on sale of fixed assets of $7.8 million, operational improvement initiative costs of $2.4 million and restructuring and other charges, net of $0.3 million. Included in 2015 were acquisition-related costs of $18.3 million, the reversal of the previously recorded provision for the Spanish capital tax case of $10.5 million, Restructuring and other charges, net of $7.6 million, accelerated contingent consideration payments of $7.2 million and operational improvement initiative costs of $1.1 million in 2015. Excluding these charges, adjusted operating profit was $623.0 million (20.0% of sales) for 2016 versus $612.1 million (20.2% of sales) for 2015. Foreign currency changes had an unfavorable impact on operating profit of approximately 2% and 6% in 2016 and 2015, respectively.

Cash flows from operations were $535.4 million or 17.2% of sales in 2016 as compared to cash flows from operations of $433.6 million, or 14.3% of sales, during 2015. The increase in operating cash flows in 2016 as compared to 2015 is principally related to the impact of decreased core working capital requirements (trade receivables, inventories and accounts payable) and lower pension contributions.

Our capital spend was $126.4 million (4.1% of sales, excluding David Michael) during 2016. Given our intent to construct a new flavors facility in China, the continuation of our Indonesia project, spending associated with the integrations of David Michael and Fragrance Resources, infrastructure needs in India, upgrades to creative center and application laboratory facilities and carryover payments from 2016, we expect that capital spending in 2017 will be about 5% of sales (net of potential grants and other reimbursements from government authorities).

Results of Operations

(DOLLARS IN THOUSANDS EXCEPT PER SHARE AMOUNTS)	Year Ended December 31, 2016	2015	2014	Change 2016 vs. 2015	2015 vs. 2014
Net sales	$ 3,116,350	$ 3,023,189	$ 3,088,533	3.1 %	(2.1)%
Cost of goods sold	1,717,280	1,671,590	1,726,383	2.7 %	(3.2)%
Gross profit	1,399,070	1,351,599	1,362,150		
Research and development (R&D) expenses	254,263	246,101	253,640	3.3 %	(3.0)%
Selling and administrative (S&A) expenses	566,224	494,517	507,563	14.5 %	(2.6)%
Restructuring and other charges, net	(1,700)	7,594	1,298	(122.4)%	485.1 %
Amortization of acquisition-related intangibles	23,763	15,040	7,328	58.0 %	105.2 %
Gain on sales of fixed assets	(10,836)	—	—	100 %	— %
Operating profit	567,356	588,347	592,321		
Interest expense	52,989	46,062	46,067	15.0 %	— %
Other (income) expense, net	(9,350)	3,184	(2,807)	(393.7)%	(213.4)%
Income before taxes	523,717	539,101	549,061		
Taxes on income	118,686	119,854	134,518	(1.0)%	(10.9)%
Net income	$ 405,031	$ 419,247	$ 414,543		
Net income per share — diluted	$ 5.05	$ 5.16	$ 5.06	(2.1)%	2.0 %
Gross margin	44.9%	44.7%	44.1%	20.0	60.0
R&D as a percentage of sales	8.2%	8.1%	8.2%	10.0	(10.0)
S&A as a percentage of sales	18.2%	16.4%	16.4%	180.0	—
Operating margin	18.2%	19.5%	19.2%	(130.0)	30.0
Adjusted operating margin (1)	*20.0%*	*20.2%*	*19.5%*	*(20.0)*	*70.0*
Effective tax rate	22.7%	22.2%	24.5%	50.0	(230.0)
Segment net sales					
Flavors	$ 1,496,525	$ 1,442,951	$ 1,457,055	3.7 %	(1.0)%
Fragrances	1,619,825	1,580,238	1,631,478	2.5 %	(3.1)%
Consolidated	$ 3,116,350	$ 3,023,189	$ 3,088,533		

(1) Adjusted operating margin for the twelve months ended December 31, 2016 excludes net legal charges/credits of $48.5 million, acquisition related costs of $12.2 million, gain on sale of assets of $7.8 million, operational improvement initiative costs of $2.4 million and restructuring and other charges, net of $0.3 million.
Adjusted operating margin for the twelve months ended December 31, 2015 excludes acquisition related costs of $18.3 million, the reversal of the previously recorded provision for the Spanish capital tax case of $10.5 million, Restructuring and other charges, net of $7.6 million, accelerated contingent consideration payments of $7.2 million and operational improvement initiative costs of $1.1 million.
Adjusted operating margin for the twelve months ended December 31, 2014 excludes the operational improvement initiative costs of $2.5 million, Restructuring and other charges, net of $1.3 million and $5.1 million of accelerated depreciation included in Cost of goods sold related to the Fragrance Ingredients Rationalization and several locations in Asia.

Cost of goods sold includes the cost of materials and manufacturing expenses; raw materials generally constitute 70% of the total. R&D expenses relate to the development of new and improved molecules and technologies, technical product support and compliance with governmental regulations. S&A expenses include expenses necessary to support our commercial activities and administrative expenses principally associated with staff groups that support our overall operating activities.

2016 IN COMPARISON TO 2015

Sales

Sales for 2016 totaled $3.1 billion, an increase of 3% from the prior year. Excluding currency impacts, sales increased 5%. Sales growth reflected new win performance (net of losses) in both Flavors and Fragrance Compounds. On both a reported and currency neutral basis, the effect of acquisitions was approximately 2% to net sales amounts. In addition, Fragrance

Ingredients sales were up 9% on a reported basis and 10% on a currency neutral basis, driven entirely by the impact of acquisitions. Overall organic sales growth includes 1% growth from both developed and emerging markets and on a currency neutral basis, 4% growth from emerging markets and 1% growth from developed markets, respectively.

Flavors Business Unit

Flavors sales in 2016 increased 4% on a reported basis and 6% on a currency neutral basis versus the prior year period. Acquisitions accounted for approximately 3% of the net sales growth on both a reported and currency neutral basis. Overall growth was primarily driven by to mid single-digit growth in Savory, Sweet and Dairy combined with low single-digit growth in Beverage. Regionally, the Flavors business delivered reported and currency neutral growth across all regions. Sales growth was led by NOAM, driven by high single-digit gains in Sweet and low single-digit gains in Beverage and Dairy. Sales growth in GA was driven by mid single-digit gains in Savory, Beverage and Sweet and high single-digit gains in Dairy. Sales growth in EAME was driven by mid single-digit gains in Savory and Sweet and high single-digit gains in Dairy. LA sales growth was primarily driven by double-digit growth in Savory and Dairy and high single-digit growth in Sweet. EAME performance continues to be led by our performance in the emerging market countries within the region. Globally, Flavors growth included mid single-digit growth in emerging markets. Overall, emerging markets represented approximately 52% of total Flavors sales.

Fragrances Business Unit

Fragrances sales in 2016 increased 3% on a reported basis and 4% on a currency neutral basis. Acquisitions accounted for approximately 2% of both reported and currency neutral sales growth. Year-over-year, 2016 sales performance was led by high single-digit growth in Fragrance Ingredients (which was driven entirely by the impact of acquisitions) and mid single-digit growth in Fabric Care, Home Care and Personal Wash. Sales growth within the regions was led by GA reflecting double-digit gains in Fragrance Ingredients and Fabric Care and high single-digit growth in Personal Wash. NOAM sales growth reflected double-digit gains in Fragrance Ingredients, Fabric Care and Home Care categories, which more than offset low single-digit declines in Fine Fragrance. EAME sales growth reflected double-digit gains in Fragrance Ingredients and Hair Care and low single-digit gains in Fabric Care. LA sales declined reflecting double-digit declines in Fragrance Ingredients as well as high single-digit declines in Hair Care and mid single-digit declines in Fabric Care and Home Care which more than offset double-digit gains in Personal Wash. Excluding the effects of acquisitions, Fragrance Ingredients sales declined low single-digits. Globally, Fragrances growth included low single-digit growth in emerging markets. Overall, emerging markets represented 48% of total Fragrances sales.

Sales Performance by Region and Category

		% Change in Sales — 2016 vs 2015					
		Fine Fragrances	**Consumer Fragrances**	**Ingredients**	**Total Frag.**	**Flavors**	**Total**
NOAM	**Reported**	**-2 %**	**8 %**	**10 %**	**6 %**	**8%**	**7 %**
EAME	**Reported**	**-1 %**	**1 %**	**13 %**	**3 %**	**1%**	**2 %**
	Currency Neutral(1)	***0 %***	***2 %***	***14 %***	***4 %***	***5%***	***4 %***
LA	**Reported**	**-6 %**	**-5 %**	**-15 %**	**-6 %**	**1%**	**-3 %**
	Currency Neutral(1)	***-3 %***	***-3 %***	***-13 %***	***-4 %***	***5%***	***-1 %***
GA	**Reported**	**0 %**	**6 %**	**13 %**	**7 %**	**4%**	**5 %**
	Currency Neutral(1)	***2 %***	***7 %***	***11 %***	***8 %***	***6%***	***6 %***
Total	**Reported**	**-2 %**	**2 %**	**9 %**	**3 %**	**4%**	**3 %**
	Currency Neutral(1)	***-1 %***	***3 %***	***10 %***	***4 %***	***6%***	***5 %***

(1) Currency neutral sales growth is calculated by translating prior year sales at the exchange rates for the corresponding 2016 period.

- NOAM Flavors sales growth, which included the impact of acquisitions, primarily reflected high single-digit gains in Sweet and low single-digit gains in Beverage and Dairy. Total Fragrances sales growth reflected double-digit gains in Fragrance Ingredients (driven entirely by the impact of acquisitions), Fabric Care and Home Care categories, which more than offset low single-digit declines in Fine Fragrance.
- EAME Flavors sales growth primarily reflected mid single-digit gains in Savory and Sweet and high single-digit gains in Dairy. EAME total Fragrances sales growth was driven by double-digit gains in Fragrance Ingredients (driven entirely by the impact of acquisitions) and Hair Care and low single-digit gains in Fabric Care.
- LA Flavors sales growth was driven by double-digit growth in Savory and Dairy and high single-digit growth in Sweet. LA total Fragrances sales declined reflecting double-digit declines in Fragrance Ingredients as well as high

single-digit declines in Hair Care and mid single-digit declines in Fabric Care and Home Care which more than offset double-digit gains in Personal Wash.

- GA Flavors sales growth was led by mid single-digit gains in Savory, Beverage and Sweet and high single-digit gains in Dairy. GA total Fragrances sales growth primarily reflected double-digit gains in Fragrance Ingredients (driven entirely by the impact of acquisitions) and Fabric Care and high single-digit growth in Personal Wash.

Cost of Goods Sold

Cost of goods sold, as a percentage of sales, decreased 20 bps, to 55.1% in 2016 compared to 55.3% in 2015. Included in cost of goods sold was $7.6 million of acquisition-related inventory "step-up" costs, $2.4 million of costs associated with operational improvement initiatives and $0.7 million of costs related to accelerated depreciation in 2016 and $6.8 million of acquisition-related inventory "step-up" costs and $1.1 million of costs related to operational improvement initiatives included in 2015.

Research and Development (R&D)

R&D expenses, as a percentage of sales, remained relatively consistent with the prior year period at 8.2% in 2016 compared to 8.1% in 2015. The slight increase in 2016 was principally driven by slightly higher salary costs and, to a lesser extent, the effect of recent acquisitions.

Selling and Administrative (S&A)

S&A, as a percentage of sales, increased 180 bps to 18.2% versus 16.4% (or 16.4% and 16.1% on an adjusted basis in 2016 and 2015, respectively). Included in 2016 were net legal charges/credits, principally related to litigation accrual, of $48.5 million, acquisition-related costs of $4.5 million and severance costs related to the termination of a former executive officer of $1.4 million, compared to acquisition related costs of $11.5 million, accelerated contingency payments of $7.2 million and the reversal of the previously recorded provision related to the Spanish capital tax case of $10.5 million included in 2015. Additionally, during 2016, costs were higher as a result of legal and professional fees associated with various finance initiatives and the effect of recently acquired companies, offset by slightly lower salary costs and the effect of foreign currency.

Restructuring and Other Charges

Restructuring and other charges primarily consist of separation costs for employees, including severance, outplacement and other benefit costs.

	Restructuring Charges *(In Thousands)*	
	2016	**2015**
Flavors	$ (1,119)	$ 4,198
Fragrances	(581)	1,347
Global	—	2,049
Total	$ (1,700)	$ 7,594

2015 Severance and Contingent Consideration Charges

During the fourth quarter of 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, in 2015, the Company recorded a pre-tax charge of $7.6 million, included in Restructuring and other charges, net, related to severance and related costs pertaining to approximately 150 positions that will be affected. During 2016, the Company made payments of $2.9 million and recorded accelerated depreciation expense of $0.7 million. In addition, during 2016, the Company recorded a credit of $1.7 million related to the reversal of severance accruals that were determined to be no longer required. The total cost of the plan is now expected to be approximately $8.8 million with the remaining charges related principally to accelerated depreciation. The Company expects the plan to be fully completed in the second half of 2017.

Separately, in 2015, the Company recorded a charge of $7.2 million, included in Selling and administrative expenses, associated with the acceleration from 2016 to 2015 of contingent consideration payments from the Aromor acquisition that were triggered by certain of the management structure changes noted above.

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. Approximately $10 million of these charges are expected to be recorded in the first quarter of 2017, 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 seven quarters. The overall charges are 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.

Amortization of Acquisition-Related Intangibles

Amortization expenses increased to $23.8 million in 2016 compared to $15.0 million in 2015. The increase of $8.7 million is principally due a full year of amortization in 2016 related to the acquisitions of Ottens Flavors and Lucas Meyer as compared to 2015 as well as the acquisition of David Michael in 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 certain non-recurring items, Interest expense, Other expense, net and Taxes on income. See Note 13 to our Consolidated Financial Statements for the reconciliation to Income before taxes.

	For the Year Ended December 31,	
(DOLLARS IN THOUSANDS)	**2016**	**2015**
Segment profit:		
Flavors	$ 337,242	$ 318,476
Fragrances	334,220	321,764
Global Expenses	(48,487)	(28,180)
Restructuring and other charges, net	(322)	(7,594)
Gain on sales of fixed assets	7,818	—
Spanish capital tax charge reversal	—	10,530
Operational improvement initiative costs	(2,402)	(1,115)
Acquisition related costs	(12,195)	(18,342)
Accelerated contingent consideration	—	(7,192)
Legal charges/credits, net	(48,518)	—
Operating Profit	$ 567,356	$ 588,347
Profit margin		
Flavors	22.5%	22.1%
Fragrances	20.6%	20.4%
Consolidated	18.2%	19.5%

Flavors Business Unit

Flavors segment profit increased $18.8 million to $337.2 million in 2016 (22.5% of sales) from $318.5 million (22.1% of sales) in the comparable 2015 period. The increase in segment profit and profit margin principally reflects productivity initiatives and solid top-line growth.

Fragrances Business Unit

Fragrances segment profit increased $12.5 million to $334.2 million in 2016 (20.6% of sales), compared to $321.8 million (20.4% of sales) reported in 2015. The increase in segment profit and profit margin was principally driven by volume growth and the benefits from cost and productivity initiatives.

Global Expenses

Global expenses represent corporate and headquarter-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 2016, Global expenses were

$48.5 million compared to $28.2 million during 2015. The increase is principally driven by lower gains on our cash flow hedging program and higher incentive compensation costs.

Interest Expense

In 2016, interest expense increased $6.9 million to $53.0 million, compared to $46.1 million in 2015 reflecting the impact of borrowings under the Euro Senior Notes - 2016. Average cost of debt was 3.8% for the 2016 period compared to 4.5% in 2015.

Other (Income) Expense, Net

Other (income) expense, net increased approximately $12.5 million to $9.4 million of income in 2016 versus $3.2 million of expense in 2015. The increase was largely driven by gains on foreign currency of approximately $5.0 million in the current year versus losses of approximately $6.0 million in the prior year.

Income Taxes

The effective tax rate was 22.7% in 2016 as compared to 22.2% in 2015. Excluding $17.1 million, $4.1 million, $0.6 million and $0.1 million of tax benefits associated with pretax legal charges/credits, net, acquisition-related costs, operational improvement initiatives and restructuring related costs, respectively, as well as a $2.7 million tax charge related to the gain on sale of property, the adjusted tax rate for 2016 was 23.8%. Excluding $6.2 million, $2.3 million and $0.3 million of tax benefits associated with pretax acquisition-related costs, restructuring charges and operational improvement initiatives, respectively, a $10.5 million tax settlement received in 2015 due to favorable tax rulings in Spain and another jurisdiction as well as a $2.9 million charge related to the reversal of the previously recorded provision for the Spanish capital tax case, the adjusted tax rate for 2015 was 24.2%. The year-over-year reduction reflects a benefit from lower cost of repatriation and mix of earnings, which were partially offset by loss provisions.

2015 IN COMPARISON TO 2014

Sales

Sales for 2015 totaled $3.0 billion, a decrease of 2% from the prior year. Excluding currency impacts, sales increased 5%. Sales growth reflects new win performance (net of losses) in both Flavors and Fragrance Compounds, partially offset by volume erosion on existing business principally driven by our customers' product line rationalization and inventory management efforts. In addition, our Flavors business was negatively impacted by volume erosion in North America (NOAM) as well as weak demand and lost business in China (principally associated with facility issues). On both a reported and currency neutral basis, the effect of acquisitions was approximately 2% to net sales amounts. Fragrance Ingredients sales declined 5% on a reported basis but were up 2% on a currency neutral basis. Overall organic sales growth includes declines of 1% and 7% from emerging markets and developed markets, respectively, compared to currency neutral sales growth of 5% and 1% from emerging markets and developed markets, respectively.

Flavors Business Unit

Flavors sales in 2015 decreased 1% on a reported basis but increased 6% on a currency neutral basis versus the prior year period. Acquisitions accounted for the majority of net sales growth on a reported basis and approximately half of the net sales growth on a currency neutral basis. Overall sales growth was primarily due to mid single-digit growth in Beverage combined with high single-digit growth in Dairy and low single-digit growth in Savory. Regionally, the Flavors business delivered reported sales growth in NOAM and LA but had currency neutral growth across all regions. Sales growth was led by NOAM which was primarily driven by high double-digit growth in Sweet and Dairy and double-digit growth in Beverage. LA sales growth was driven by double-digit gains in Beverage, Savory and Dairy. GA sales included low single-digit gains in Savory and Dairy and low single-digit declines in Sweet, offset by the effects of currency. EAME sales included mid single-digit gains in Savory and Beverage, offset by the effects of currency. EAME performance continued to be led by our performance in the emerging market countries within the region. Globally, Flavors growth was led by mid single-digit growth in emerging markets. Overall, emerging markets represented approximately 52% of total Flavors sales.

Fragrances Business Unit

Fragrances sales in 2015 declined 3% on a reported basis but increased 4% on a currency neutral basis. Acquisitions accounted for approximately 1% of both reported and currency neutral sales growth. Year-over-year, 2015 sales performance was led by double-digit growth in Fabric Care, high single-digit growth in Home Care, mid single-digit growth in Hair Care and low single-digit growth in Fragrance Ingredients and Fine Fragrance. Sales in EAME included double-digit gains in Fabric Care and mid single-digit growth in Fine Fragrance and Fragrance Ingredients, offset by the effects of currency. LA sales growth reflected double-digit gains in Fabric Care, Home Care and Hair Care categories as well as low single-digit gains in Fragrance Ingredients, which offset mid single-digit declines in Fine Fragrance. GA sales growth reflected high single-digit gains in Fragrance Ingredients and mid single-digit gains in Fabric Care, offset by the effects of currency. NOAM sales declined driven by double-digit declines in Toiletries, high single-digit declines in Fragrance Ingredients and mid single-digit declines in Fine Fragrance which more than offset mid to high single-digit gains in Home Care and Fabric Care. Overall, emerging markets represented 49% of total Fragrances sales.

Sales Performance by Region and Category

		% Change in Sales — 2015 vs 2014					
		Fine Fragrances	Consumer Fragrances	Ingredients	Total Frag.	Flavors	Total
NOAM	**Reported**	**-5 %**	**1 %**	**-7 %**	**-2 %**	**11 %**	**4 %**
EAME	**Reported**	**-9 %**	**-8 %**	**-7 %**	**-8 %**	**-11 %**	**-9 %**
	Currency Neutral(1)	***6 %***	***8 %***	***4 %***	***7 %***	***4 %***	***5 %***
LA	**Reported**	**-10 %**	**7 %**	**1 %**	**2 %**	**7 %**	**4 %**
	Currency Neutral(1)	***-5 %***	***10 %***	***3 %***	***6 %***	***16 %***	***9 %***
GA	**Reported**	**-2 %**	**— %**	**3 %**	**— %**	**-3 %**	**-2 %**
	Currency Neutral(1)	***-1 %***	***2 %***	***8 %***	***3 %***	***2 %***	***2 %***
Total	**Reported**	**-8 %**	**-1 %**	**-5 %**	**-3 %**	**-1 %**	**-2 %**
	Currency Neutral(1)	***1 %***	***5 %***	***2 %***	***4 %***	***6 %***	***5 %***

(1) Currency neutral sales growth is calculated by translating prior year sales at the exchange rates for the corresponding 2015 period.

- NOAM Flavors sales growth, which included the impact of acquisitions, primarily reflected high double-digit growth in Sweet and Dairy and double-digit growth in Beverage. NOAM total Fragrances sales declined driven by double-digit declines in Toiletries, high single-digit declines in Fragrance Ingredients and mid single-digit declines in Fine Fragrance, which more than offset mid single-digit gains in Home Care and Fabric Care.
- EAME Flavors sales growth primarily reflected mid single-digit gains in Savory and Beverage. EAME total Fragrances sales growth was driven by double-digit gains in the Fabric Care and mid single-digit growth in Fine Fragrance and Fragrance Ingredients, offset by the effects of currency, which included the impact of acquisitions.
- LA Flavors sales growth was driven by double-digit gains in Beverage, Savory and Dairy. LA total Fragrances sales growth reflected double-digit gains in Fabric Care, Home Care and Hair Care categories as well as low single-digit gains in Fragrance Ingredients, which offset mid single-digit declines in Fine Fragrance.
- GA Flavors sales growth was led by low single-digit gains in Savory and Dairy, which more than offset low single-digit declines in Sweet. GA total Fragrances sales growth primarily reflected high single-digit gains in Fragrance Ingredients and mid single-digit gains in Fabric Care, offset by the effects of currency.

Cost of Goods Sold

Cost of goods sold, as a percentage of sales, decreased 60 bps, to 55.3% in 2015 compared to 55.9% in 2014. Included in cost of goods sold was $7.9 million of acquisition-related costs (including $6.8 million of inventory "step-up" costs) and operational improvement initiative costs in 2015 and $7.6 million of charges related to restructuring and operational improvement initiative costs in 2014.

Research and Development (R&D)

R&D expenses, as a percentage of sales, decreased slightly from the prior year period at 8.1% in 2015 compared to 8.2% in 2014. The decrease was principally driven by lower incentive compensation expense in 2015.

Selling and Administrative (S&A)

S&A, as a percentage of sales, remained consistent at 16.4% in 2015 and 2014. 2015 S&A expenses included acquisition-related expenses and a charge of $7.2 million related to the accelerated contingent consideration payments from the Aromor acquisition, offset by lower incentive compensation expense and the reversal of the previously recorded provision related to the Spanish capital tax case of $10.5 million.

Restructuring and Other Charges

Restructuring and other charges primarily consist of separation costs for employees, including severance, outplacement and other benefit costs.

	Restructuring Charges (In Thousands)	
	2015	2014
Flavors	$ 4,198	$ —
Fragrances	1,347	1,298
Global	2,049	—
Total	$ 7,594	$ 1,298

2015 Severance and Contingent Consideration Charges

During the fourth quarter of 2015, we established a series of initiatives that were expected to streamline our management structure, simplify decision-making and accountability, better leverage and align our capabilities across the organization and improve efficiency of our global manufacturing and operations network. As a result, we recorded a pre-tax charge of $7.6 million, included in restructuring and other charges, net, related to severance and related costs pertaining to approximately 150 positions that will be affected. The Company expects the plan to be fully completed in the second half of 2017.

Separately, we recorded a charge of $7.2 million, included in Selling and administrative expenses, associated with the acceleration from 2016 to 2015 of contingent consideration payments from the Aromor acquisition that were triggered by certain of the management structure changes noted above.

Fragrance Ingredients Rationalization - 2014

In 2014, we closed our fragrance ingredients manufacturing facility in Augusta, Georgia and consolidated production into other Company facilities. In connection with this closure, we incurred charges of $13.8 million, consisting primarily of $10.3 million in accelerated depreciation of fixed assets, $2.2 million in personnel-related costs and $1.3 million in plant shutdown and other related costs. We recorded total charges of $7.4 million during 2013, consisting of $2.2 million of pre-tax charges related to severance included in Restructuring and other charges, net and $5.2 million of non-cash charges related to accelerated depreciation included in Cost of goods sold. During 2014, we recorded $1.3 million of plant shutdown and other related costs included in Restructuring and other charges, net as well as an additional $5.1 million of non-cash charges related to accelerated depreciation included in Cost of goods sold. As a result of this closure, 43 positions were eliminated. During 2015, we recorded a net credit of $0.5 million principally related to the reversal of severance accruals.

Amortization of Acquisition-Related Intangibles

Amortization expenses increased to $15.0 million in 2015 compared to $7.3 million in 2014. The increase of $7.7 million was driven by the acquisitions of Ottens Flavors and Lucas Meyer in 2015.

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 certain non-recurring items, Interest expense, Other expense, net and Taxes on income. See Note 13 to our Consolidated Financial Statements for the reconciliation to Income before taxes.

	For the Year Ended December 31,	
(DOLLARS IN THOUSANDS)	**2015**	**2014**
Segment profit:		
Flavors	$ 318,476	$ 331,257
Fragrances	321,764	335,447
Global Expenses	(28,180)	(65,443)
Restructuring and other charges, net	(7,594)	(1,298)
Spanish capital tax charge reversal	10,530	—
Operational improvement initiative costs	(1,115)	(7,642)
Acquisition related costs	(18,342)	—
Accelerated contingent consideration	(7,192)	—
Operating Profit	$ 588,347	$ 592,321
Profit margin		
Flavors	22.1%	22.7%
Fragrances	20.4%	20.6%
Consolidated	19.5%	19.2%

Flavors Business Unit

Flavors segment profit decreased $12.8 million to $318.5 million in 2015 (22.1% of sales) from $331.3 million (22.7% of sales) in the comparable 2014 period. The decrease in segment profit and profit margin was driven by unfavorable foreign currency impacts, scale up costs of new sites in Turkey and Indonesia and other one-off costs, including incremental operating costs associated with the China Flavors facility. These costs were only partially offset by favorable volume growth, productivity initiatives, sales mix and a slight impact from the addition of Ottens Flavors.

Fragrances Business Unit

Fragrances segment profit decreased $13.7 million to $321.8 million in 2015 (20.4% of sales), compared to $335.4 million (20.6% of sales) reported in 2014. The decrease in segment profit and profit margin was principally driven by unfavorable foreign currency impacts, which were partially offset by favorable volume growth, sales mix and a slight impact from the addition of Lucas Meyer.

Global Expenses

Global expenses represent corporate and headquarter-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 2015, Global expenses were $28.2 million compared to $65.4 million during 2014. The decrease is principally driven by lower incentive compensation expense and the favorable impact of our cash flow hedging program.

Interest Expense

In 2015, interest expense remained comparable with the prior year at $46.1 million. Average cost of debt was 4.5% for the 2015 period compared to 4.9% in 2014.

Other Expense (Income), Net

Other expense (income), net decreased approximately $6.0 million to $3.2 million of expense in 2015 versus $2.8 million of income in 2014. This decrease is primarily driven by lower foreign exchange gains on working capital and lower mark-to-market adjustments on deferred compensation plan assets during 2015 compared to the 2014 period.

Income Taxes

The effective tax rate was 22.2% in 2015 as compared to 24.5% in 2014. Excluding the $2.6 million tax benefit associated with the pretax restructuring charges and operational improvement initiatives, the $6.2 million benefit associated with acquisition related costs, the $10.5 million tax settlement received in 2015 due to favorable tax rulings in Spain and another jurisdiction as well as the $2.9 million charge related to the reversal of the previously recorded provision for the Spanish capital tax case, the adjusted tax rate for 2015 was 24.2%. Excluding the $2.6 million tax benefit associated with the pretax restructuring charges and operational improvement initiative costs as well as the $3.8 million tax benefit related to the reserve reversal for the 2001 Spanish dividend withholding tax case, the adjusted tax rate for 2014 was 25.3%. The year-over-year reduction reflected a benefit from lower cost of repatriation and loss provisions which were partially offset by mix of earnings.

Liquidity and Capital Resources

CASH AND CASH EQUIVALENTS

We had cash and cash equivalents of $324.0 million at December 31, 2016 compared to $182.0 million at December 31, 2015, of which $252.6 million of the balance at December 31, 2016 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 U.S. deferred tax assets. We regularly repatriate, in the form of dividends from our non-U.S. subsidiaries, a portion of our current year earnings to fund financial obligations in the U.S. These repatriations of current year earnings totaled $134.5 million, $184.6 million and $248.0 million in 2016, 2015 and 2014, respectively.

CASH FLOWS FROM OPERATING ACTIVITIES

Operating cash flows in 2016 were $535.4 million compared to $433.6 million in 2015 and $518.4 million in 2014. The increase in operating cash flows in 2016 as compared to 2015 is principally related to the impact of decreased core working capital requirements (trade receivables, inventories and accounts payable) and lower pension contributions. Included in 2014 was payment of $11.2 million to the Spanish government related to a capital tax case.

Working capital (current assets less current liabilities) totaled $710.7 million at year-end 2016 compared to $712.0 million at December 31, 2015. This slight decrease in working capital of $1.3 million primarily reflects an increase in payable balances principally associated with short-term debt which were partially offset by increased cash balances as a result of our borrowings under the Euro Senior Notes - 2016. We 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. We estimate that, as a result of participating in the programs, there was a beneficial impact on cash provided by operations of approximately $34.0 million, $3.4 million and $33.1 million in 2016, 2015 and 2014, respectively. The cost of participating in these programs was immaterial to our results in all periods.

CASH FLOWS USED IN INVESTING ACTIVITIES

Net investing activities in 2016 utilized $355.5 million compared to $577.2 million and $221.3 million in 2015 and 2014, respectively. The decrease in cash paid for investing activities is primarily driven by the acquisition of David Michael in 2016 for approximately $236.9 million (net of cash acquired) as compared to the acquisitions of Ottens Flavors and Lucas Meyer for approximately $188.5 million (net of cash acquired) and $305.1 million (net of cash acquired), respectively, in 2015. The 2014 amount was principally driven by the acquisition of Aromor for approximately $102.5 million (net of cash acquired).

Additions to property, plant and equipment were $126.4 million, $101.0 million and $143.2 million in 2016, 2015 and 2014, respectively (net of grants and other reimbursements from government authorities). These investments largely arise from our ongoing focus to align our manufacturing facilities with our customer demand, primarily in emerging markets and new technology consistent with our strategy.

In light of our intent to construct a new flavors facility in China, our relocation of our Ingredients facility in Hangzhou, China and the continuation of our Indonesia project we expect that capital spending in 2017 will be about 5% of sales (net of potential grants and other reimbursements from government authorities).

CASH FLOWS USED IN FINANCING ACTIVITIES

Net financing activities in 2016 utilized $19.7 million compared to $131.3 million and $202.3 million in 2015 and 2014, respectively. The decrease in outflow of cash used in financing activities in 2016 as compared to 2015 principally reflects borrowings under the Euro Senior Notes - 2016 which were offset by repayment of our Senior Notes - 2006 as well as higher dividend payments and treasury share repurchases in 2016. The decrease in outflow of cash used in financing activities in 2015 compared to 2014 principally reflected incremental dividend payments and treasury share repurchases in 2015 which were more than offset by proceeds from the drawdown on the revolving credit facility during 2015.

At December 31, 2016, we had $1,325.4 million of debt outstanding compared to $1,067.7 million outstanding at December 31, 2015.

We paid dividends totaling $184.9 million, $158.9 million and $133.2 million in 2016, 2015 and 2014, respectively. The cash dividend declared per share in 2016, 2015 and 2014 was $2.40, $2.06 and $1.72, respectively.

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 $109 million available under the repurchase program, approximately 0.9 million shares, or 1.2% of shares outstanding (based on the market price and shares outstanding as of December 31, 2016) could be repurchased under the program as of December 31, 2016. 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 service 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. Based on our leverage ratios and general market interest rate expectations, we anticipate evaluating refinancing opportunities during 2017. We believe our existing cash balances are sufficient to meet our debt service requirements.

During the first quarter of 2017, we acquired Fragrance Resources for approximately $143.3 million (net of cash acquired), which was funded from existing resources.

During the fourth quarter of 2016, we acquired David Michael for approximately $236.9 million (net of cash acquired), which was funded from existing resources.

During the third quarter of 2015, we acquired Lucas Meyer for approximately $305.1 million (net of cash acquired), which was funded from existing resources.

During the second quarter of 2015, we acquired Ottens Flavors for approximately $188.5 million (net of cash acquired), which was funded from existing resources.

Credit Facility and Senior Notes

We supplement short-term liquidity with access to capital markets, mainly through bank credit facilities and issuance of commercial paper.

Commercial Paper

During 2016, we issued approximately $65 million of commercial paper, which was fully repaid by December 31, 2016. As of December 31, 2016, there was no commercial paper outstanding. We did not issue commercial paper during 2015.

Subsequent to December 31, 2016, we issued approximately $87.5 million of commercial paper.

Credit Facility

There are two tranches under the credit facility. Tranche A of the Facility is now available to borrowers in U.S. dollars, euros, Swiss francs, Japanese yen and British sterling in an aggregate amount up to an equivalent of approximately $564.1 million, with a sublimit of $25 million for swing line borrowings. Tranche B of the Facility is now available to borrowers in U.S. dollars, euros, Swiss francs, Japanese yen and British sterling in an aggregate amount up to an equivalent of approximately $385.9 million, with sublimits of €50 million and $25 million for swing line borrowings.

The credit facility is available for general corporate purposes. Borrowings under the credit facility bear interest at an annual rate of LIBOR plus a margin, currently 112.5 bps, linked to our credit rating. The interest rate under our credit facility at

December 31, 2016 was 1.13%. The credit facility contains various affirmative and negative covenants, including the requirement for us 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 3.50 to 1. Based on this ratio, at December 31, 2016 our covenant compliance would provide overall borrowing capacity of $1,647.3 million.

During the first quarter of 2016, the Company repaid the full amount outstanding under the credit facility ($131.2 million).

As of December 31, 2016 we had no borrowings under the credit facility. The amount which we are able to draw down on under the credit facility is limited by financial covenants as described in more detail below. Our drawdown capacity on the credit facility was $950 million at December 31, 2016. See Note 9 to the Consolidated Financial Statements for further information on the credit facility.

At December 31, 2016 and 2015 we were in compliance with all financial and other covenants, including the net debt to adjusted EBITDA ratio. At December 31, 2016 our Net Debt/adjusted EBITDA[1] ratio was 1.32 to 1 as defined by the credit facility, 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.

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(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 December 31, 2016	
Net income	$	405.0
Interest expense		53.0
Income taxes		118.7
Depreciation and amortization		102.5
Specified items[1]		63.4
Non-cash items[2]		13.8
Adjusted EBITDA	$	756.4

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(1) Specified items for the 12 months ended December 31, 2016 of $63.4 million consist of legal charges/credits principally related to litigation accrual, acquisition-related costs, restructuring charges and operational improvement initiative costs.

(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.

(DOLLARS IN MILLIONS)	December 31, 2016	
Total debt	$	1,325.4
Adjustments:		
Deferred gain on interest rate swaps		(1.3)
Cash and cash equivalents		(324.0)
Net debt	$	1,000.1

Senior Notes

Euro Senior Notes - 2016. On March 14, 2016, we issued Euro 500.0 million face amount of 1.75% Senior Notes ("Euro Senior Notes - 2016") due 2024 at a discount of Euro 0.9 million. The Company received proceeds related to the issuance of these Euro Senior Notes - 2016 of Euro 496.0 million which was net of the Euro 0.9 million discount and Euro 3.1 million underwriting discount (recorded as deferred financing costs). The Euro Senior Notes - 2016 bear interest at a rate of 1.75% per annum, with interest payable on March 14 of each year, commencing on March 14, 2017. The Euro Senior Notes - 2016 will mature on March 14, 2024. See Note 9 to the Consolidated Financial Statements for further information on the Senior Notes - 2013.

Senior Notes - 2013. In April 2013, we issued $300.0 million face amount of 3.20% Senior Notes ("Senior Notes - 2013") due 2023 at a discount of $0.3 million, to take advantage of attractive borrowing rates and maintain efficiency and flexibility in our capital structure, and received proceeds of $297.8 million. The Senior Notes -2013 bear interest at a rate of 3.20% per year, with interest payable on May 1 and November 1 of each year, commencing on November 1, 2013. See Note 9 to the Consolidated Financial Statements for further information on the Senior Notes - 2013.

Senior Notes - 2007. In September 2007, we issued an aggregate of $500.0 million of senior unsecured notes in four series, with $250.0 million due in 2017, $100.0 million due in 2019, $50 million due in 2022 and $100.0 million due in 2027. See Note 9 to the Consolidated Financial Statements for further information on the Senior Notes - 2007.

Senior Notes - 2006. In 2006, we issued an aggregate of $375.0 million of senior unsecured notes in four series, which was fully repaid in 2016. See Note 9 to the Consolidated Financial Statements for further information on the Senior Notes - 2006.

Other Commitments

Compliance with existing governmental requirements regulating the discharge of materials into the environment has not materially affected our operations, earnings or competitive position. In 2016 and 2015, we spent $4.6 million and $9.3 million on capital projects and $16.0 million and $19.0 million, respectively, in operating expenses and governmental charges for the purpose of complying with such regulations. Expenditures for these purposes will continue for the foreseeable future. In addition, we are party to a number of proceedings brought under the Comprehensive Environmental Response, Compensation and Liability Act or similar state statutes. It is expected that the impact of any judgments in or voluntary settlements of such proceedings will not be material to our financial condition, results of operations or liquidity.

CONTRACTUAL OBLIGATIONS

At December 31, 2016, we had contractual payment obligations due within the time periods as specified in the following table:

Contractual Obligations ***(Dollars In Millions)***	**Payments Due** Total	2017	2018 - 2019	2020 - 2021	2022 and thereafter
Borrowings(1)	$ 1,321	$ 250	$ 100	$ —	$ 971
Interest on borrowings(1)	247	47	69	57	74
Operating leases(2)	256	33	53	48	122
Pension funding obligations(3)	180	60	120	—	—
Postretirement obligations(4)	80	5	10	11	54
Purchase commitments(5)	64	54	9	1	—
Total	$ 2,148	$ 449	$ 361	$ 117	$ 1,221

(1) See Note 9 to the Consolidated Financial Statements for a further discussion of our various borrowing facilities.
(2) Operating leases include facility and other lease commitments executed in the normal course of the business, including sale leaseback obligations included in Note 8 of the Notes to the Consolidated Financial Statements. Further details concerning worldwide aggregate operating leases are contained in Note 18 of the Notes to the Consolidated Financial Statements.
(3) See Note 14 of the Notes to the Consolidated Financial Statements for a further discussion of our retirement plans. Anticipated funding obligations are based on current actuarial assumptions. The projected contributions beyond fiscal year 2019 are not currently determinable.
(4) Amounts represent expected future benefit payments for our postretirement benefit plans.
(5) Purchase commitments include agreements for raw material procurement and contractual capital expenditures. Amounts for purchase commitments represent only those items which are based on agreements that are enforceable and legally binding.

The table above does not include $26.4 million of the total unrecognized tax benefits for uncertain tax positions and approximately $1.1 million of associated accrued interest. Due to the high degree of uncertainty regarding the timing of potential cash flows, we are unable to make a reasonable estimate of the amount and period in which the remaining liabilities might be paid.

Critical Accounting Policies and Use of Estimates

Our significant accounting policies are more fully described in Note 1 to the Consolidated Financial Statements. As disclosed in Note 1, the preparation of financial statements in conformity with U.S. generally accepted accounting principles ("GAAP") requires management to make estimates and assumptions that affect reported amounts and accompanying disclosures. These estimates are based on management's best judgment of current events and actions that we may undertake in the future. Actual results may ultimately differ from these estimates.

Those areas requiring the greatest degree of management judgment or deemed most critical to our financial reporting involve:

The periodic assessment of potential impairment of goodwill. We currently have goodwill of $1.0 billion. In assessing the potential for impairment of goodwill, management uses the most current actual and forecasted operating data available and current market based assumptions in accordance with the criteria in ASC 350. The Company has identified four reporting units: (1) Flavors, (2) Fragrance Compounds (3) Fragrance Ingredients and (4) Cosmetic Active Ingredients.

The Company performed the annual goodwill impairment test, utilizing the two-step approach for the Flavors, Fragrance Compounds, Fragrance Ingredients and Cosmetic Active Ingredients reporting units, by assessing the fair value of our reporting units based on discounted cash flows. We completed our annual goodwill impairment test as of November 30, 2016, which indicated no impairment of goodwill, as the estimated fair values substantially exceeded the carrying values of each of these reporting units.

The periodic assessment of potential impairment of finite-lived intangible assets. We currently have intangible assets of $365.8 million. The Company reviews long-lived assets for impairment when events or changes in business conditions indicate that their full carrying value may not be recovered. An estimate of undiscounted future cash flows produced by an asset or group of assets is compared to the carrying value to determine whether impairment exists. If assets are determined to be impaired, the loss is measured based on an estimate of fair value using various valuation techniques, including a discounted estimate of future cash flows.

The analysis and evaluation of income taxes. We account for taxes under the asset and liability method. Under this method, deferred income taxes are recognized for temporary differences between the financial statement and tax return bases of assets and liabilities. A valuation allowance is recognized if, based on the weight of available evidence, it is more likely than not that some portion or all of the deferred tax asset will not be realized. The assessment of the need for a valuation allowance requires management to make estimates and assumptions about future earnings, reversal of existing temporary differences and available tax planning strategies. If actual experience differs from these estimates and assumptions, the recorded deferred tax asset may not be fully realized resulting in an increase to income tax expense in our results of operations.

The Company has not established deferred tax liabilities for substantially all undistributed foreign earnings as it has plans to and intends to indefinitely reinvest those earnings to finance foreign activities. The unrecognized deferred tax liability on these undistributed earnings approximates $344 million.

We are subject to income taxes in the U.S. and numerous foreign jurisdictions. Significant judgment is required in evaluating our uncertain tax positions and determining our provision for income taxes. We first determine whether it is "more likely than not" that we would sustain our tax position if the relevant tax authority were to audit the position with full knowledge of all the relevant facts and other information. For those tax positions that meet this threshold, we measure the amount of tax benefit based on the largest amount of tax benefit that we have a greater than 50% chance of realizing in a final settlement with the relevant authority. Those tax positions failing to qualify for initial recognition are recognized in the first interim period in which they meet the more likely than not standard. This evaluation is made at the time that we adopt a tax position and whenever there is new information and is based upon management's evaluation of the facts, circumstances and information available at the reporting date. We maintain a cumulative risk portfolio relating to all of our uncertainties in income taxes in order to perform this analysis, but the evaluation of our tax positions requires significant judgment and estimation in part because, in certain cases, tax law is subject to varied interpretation, and whether a tax position will ultimately be sustained may be uncertain. We do not currently believe that any of our pending tax assessments, even if ultimately resolved against us, would have a material impact on our results of operations and cash flows.

The evaluation of potential litigation and environmental liabilities, where changing circumstances, rules and regulations require regular reassessment of related practices and anticipated costs. We are subject to certain legal claims regarding products and other matters, as well as environmental-related matters. Significant management judgment is involved in determining when it is probable that a liability has been incurred and the extent to which it can be reasonably estimated.

We regularly assess potential liabilities with respect to all legal claims based on the most recent available information, in consultation with outside counsel we have engaged on our behalf to handle the defense of such matters. To the extent a liability is considered to be probable and reasonably estimable, we recognize a corresponding liability; if the reasonably estimated liability is a range, we recognize that amount considered most likely, or in the absence of such a determination, the minimum reasonably estimated liability. To the extent such claims are covered by various insurance policies, we separately evaluate the right to recovery and estimate the related insurance claim receivable. Management judgments involve determination as to whether a liability has been incurred, the reasonably estimated amount of that liability, and any potential insurance recovery.

We regularly evaluate potential environmental exposure in terms of total estimated cost and the viability of other potentially responsible parties (“PRP’s”) associated with our exposure. Recorded liabilities are adjusted periodically as remediation efforts progress and additional information becomes available. Critical management assumptions relate to expected total costs to remediate and the financial viability of PRP’s to share such costs.

Determination of the various assumptions employed in the valuation of pension and retiree health care expense and associated obligations. Amounts recognized in the Consolidated Financial Statements related to pension and other postretirement benefits are determined from actuarial valuations. Inherent in such valuations are assumptions including expected return on plan assets, discount rates at which the liabilities could be settled, rates of increase in future compensation levels, mortality rates and health care cost trend rates. These assumptions are updated annually and are disclosed in Note 14 to the Consolidated Financial Statements. In accordance with GAAP, actual results that differ from the assumptions are accumulated and amortized over future periods and, therefore, affect expense recognized and obligations recorded in future periods.

We consider a number of factors in determining and selecting assumptions for the overall expected long-term rate of return on plan assets. We consider the historical long-term return experience of our assets, the current and expected allocation of our plan assets, and expected long-term rates of return. We derive these expected long-term rates of return with the assistance of our investment advisors. We base our expected allocation of plan assets on a diversified portfolio consisting of domestic and international equity securities, fixed income, real estate, and alternative asset classes.

We consider a variety of factors in determining and selecting our assumptions for the discount rate at December 31. For the U.S. plans, the discount rate was based on the internal rate of return for a portfolio of high quality bonds rated Aa or higher by either Moody’s or Standard & Poor's with maturities that are consistent with the projected future benefit payment obligations of the plan. For the Non-U.S. Plans, the discount rates were determined by region and are based on high quality long-term corporate bonds. Consideration has been given to the duration of the liabilities in each plan when selecting the bonds to be used in determining the discount rate. The rate of compensation increase for all plans and the medical cost trend rate for the applicable U.S. plans are based on plan experience.

With respect to the U.S. plans, the expected rate of return on plan assets was determined based on an asset allocation model using the current target allocation, real rates of return by asset class and an anticipated inflation rate. The target asset allocation consists of approximately: 40% in equity securities and 60% in fixed income securities. The plan has achieved a compounded annual rate of return of 6.3% over the previous 20 years. At December 31, 2016, the actual asset allocation for the U.S. plan was: 36% in equity securities and 64% in fixed income securities.

The expected rate of return for the non-U.S. plans employs a similar set of criteria adapted for local investments, inflation rates and in certain cases specific government requirements. The target asset allocation, for the non-U.S. plans, consists of approximately: 40% – 70% in fixed income securities; 15% – 40% in equity securities; 5% – 20% in real estate; and 5% – 10% in alternative investments. At December 31, 2016, the actual asset allocation for the non-U.S. plan was: 56% in fixed income investments; 27% in equity investments; 5% in real estate investments, 2% in cash and cash equivalents and 10% in alternative investments.

Changes in pension and other post-employment benefits, and associated expenses, may occur in the future due to changes in these assumptions. The impact that a 0.25% decrease in the discount rate or a 1% change in the medical cost trend rate would have on our pension and other post-employment benefit expense, as applicable, is as follows:

	Sensitivity of Disclosures to Changes in Selected Assumptions			
	25 BP Decrease in Discount Rate		25 BP Decrease in Discount Rate	25 BP Decrease in Long-Term Rate of Return
(DOLLARS IN THOUSANDS)	Change in PBO	Change in ABO	Change in pension expense	Change in pension expense
U.S. Pension Plans	$ 15,719	$ 15,620	$ (109)	$ 1,250
Non-U.S. Pension Plans	46,658	44,861	2,876	1,895
Postretirement Benefit Plan	N/A	2,302	100	N/A

The effect of a 1% increase in the medical cost trend rate would increase the accumulated postretirement benefit obligation and the annual postretirement expense by approximately $0.3 million and less than $0.1 million, respectively; a 1% decrease in the rate would decrease the obligation and expense by approximately $0.4 million and less than $0.1 million, respectively.

<u>The ongoing assessment of the valuation of inventory, given the large number of natural ingredients employed, the quality of which may be diminished over time.</u> We hold a majority of our inventory as raw materials, providing the greatest degree of flexibility in manufacture and use. As of December 31, 2016, we maintained 49% of our inventory as raw materials. Materials are evaluated based on shelf life, known uses and anticipated demand based on forecasted customer order activity and changes in product/sales mix. Management policy provides for an ongoing assessment of inventory with adjustments recorded when an item is deemed to be slow moving or obsolete.

We believe that we have considered relevant circumstances that we may be currently subject to, and the financial statements accurately reflect our best estimate of the impact of these items in our results of operations, financial condition and cash flows for the years presented. We have discussed the decision process and selection of these critical accounting policies with the Audit Committee of the Board of Directors.

New Accounting Standards

In January 2017, the Financial Accounting Standards Board ("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. This guidance may have an impact 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. Early adoption is only permitted as of the beginning of an annual reporting period. This guidance must be adopted using a modified retrospective transition. The Company plans to adopt this guidance in the first quarter of fiscal year 2017 and accordingly, will record a cumulative-effect adjustment directly to Retained earnings of approximately $47 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 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 will be effective for annual and interim periods beginning after December 15, 2016. 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 expects to adopt this change retroactively and that the impact of this aspect of the standard on the Consolidated Statement of Cash Flows will be approximately $13-$25 million on an annual basis. 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 expects to adopt this change retroactively and that the impact of this aspect of the standard on the Consolidated Statement of Cash Flows will be approximately $5-$12 million on an annual basis. The standard also requires all excess tax benefits/deficiencies be recognized as income tax expense/benefit in the income statement to be applied on a prospective basis. Depending on the future volatility of the stock price, the impact of this aspect of the standard could have a material impact on tax expense on its Consolidated Statement of Income and Comprehensive Income. 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 vest or account for forfeitures as they occur. The Company plans to continue to account for forfeitures using an estimate of awards expected to be forfeited. Lastly, the standard requires that the threshold for equity classification of awards permits withholding up to the maximum statutory tax rates in the applicable jurisdictions. The adoption of this aspect of the standard will impact future vestings.

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 Income and Comprehensive Income.

In September 2015, the FASB issued authoritative guidance related to the adjustments made during the measurement period for items in a business combination. Specifically, the new guidance requires adjustments related to the finalization of estimates to be recorded in the period when they are determined and to provide certain additional disclosures. This guidance is effective for fiscal years beginning after December 15, 2015. The Company adopted this guidance during 2016 and the adoption did not have a significant impact on its consolidated financial statements.

In May 2015, the FASB issued authoritative guidance which removed the requirement to categorize within the fair value hierarchy investments for which fair values are estimated using the net asset value practical expedient. The Company has adopted this guidance for the year ended December 31, 2016 and has reclassified prior year amounts for the year ended December 31, 2015 as disclosed in Note 14 to the Consolidated Financial Statements.

In April 2015, the FASB issued authoritative guidance which requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability. This guidance is effective for annual and interim periods beginning after December 15, 2015. The Company adopted this guidance retrospectively in 2016 and accordingly has reclassified all debt issuance costs on long-term debt as a direct deduction from the carrying amount of the debt liability in the Consolidated Balance Sheet as of December 31, 2015. The adoption of this guidance did not have a significant impact on its consolidated financial statements.

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. Adoption as of the original effective date is permitted. Accordingly, the Company is required to adopt this standard in the first quarter of fiscal year 2018. 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 have been proposed 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 the consolidated financial statements and related disclosures.

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 profit and adjusted gross margin (which exclude acquisition-related costs, operational improvement initiative costs and restructuring charges) (iii) adjusted operating profit and adjusted operating margin (which excludes legal charges/credits, acquisition-related costs, operational improvement initiative costs, restructuring charges and gains on sale of assets), (iv) adjusted selling and administrative expenses (which excludes legal charges/credits, acquisition-related costs, operational improvement initiative costs and restructuring charges) and (v) adjusted effective tax rate (which excludes legal charges/credits, acquisition-related costs, operational improvement initiative costs, restructuring charges and gains on the sale of assets). 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 have included each of these non-GAAP measures in order to provide additional information regarding our underlying operating results and comparable year-over-year performance. Such information is supplemental to information presented in accordance with GAAP and is not intended to represent a presentation in accordance with GAAP. In discussing our historical and expected future results and financial condition, we believe it is meaningful for investors to be made aware of and to be assisted in a better understanding of, on a period-to-period comparable basis, financial amounts both including and excluding these identified items, as well as the impact of exchange rate fluctuations. We believe such additional non-GAAP information provides investors with an overall perspective of the period-to-period performance of our business. In addition, management internally reviews each of these non-GAAP measures to evaluate performance on a comparative period-to-period basis in terms of absolute performance, trends and expected future performance with respect to our business. A material limitation of these non-GAAP measures is that such measures do not reflect actual GAAP amounts. We compensate for such limitations by using these measures as one of several metrics, including GAAP measures. These non-GAAP measures may not be comparable to similarly titled measures used by other companies.

A. Reconciliation of Non-GAAP Metrics

For the Year Ended December 31, 2016

	Reconciliation of Gross Profit				
	Reported (GAAP)	**Restructuring and Other Charges (a)**	**Operational Improvement Initiative Costs (b)**	**Acquisition and Related Costs (c)**	**Adjusted (Non-GAAP)**
Gross profit	1,399,070	658	2,391	7,648	**1,409,767**

	Reconciliation of Selling and Administrative Expenses					
	Reported (GAAP)	**Restructuring and Other Charges (a)**	**Operational Improvement Initiative Costs (b)**	**Acquisition and Related Costs (c)**	**Legal Charges/Credits (d)**	**Adjusted (Non-GAAP)**
Selling and Administrative Expenses	566,224	(1,364)	(11)	(4,547)	(48,518)	**511,784**

	Reconciliation of Operating Profit						
	Reported (GAAP)	**Restructuring and Other Charges (a)**	**Operational Improvement Initiative Costs (b)**	**Acquisition Related Costs (c)**	**Legal Charges/Credits (d)**	**Gain on Sale of Asset (e)**	**Adjusted (Non-GAAP)**
Operating profit	567,356	322	2,402	12,195	48,518	(7,818)	**622,975**

	Reconciliation of Net Income						
	Reported (GAAP)	**Restructuring and Other Charges (a)**	**Operational Improvement Initiative Costs (b)**	**Acquisition Related Costs (c)**	**Legal Charges/Credits (d)**	**Gain on Sale of Asset (e)**	**Adjusted (Non-GAAP)**
Income before taxes	523,717	322	2,402	12,195	48,518	(7,818)	**579,336**
Taxes on income (f)	118,686	97	599	4,117	17,089	(2,658)	**137,930**
Net income	405,031	225	1,803	8,078	31,429	(5,160)	**441,406**

(a) Accelerated depreciation related to restructuring initiatives, severance costs related to the termination of a former executive officer and the partial reversal of restructuring accruals recorded in the prior year.
(b) Accelerated depreciation, dismantling and idle labor costs in Hangzhou, China and the partial reversal of severance accruals related to prior year operational initiatives in Europe. There was approximately $0.4 million of idle labor costs in Hangzhou, China recorded during the third quarter of 2016 that were not excluded from Adjusted Non-GAAP metrics.
(c) Expense related to the fair value step up of inventory and transaction costs related to acquisition of Lucas Meyer in 2015 and David Michael in 2016 as well as transaction costs related to the acquisition of Fragrance Resources in 2017.
(d) Includes legal charges related to litigation accrual offset by settlements due to favorable tax rulings in jurisdictions for which reserves were previously recorded for ongoing tax disputes.
(e) Represents the gain from sale of property in Brazil during the fourth quarter of 2016. During the first quarter of 2016, we previously recognized approximately $3 million of gains related to the sale of fixed assets. We have not retrospectively adjusted these amounts out of our Adjusted Non-GAAP metrics.
(f) The tax effects are calculated based upon the specific rate of the applicable jurisdiction of the items.

For the Year Ended December 31, 2015

	Reconciliation of Gross Profit			
	Reported (GAAP)	Operational Improvement Initiative Costs (a)	Acquisition and Related Costs (b)	Adjusted (Non-GAAP)
Gross profit	1,351,599	1,115	6,825	**1,359,539**

	Reconciliation of Selling and Administrative Expenses				
	Reported (GAAP)	Acquisition and Related Costs (b)	Accelerated Contingent Consideration (c)	Legal Charges/Credits (d)	Adjusted (Non-GAAP)
Selling and Administrative Expenses	494,517	(11,517)	(7,192)	10,530	**486,338**

	Reconciliation of Operating Profit						
	Reported (GAAP)	Operational Improvement Initiative Costs (a)	Acquisition Related Costs (b)	Accelerated Contingent Consideration (c)	Legal Charges/Credits (d)	Restructuring and Other Charges (e)	Adjusted (Non-GAAP)
Operating profit	588,347	1,115	18,342	7,192	(10,530)	7,594	**612,060**

	Reconciliation of Net Income							
	Reported (GAAP)	Operational Improvement Initiative Costs (a)	Acquisition Related Costs (b)	Accelerated Contingent Consideration (c)	Legal Charges/Credits (d)	Restructuring and Other Charges (e)	Tax Settle-ments (f)	Adjusted (Non-GAAP)
Income before taxes	539,101	1,115	18,342	7,192	(10,530)	7,594	—	**562,814**
Taxes on income (g)	119,854	279	6,225	—	(2,948)	2,302	10,478	**136,190**
Net income	419,247	836	12,117	7,192	(7,582)	5,292	(10,478)	**426,624**

(a) Related to plant closings in Europe and partial closing in Asia.
(b) Transaction costs related to acquisitions (Ottens Flavors and Lucas Meyer) as well as expense related to the fair value step up of inventory for both acquisitions.
(c) Represents the acceleration of the contingent consideration payment related to the Aromor acquisition.
(d) Represents the reversal of the previously recorded provision related to the Spanish capital tax case as a result of a favorable ruling.
(e) Restructuring costs related to Q4 2015 Profit Improvement Initiative.
(f) Settlements due to favorable tax rulings in jurisdictions for which reserves were previously recorded for ongoing tax disputes.
(g) The tax effects are calculated based upon the specific rate of the applicable jurisdiction of the items.

B. Foreign Currency Reconciliation

	Operating Profit	
	December 31, 2016	**December 31, 2015**
% Change - Reported (GAAP)	**(4)%**	**(1)%**
Items impacting comparability [(1)] [(2)]	5%	3%
% Change - Adjusted (Non-GAAP)[(2)]	**2%**	**2%**
Currency Impact	2%	6%
% Change Year-over-Year - Currency Neutral Adjusted (Non-GAAP)[(2)]**	**4%**	**8%**

[(1)] Includes items impacting comparability of $55.6 million for the twelve months ended December 31, 2016 and includes $23.7 million of items impacting comparability for the twelve months ended December 31, 2015.

[(2)] 2016 item does not foot due to rounding.

** Currency neutral amount is calculated by translating prior year amounts at the exchange rates used for the corresponding 2016 period. Currency neutral operating profit also eliminates the year-over-year impact of cash flow hedging.

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 THOUSANDS)	December 31, 2016	December 31, 2015
David Michael	$1,662	$—
Ottens Flavors	6,345	4,310
Lucas Meyer Cosmetics	8,322	3,249

Cautionary Statement Under the Private Securities Litigation Reform Act of 1995

Statements in this Annual Report, which are not historical facts or information, are “forward-looking statements” within the meaning of The Private Securities Litigation Reform Act of 1995. Such forward-looking statements are based on management’s current assumptions, estimates and expectations and include statements concerning (i) our ability to achieve long-term sustainable growth and increase shareholder value, (ii) growth potential in the emerging markets, (iii) the anticipated impact of our acquisitions on our market position within key markets, (iv) our ability to generate returns above cost of capital, (v) our competitive position in the market and expected financial results in 2017, (vi) expected savings from profit improvement initiatives, (vii) expected capital expenditures and cost pressures in 2017 and (viii) timing of completion or relocation of our plants in China. 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 forward-looking information may be identified by such terms as “expect”, “anticipate”, “believe”, “intend”, “outlook”, “may”, “estimate”, “should”, “predict” and 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 forward-looking statements. Such factors include, among others, the following:

- macroeconomic trends affecting the emerging markets;
- our ability to implement and adopt 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 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 current challenging economic conditions in China and Latin America;
- the impact of any failure of our key information technology systems or a breach of 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 the Company, its operations or its 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.

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 Securities and Exchange Commission ("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 this 2016 Form 10-K for additional information regarding factors that could affect the Company's results of operations, financial condition and liquidity.

We intend our forward-looking statements to speak only as of the time of such statements and do not undertake or plan to update or revise them as more information becomes available or to reflect changes in expectations, assumptions or results. We can give no assurance that such expectations or forward-looking statements will prove to be correct. An occurrence of, or any material adverse change in, one or more of the risk factors or risks and uncertainties referred to in this report or included in our other periodic reports filed with the SEC could materially and adversely impact our operations and our future financial results.

Any public statements or disclosures made by us 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.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

We operate on a global basis and are exposed to currency fluctuation related to the manufacture and sale of our products in currencies other than the U.S. dollar. The major foreign currencies involve the markets in the European Union, Great Britain, Mexico, Brazil, China, India, Indonesia, Australia and Japan, although all regions are subject to foreign currency fluctuations versus the U.S. dollar. We actively monitor our foreign currency exposures in all major markets in which we operate, and employ a variety of techniques to mitigate the impact of exchange rate fluctuations, including foreign currency hedging activities.

We have established a centralized reporting system to evaluate the effects of changes in interest rates, currency exchange rates and other relevant market risks. Our risk management procedures include the monitoring of interest rate and foreign exchange exposures and hedge positions utilizing statistical analyses of cash flows, market value and sensitivity analysis. However, the use of these techniques to quantify the market risk of such instruments should not be construed as an endorsement of their accuracy or the accuracy of the related assumptions. For the year ended December 31, 2016, the Company's exposure to market risk was estimated using sensitivity analyses, which illustrate the change in the fair value of a derivative financial instrument assuming hypothetical changes in foreign exchange rates and interest rates.

We enter into foreign currency forward contracts with the objective of reducing exposure to cash flow volatility associated with foreign currency receivables and payables, and with anticipated purchases of certain raw materials used in operations. These contracts, the counterparties to which are major international financial institutions, generally involve the exchange of one currency for a second currency at a future date, and have maturities not exceeding twelve months. The gain or loss on the hedging instrument and services is recorded in earnings at the same time as the transaction being hedged is recorded in earnings. At December 31, 2016, the Company's foreign currency exposures pertaining to derivative contracts exist with the Euro, Japanese Yen, British Pound, Australian Dollar and Indonesian Rupiah. Based on a hypothetical decrease or increase of 10% in the applicable balance sheet exchange rates (primarily against the U.S. dollar), the estimated fair value of the Company's foreign currency forward contracts would increase or decrease by approximately $36 million. However, any change in the value of the contracts, real or hypothetical, would be significantly offset by a corresponding change in the value of the underlying hedged items.

We have also used non-U.S. dollar borrowings and foreign currency forward contracts, to hedge the foreign currency exposures of our net investment in certain foreign subsidiaries, primarily in the European Union. Based on a hypothetical decrease or increase of 10% in the value of the U.S. dollar against the Euro, the estimated fair value of the Company's foreign currency forward contracts would change by approximately $7 million. However, any change in the value of the contracts, real or hypothetical, would be significantly offset by a corresponding change in the value of the underlying hedged items.

We use derivative instruments as part of our interest rate risk management strategy. The derivative instruments used are comprised of fixed to variable rate interest rate swaps based on the LIBOR plus an interest mark up and interest rate swaps to hedge the anticipated issuance of fixed rate debt. The notional amount, interest payment and maturity date of the swaps match the principal, interest payment and maturity date of the related debt and the swaps are valued using observable benchmark rates. Based on a hypothetical decrease or increase of one percentage point in LIBOR, the estimated fair value of the Company's interest rate swaps would change by less than $10 million.

At December 31, 2016, the fair value of our fixed rate debt was $1.4 billion. Based on a hypothetical decrease of 10% in interest rates, the estimated fair value of the Company's fixed debt would increase by $6 million.

We purchase certain commodities, such as natural gas, electricity, petroleum based products and certain crop related items. We generally purchase these commodities based upon market prices that are established with the vendor as part of the purchase process. In general, we do not use commodity financial instruments to hedge commodity prices.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

See index to Consolidated Financial Statements on page 57. See Item 6 on page 27 for supplemental quarterly data.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.

None.

ITEM 9A. CONTROLS AND PROCEDURES.

Evaluation of Disclosure Controls and Procedures and Changes in Internal Control over Financial Reporting.

Our 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 Annual Report on Form 10-K. Based on such evaluation, our 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 Annual Report on Form 10-K.

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 Exchange Act is recorded, processed, summarized and reported within the time periods specified in the 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.

Our Chief Executive Officer and Chief Financial Officer have concluded that there have not been any changes in our internal control over financial reporting during the fourth quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management's Report on Internal Control Over Financial Reporting.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934. Our internal control over financial reporting is a process designed 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.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management assessed the effectiveness of our internal control over financial reporting as of December 30, 2016. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in its 2013 *Internal Control — Integrated Framework*.

Based on this assessment, management determined that, as of December 30, 2016, our internal control over financial reporting was effective.

PricewaterhouseCoopers LLP, our independent registered public accounting firm, has audited the effectiveness of our internal control over financial reporting as of December 30, 2016 as stated in their report which is included herein.

ITEM 9B. OTHER INFORMATION.

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.

The information relating to directors and nominees of the Company is set forth in the IFF 2017 Proxy Statement and is incorporated by reference herein. The information relating to Section 16(a) beneficial ownership reporting compliance that appears in the IFF 2017 Proxy Statement is also incorporated by reference herein. See Part I, Item 1 of this Form 10-K for information relating to the Company's Executive Officers.

We have adopted a Code of Business Conduct and Ethics (the "Code of Ethics") that applies to all of our employees, including our chief executive officer and our chief financial officer (who is also our principal accounting officer). We have also adopted a Code of Conduct for Directors and a Code of Conduct for Executive Officers (together with the Code of Ethics, the "Codes"). The Codes are available through the Investors — Corporate Governance link on our website *www.iff.com*.

Only the Board of Directors or the Audit Committee of the Board may grant a waiver from any provision of our Codes in favor of a director or executive officer, and any such waiver will be publicly disclosed. We will disclose substantive amendments to and any waivers from the Codes provided to our chief executive officer and principal financial officer (principal accounting officer), as well as any other executive officer or director, on the Company's website: *www.iff.com*.

The information regarding the Company's Audit Committee and its designated audit committee financial experts is set forth in the IFF 2017 Proxy Statement and such information is incorporated by reference herein.

The information concerning procedures by which shareholders may recommend director nominees is set forth in the IFF 2017 Proxy Statement and such information is incorporated by reference herein.

ITEM 11. EXECUTIVE COMPENSATION.

The information relating to executive compensation and the Company's policies and practices as they relate to the Company's risk management is set forth in the IFF 2017 Proxy Statement and such information is incorporated by reference herein; except that the information under the caption "Compensation Committee Report" shall be deemed "furnished" with this report and shall not be deemed "filed" with this report, not deemed incorporated by reference into any filing under the Securities Act of 1933 except only as may be expressly set forth in any such filing by specific reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.

The information relating to security ownership of management, certain beneficial owners and the Company's equity plans is set forth in the IFF 2017 Proxy Statement and such information is incorporated by reference herein.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE.

The information regarding certain relationships and related party transactions and director independence is set forth in the IFF 2017 Proxy Statement and such information is incorporated by reference herein.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

The information regarding the independent registered public accounting firm ("independent accountant") fees and services and the Company's pre-approval policies and procedures for audit and non-audit services provided by the Company's independent accountant are set forth in the IFF 2017 Proxy Statement and such information is incorporated by reference herein.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

(a)(1) FINANCIAL STATEMENTS: The following consolidated financial statements, related notes, and independent registered public accounting firm's report are included in this report on Form 10-K:

All other schedules are omitted because they are not applicable or the required information is shown in the financial statements or notes thereto.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of International Flavors & Fragrances Inc.

In our opinion, the consolidated financial statements listed in the index appearing under item 15(a)(1) present fairly, in all material respects, the financial position of International Flavors & Fragrances Inc. and its subsidiaries at December 30, 2016 and January 1, 2016, and the results of their operations and their cash flows for each of the three years in the period ended December 30, 2016 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the index appearing under Item 15(a)(2) presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 30, 2016, based on criteria established in *Internal Control - Integrated Framework 2013* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements and financial statement schedule, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting, appearing under Item 9A. Our responsibility is to express opinions on these financial statements, on the financial statement schedule, and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP
New York, New York
February 28, 2017

INTERNATIONAL FLAVORS & FRAGRANCES INC.

CONSOLIDATED STATEMENT OF INCOME AND COMPREHENSIVE INCOME

	Year Ended December 31,		
(DOLLARS IN THOUSANDS EXCEPT PER SHARE AMOUNTS)	**2016**	**2015**	**2014**
Net sales	$ 3,116,350	$ 3,023,189	$ 3,088,533
Cost of goods sold	1,717,280	1,671,590	1,726,383
Gross profit	1,399,070	1,351,599	1,362,150
Research and development expenses	254,263	246,101	253,640
Selling and administrative expenses	566,224	494,517	507,563
Restructuring and other charges, net	(1,700)	7,594	1,298
Amortization of acquisition-related intangibles	23,763	15,040	7,328
Gain on sales of fixed assets	(10,836)	—	—
Operating profit	567,356	588,347	592,321
Interest expense	52,989	46,062	46,067
Other (income) expense, net	(9,350)	3,184	(2,807)
Income before taxes	523,717	539,101	549,061
Taxes on income	118,686	119,854	134,518
Net income	405,031	419,247	414,543
Other comprehensive income (loss):			
Foreign currency translation adjustments	(54,526)	(124,157)	(69,064)
(Losses) gains on derivatives qualifying as hedges	(1,797)	(2,970)	16,383
Pension and postretirement liability adjustment	(10,332)	54,117	(95,038)
Comprehensive income	$ 338,376	$ 346,237	$ 266,824

	2016	**2015**	**2014**
Net income per share — basic	$ 5.07	$ 5.19	$ 5.09
Net income per share — diluted	$ 5.05	$ 5.16	$ 5.06

See Notes to Consolidated Financial Statements

INTERNATIONAL FLAVORS & FRAGRANCES INC.

CONSOLIDATED BALANCE SHEET

(DOLLARS IN THOUSANDS)	December 31, 2016	December 31, 2015
ASSETS		
Current Assets:		
Cash and cash equivalents	$ 323,992	$ 181,988
Receivables:		
Trade	560,653	546,125
Allowance for doubtful accounts	(9,995)	(8,229)
Inventories	592,017	572,047
Prepaid expenses and other current assets	142,347	145,178
Total Current Assets	1,609,014	1,437,109
Property, plant and equipment, net	775,716	732,794
Goodwill	1,000,123	941,389
Other intangible assets, net	365,783	306,004
Deferred income taxes	138,636	166,323
Other assets	127,712	118,391
Total Assets	$ 4,016,984	$ 3,702,010
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current Liabilities:		
Bank borrowings, overdrafts and current portion of long-term debt	$ 258,516	$ 132,349
Accounts payable	274,815	285,501
Dividends payable	50,678	44,824
Other current liabilities	314,288	262,482
Total Current Liabilities	898,297	725,156
Other Liabilities:		
Long-term debt	1,066,855	935,373
Deferred gains	39,816	43,260
Retirement liabilities	243,407	242,383
Other liabilities	137,475	160,849
Total Other Liabilities	1,487,553	1,381,865
Commitments and Contingencies (Note 18)		
Shareholders' Equity:		
Common stock 12 $^{1}/2$¢ par value; authorized 500,000,000 shares; issued 115,858,190 shares as of December 31, 2016 and 2015; and outstanding 79,213,037 and 80,022,291 shares as of December 31, 2016 and 2015	14,470	14,470
Capital in excess of par value	152,481	140,802
Retained earnings	3,818,535	3,604,254
Accumulated other comprehensive loss:		
Cumulative translation adjustments	(352,025)	(297,499)
Accumulated gains on derivatives qualifying as hedges	7,604	9,401
Pension and postretirement liability adjustment	(335,674)	(325,342)
Treasury stock, at cost - 36,645,153 and 35,835,899 shares as of December 31, 2016 and 2015	(1,679,147)	(1,555,769)
Total Shareholders' Equity	1,626,244	1,590,317
Noncontrolling interest	4,890	4,672
Total Shareholders' Equity including noncontrolling interest	1,631,134	1,594,989
Total Liabilities and Shareholders' Equity	$ 4,016,984	$ 3,702,010

See Notes to Consolidated Financial Statements

INTERNATIONAL FLAVORS & FRAGRANCES INC.

CONSOLIDATED STATEMENT OF CASH FLOWS

	Year Ended December 31,		
(DOLLARS IN THOUSANDS)	2016	2015	2014
Cash flows from operating activities:			
Net income	$ 405,031	$ 419,247	$ 414,543
Adjustments to reconcile to net cash provided by operating activities:			
Depreciation and amortization	102,469	89,597	89,354
Deferred income taxes	14,350	13,043	23,350
Gain on disposal of assets	(10,836)	(622)	(3,768)
Stock-based compensation	24,587	23,160	22,648
Pension contributions	(46,347)	(67,897)	(43,982)
Changes in assets and liabilities, net of acquisitions:			
Trade receivables	(21,544)	(91,712)	(2,635)
Inventories	15,452	(37,628)	(40,042)
Accounts payable	(7,642)	89,273	19,403
Accruals for incentive compensation	12,133	(17,399)	(30,947)
Other current payables and accrued expenses	49,103	29,124	(30,982)
Other assets	(2,442)	46,862	64,605
Other liabilities	1,092	(61,470)	36,843
Net cash provided by operating activities	535,406	433,578	518,390
Cash flows from investing activities:			
Cash paid for acquisitions, net of cash received (including $15 million of contingent consideration related to the Aromor acquisition in 2014)	(236,836)	(493,424)	(102,500)
Additions to property, plant and equipment	(126,412)	(101,030)	(143,182)
Proceeds from disposal of assets	6,856	4,302	3,295
Maturity of net investment hedges	637	12,128	3,304
Proceeds from life insurance contracts	292	868	17,750
Net cash used in investing activities	(355,463)	(577,156)	(221,333)
Cash flows from financing activities:			
Cash dividends paid to shareholders	(184,897)	(158,870)	(133,239)
Increase (decrease) in revolving credit facility borrowings and overdrafts	(134,344)	136,826	8,332
Proceeds from issuance of long-term debt	555,559	—	3,609
Deferred financing costs	(5,788)	—	(1,023)
Repayments of debt	(125,000)	—	—
Loss on pre-issuance hedges	(3,244)	—	—
Proceeds from issuance of stock under stock plans	813	886	1,864
Excess tax benefits on stock-based payments	4,650	12,055	6,330
Purchase of treasury stock	(127,443)	(122,193)	(88,203)
Net cash used in financing activities	(19,694)	(131,296)	(202,330)
Effect of exchange rate changes on cash and cash equivalents	(18,245)	(21,711)	(21,659)
Net change in cash and cash equivalents	142,004	(296,585)	73,068
Cash and cash equivalents at beginning of year	181,988	478,573	405,505
Cash and cash equivalents at end of year	$ 323,992	$ 181,988	$ 478,573
Cash paid for:			
Interest, net of amounts capitalized	$ 50,576	$ 46,760	$ 46,106
Income taxes	$ 107,898	$ 102,734	$ 92,087
Noncash investing activities:			
Accrued capital expenditures	$ 26,049	$ 26,030	$ 14,376

See Notes to Consolidated Financial Statements

INTERNATIONAL FLAVORS & FRAGRANCES INC.
CONSOLIDATED STATEMENT OF SHAREHOLDERS' EQUITY

(DOLLARS IN THOUSANDS)	Common stock	Capital in excess of par value	Retained earnings	Accumulated other comprehensive (loss) income	Treasury stock Shares	Treasury stock Cost	Non-controlling interest	Total
Balance at December 31, 2013	$ 14,470	$ 131,461	$ 3,075,657	$ (392,711)	(34,377,594)	$ (1,365,805)	$ 3,979	$ 1,467,051
Net income			414,543				149	414,692
Cumulative translation adjustment				(69,064)				(69,064)
Gains on derivatives qualifying as hedges; net of tax $(2,526)				16,383				16,383
Pension liability and postretirement adjustment; net of tax $36,554				(95,038)				(95,038)
Cash dividends declared ($1.72 per share)			(139,466)					(139,466)
Stock options		9,770			87,706	3,590		13,360
Treasury share repurchases					(927,339)	(88,959)		(88,959)
Vested restricted stock units and awards		(23,871)			136,627	4,953		(18,918)
Stock-based compensation		22,648						22,648
Balance at December 31, 2014	$ 14,470	$ 140,008	$ 3,350,734	$ (540,430)	(35,080,600)	$ (1,446,221)	$ 4,128	$ 1,522,689
Net income			419,247				544	419,791
Cumulative translation adjustment				(124,157)				(124,157)
Losses on derivatives qualifying as hedges; net of tax $463				(2,970)				(2,970)
Pension liability and postretirement adjustment; net of tax $(29,452)				54,117				54,117
Cash dividends declared ($2.06 per share)			(165,727)					(165,727)
Stock options		6,099			194,016	7,085		13,184
Treasury share repurchases					(1,074,210)	(121,193)		(121,193)
Vested restricted stock units and awards		(28,465)			124,895	4,560		(23,905)
Stock-based compensation		23,160			—	—		23,160
Balance at December 31, 2015	$ 14,470	$ 140,802	$ 3,604,254	$ (613,440)	(35,835,899)	$ (1,555,769)	$ 4,672	$ 1,594,989
Net income			405,031				218	405,249
Cumulative translation adjustment				(54,526)				(54,526)
Losses on derivatives qualifying as hedges; net of tax $(227)				(1,797)				(1,797)
Pension liability and postretirement adjustment; net of tax $3,049				(10,332)				(10,332)
Cash dividends declared ($2.40 per share)			(190,750)					(190,750)
Stock options		8,952			30,015	1,335		10,287
Treasury share repurchases					(1,058,018)	(127,443)		(127,443)
Vested restricted stock units and awards		(21,860)			218,749	2,730		(19,130)
Stock-based compensation		24,587			—	—		24,587
Balance at December 31, 2016	$ 14,470	$ 152,481	$ 3,818,535	$ (680,095)	(36,645,153)	$ (1,679,147)	$ 4,890	$ 1,631,134

See Notes to Consolidated Financial Statements

INTERNATIONAL FLAVORS & FRAGRANCES INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1. NATURE OF OPERATIONS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of Operations International Flavors & Fragrances Inc. and its subsidiaries (the "Registrant," "IFF," "the Company," "we," "us" and "our") is a leading creator and manufacturer of flavors and fragrances (including cosmetic active ingredients) used to impart or improve flavor or fragrance in a wide variety of consumer products. Our products are sold principally to manufacturers of perfumes and cosmetics, hair and other personal care products, soaps and detergents, cleaning products, dairy, meat and other processed foods, beverages, snacks and savory foods, sweet and baked goods, and pharmaceutical and oral care products.

Fiscal Year End The Company has historically operated on a 52/53 week fiscal year generally ending on the Friday closest to the last day of the year. For ease of presentation, December 31 is used consistently throughout the financial statements and notes to represent the period-end date. The 2016 and 2015 fiscal years were 52 week periods and the 2014 fiscal year was a 53 week period. For the 2016, 2015 and 2014 fiscal years, the actual closing dates were December 30, January 1 and January 2, respectively.

Use of Estimates The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts and accompanying disclosures. These estimates are based on management's best knowledge of current events and actions the Company may undertake in the future. Actual results may ultimately differ from estimates.

Principles of Consolidation The consolidated financial statements include the accounts of International Flavors & Fragrances Inc. and those of its subsidiaries. Significant intercompany balances and transactions have been eliminated. To the extent a subsidiary is not wholly owned, any related noncontrolling interest is included as a separate component of Shareholders' Equity. Any applicable expense (income) attributable to the noncontrolling interest is included in Other expense, net in the accompanying Consolidated Statement of Income and Comprehensive Income due to its immateriality and, as such, is not presented separately.

Revenue Recognition The Company recognizes revenue when the earnings process is complete. This generally occurs when (i) title and risk of loss have been transferred to the customer in accordance with the terms of sale and (ii) collection is reasonably assured. Sales are reduced, at the time revenue is recognized, for applicable discounts, rebates and sales allowances based on historical experience. Related accruals are included in Other current liabilities in the accompanying Consolidated Balance Sheet.

Foreign Currency Translation The Company translates the assets and liabilities of non-U.S. subsidiaries into U.S. dollars at year-end exchange rates. Income and expense items are translated at average exchange rates during the year. Cumulative translation adjustments are shown as a separate component of Shareholders' Equity.

Research and Development Research and development ("R&D") expenses relate to the development of new and improved flavors or fragrances, technical product support and compliance with governmental regulation. All research and development costs are expensed as incurred.

Cash Equivalents Cash equivalents include highly liquid investments with maturities of three months or less at date of purchase.

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 sale 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 increased approximately $34.0 million, $3.4 million and $33.1 million in 2016, 2015 and 2014, respectively. The cost of participating in these programs was immaterial to our results in all periods.

Inventories Inventories are stated at the lower of cost (on a weighted-average basis) or market. Our inventories consisted of the following:

	December 31,	
(DOLLARS IN THOUSANDS)	2016	2015
Raw materials	$ 288,629	$ 282,181
Work in process	13,792	17,450
Finished goods	289,596	272,416
Total	$ 592,017	$ 572,047

Long-Lived Assets

Property, Plant and Equipment Property, plant and equipment are recorded at cost. Depreciation is calculated on a straight-line basis, principally over the following estimated useful lives: buildings and improvements, 10 to 40 years; machinery and equipment, 3 to 20 years; information technology hardware and software, 3 to 7 years; and leasehold improvements which are included in buildings and improvements, the estimated life of the improvements or the remaining term of the lease, whichever is shorter.

Finite-Lived Intangible Assets Finite-lived intangible assets include customer relationships, patents, trade names, technological know-how and other intellectual property valued at acquisition and amortized on a straight-line basis over the following estimated useful lives: customer relationships, 11 - 24 years; patents, 10 - 15 years; trade names, approximately 30 years and technological know-how, 19 - 28 years.

The Company reviews long-lived assets for impairment when events or changes in business conditions indicate that their full carrying value may not be recovered. An estimate of undiscounted future cash flows produced by an asset or group of assets is compared to the carrying value to determine whether impairment exists. If assets are determined to be impaired, the loss is measured based on an estimate of fair value using various valuation techniques, including a discounted estimate of future cash flows.

Goodwill Goodwill represents the difference between the total purchase price and the fair value of identifiable assets and liabilities acquired in business acquisitions.

In assessing the potential for impairment of goodwill, management uses the most current actual and forecasted operating data available and current market-based assumptions in accordance with the criteria in FASB Accounting Standards Codification ("ASC") 350. The Company has identified four reporting units: (1) Flavors, (2) Fragrance Compounds, (3) Fragrance Ingredients and (4) Cosmetic Actives Ingredients. These reporting units were determined based on the level at which the performance is measured and reviewed by segment management.

The Company performs an annual goodwill impairment test utilizing the two-step approach for the Flavors, Fragrance Compounds, Fragrance Ingredients and Cosmetic Actives Ingredients reporting units, by assessing the fair value of the reporting units based on discounted cash flows. The Company completed its annual goodwill impairment test as of November 30, 2016, which indicated no impairment of goodwill, as the estimated fair values substantially exceeded the carrying values of each of these reporting units.

Income Taxes The Company accounts for taxes under the asset and liability method. Under this method, deferred income taxes are recognized for temporary differences between the financial statement and tax return bases of assets and liabilities, based on enacted tax rates and other provisions of the tax law. The effect of a change in tax laws or rates on deferred tax assets and liabilities is recognized as income in the period in which such change is enacted. Future tax benefits are recognized to the extent that the realization of such benefits is more likely than not, and a valuation allowance is established for any portion of a deferred tax asset that management believes may not be realized.

The Company recognizes uncertain tax positions that it has taken or expects to take on a tax return. Pursuant to accounting requirements, the Company first determines whether it is “more likely than not” its tax position will be sustained if the relevant tax authority were to audit the position with full knowledge of all the relevant facts and other information. For those tax positions that meet this threshold, the Company measures the amount of tax benefit based on the largest amount of tax benefit that it has a greater than 50% chance of realizing in a final settlement with the relevant authority. Those tax positions failing to qualify for initial recognition are recognized in the first interim period in which they meet the more likely than not standard. The Company maintains a cumulative risk portfolio relating to all of its uncertainties in income taxes in order to perform this analysis, but the evaluation of its tax positions requires significant judgment and estimation in part because, in certain cases, tax law is subject to varied interpretation, and whether a tax position will ultimately be sustained may be uncertain.

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

Interest and penalties related to unrecognized tax benefits are recognized as a component of income tax expense.

Retirement Benefits Current service costs of retirement plans and postretirement health care and life insurance benefits are accrued. Prior service costs resulting from plan improvements are amortized over periods ranging from 10 to 20 years.

Financial Instruments Derivative financial instruments are used to manage interest and foreign currency exposures. The gain or loss on the hedging instrument is recorded in earnings at the same time as the transaction being hedged is recorded in earnings. The associated asset or liability related to the open hedge instrument is recorded in Prepaid expenses and Other current assets or Other current liabilities, as applicable.

The Company records all derivative financial instruments on the balance sheet at fair value. Changes in a derivative's fair value are recognized in earnings unless specific hedge criteria are met. If the derivative is designated as a fair value hedge, the changes in the fair value of the derivative and of the hedged item attributable to the hedged risk are recognized in Net income. If the derivative is designated as a cash flow hedge, the effective portions of changes in the fair value of the derivative are recorded in Accumulated other comprehensive income ("AOCI") in the accompanying Consolidated Balance Sheet and are subsequently recognized in Net income when the hedged item affects earnings. Ineffective portions of changes in the fair value of cash flow hedges, if any, are recognized as a charge or credit to earnings.

Software Costs The Company capitalizes direct internal and external development costs for certain significant projects associated with internal-use software and amortizes these costs over 7 years. Neither preliminary evaluation costs nor costs associated with the software after implementation are capitalized. Costs related to projects that are not significant are expensed as incurred.

Shipping and Handling Costs Net sales include shipping and handling charges billed to customers. Cost of goods sold includes all costs incurred in connection with shipping and handling.

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

	Number of Shares		
(SHARES IN THOUSANDS)	**2016**	**2015**	**2014**
Basic	79,648	80,449	80,936
Assumed dilution under stock plans	333	442	558
Diluted	79,981	80,891	81,494

An immaterial amount of Stock-Settled Appreciation Rights ("SSARs") were excluded from the computation of diluted net income per share at December 31, 2016 and 2015. There were no stock options or SSARs excluded from the computation in 2014.

The Company has issued shares of Purchased Restricted Stock ("PRS") and Purchased Restricted Stock Units ("PRSUs") which contain nonforfeitable rights to dividends and thus are considered participating securities which are required to be included in the computation of basic and diluted earnings per share pursuant to the two-class method. The two-class method was not presented since the difference between basic and diluted net income per share for both common shareholders, PRS and PRSU holders was less than $0.01 per share for each year and the number of PRS and PRSUs outstanding as of December 31, 2016, 2015 and 2014 was immaterial. Net income allocated to such PRS and PRSUs during 2016, 2015 and 2014 was approximately $1.0 million, $2.0 million and $2.4 million, respectively.

Stock-Based Compensation Compensation cost of all stock-based awards is measured at fair value on the date of grant and recognized over the service period for which awards are expected to vest. The cost of such stock-based awards is principally recognized on a straight-line attribution basis over their respective vesting periods, net of estimated forfeitures.

New Accounting Standards

In January 2017, the Financial Accounting Standards Board ("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. This guidance may have an impact 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. Early adoption is only permitted as of the beginning of an annual reporting period. This guidance must be adopted using a modified retrospective transition. The Company plans to adopt this guidance in the first quarter of fiscal year 2017 and accordingly, will record a cumulative-effect adjustment directly to Retained earnings of approximately $47 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 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 will be effective for annual and interim periods beginning after December 15, 2016. 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 expects to adopt this change retroactively and that the impact of this aspect of the standard on the Consolidated Statement of Cash Flows will be approximately $13-$25 million on an annual basis. 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 expects to adopt this change retroactively and that the impact of this aspect of the standard on the Consolidated Statement of Cash Flows will be approximately $5-$12 million on an annual basis. The standard also requires all excess tax benefits/deficiencies be recognized as income tax expense/benefit in the income statement to be applied on a prospective basis. Depending on the future volatility of the stock price, the impact of this aspect of the standard could have a material impact on tax expense on its Consolidated Statement of Income and Comprehensive Income. 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 vest or account for forfeitures as they occur. The Company plans to continue to account for forfeitures using an estimate of awards expected to be forfeited. Lastly, the standard requires that the threshold for equity classification of awards permits withholding up to the maximum statutory tax rates in the applicable jurisdictions. The adoption of this aspect of the standard will impact future vestings.

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 Income and Comprehensive Income.

In September 2015, the FASB issued authoritative guidance related to the adjustments made during the measurement period for items in a business combination. Specifically, the new guidance requires adjustments related to the finalization of estimates to be recorded in the period when they are determined and to provide certain additional disclosures. This guidance is effective for fiscal years beginning after December 15, 2015. The Company adopted this guidance during 2016 and the adoption did not have a significant impact on its consolidated financial statements.

In May 2015, the FASB issued authoritative guidance which removed the requirement to categorize within the fair value hierarchy investments for which fair values are estimated using the net asset value practical expedient. The Company has adopted this guidance for the year ended December 31, 2016 and has reclassified prior year amounts for the year ended December 31, 2015 as disclosed in Note 14 to the Consolidated Financial Statements.

In April 2015, the FASB issued authoritative guidance which requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability. This guidance is effective for annual and interim periods beginning after December 15, 2015. The Company adopted this guidance retrospectively in 2016 and accordingly has reclassified all debt issuance costs on long-term debt as a direct deduction from the carrying amount of the debt liability in the Consolidated Balance Sheet as of December 31, 2015. The adoption of this guidance did not have a significant impact on its consolidated financial statements.

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. Adoption as of the original effective date is permitted. Accordingly, the Company is required to adopt this standard in the first quarter of fiscal year 2018. 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 have been proposed 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 the consolidated financial statements and related disclosures.

Reclassifications and Revisions

Certain prior year amounts have been reclassified and revised to conform with current year presentation.

The Consolidated Balance Sheet as of December 31, 2015, has been revised to properly reflect in-bound goods in transit. Accordingly, Inventory and Accounts payable decreased by $17.0 million. This adjustment was not material to the previously-issued financial statements.

NOTE 2. RESTRUCTURING AND OTHER CHARGES

Restructuring and other charges primarily consist of separation costs for employees including severance, outplacement and other benefit costs.

2015 Severance and Contingent Consideration Charges

During the fourth quarter of 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, in 2015, the Company recorded a pre-tax charge of $7.6 million, included in Restructuring and other charges, net, related to severance and related costs pertaining to approximately 150 positions that will be affected. During 2016, the Company made payments of $2.9 million and recorded accelerated depreciation expense of $0.7 million. In addition, during 2016, the Company recorded a credit of $1.7 million related to the reversal of severance accruals that were determined to be no longer required. The total cost of the plan is now expected to be approximately $8.8 million with the remaining charges related principally to accelerated depreciation. The Company expects the plan to be fully completed the second half of 2017.

Separately, in 2015, the Company recorded a charge of $7.2 million, included in Selling and administrative expenses, associated with the acceleration from 2016 to 2015 of contingent consideration payments from the Aromor acquisition that were triggered by certain of the management structure changes noted above.

Fragrance Ingredients Rationalization - 2014

In 2014, the Company closed its fragrance ingredients manufacturing facility in Augusta, Georgia and consolidated production into other Company facilities. In connection with this closure, the Company incurred charges of $13.8 million, consisting primarily of $10.3 million in accelerated depreciation of fixed assets, $2.2 million in personnel-related costs and $1.3 million in plant shutdown and other related costs. The Company recorded total charges of $7.4 million during 2013, consisting of $2.2 million of pre-tax charges related to severance included in Restructuring and other charges, net and $5.2 million of non-cash charges related to accelerated depreciation included in Cost of goods sold. During 2014, the Company recorded $1.3 million of plant shutdown and other related costs included in Restructuring and other charges, net as well as an additional $5.1 million of non-cash charges related to accelerated depreciation included in Cost of goods sold. As a result of this closure, 43 positions have been eliminated. During 2015, the Company recorded a net credit of $0.5 million principally related to the reversal of severance accruals.

Rollforward of Liability

Movements in related accruals during 2014, 2015 and 2016 are as follows:

(DOLLARS IN THOUSANDS)	Employee-Related	Asset - Related/and Other	Total
Balance at January 1, 2014	$ 2,116	$ —	$ 2,116
Additional charges (reversals), net	(46)	6,444	6,398
Non-cash charges	—	(5,100)	(5,100)
Payments and other costs	(1,311)	(1,344)	(2,655)
Balance at December 31, 2014	759	—	759
Additional charges (reversals), net	7,594	—	7,594
Payments and other costs	(471)	—	(471)
Balance at December 31, 2015	7,882	—	7,882
Additional charges (reversals), net	(1,700)	658	(1,042)
Non-cash charges	—	(658)	(658)
Payments and other costs	(2,905)	—	(2,905)
Balance at December 31, 2016	$ 3,277	$ —	$ 3,277

NOTE 3. ACQUISITIONS

Fragrance Resources

On January 17, 2017, the Company completed the acquisition of Fragrance Resources, a privately-held fragrance company with facilities in Germany, North America, France, and China. The acquisition will be 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 million (approximately $150.5 million) including approximately Euro 6.8 million (approximately $7.2 million) of cash acquired for this acquisition, which was funded from existing resources. Due to the limited time since closing and the fact that the purchase price allocation has not been completed, the Company has not yet calculated the actual amounts related to the assets and liabilities acquired in the Fragrance Resources transaction. As a result, certain required disclosures have not been made. The purchase price allocation is expected to be completed by the third quarter of 2017.

No pro forma financial information for 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 $242.0 million (including $5.1 million of cash acquired) for this acquisition, which was funded from existing resources. The purchase price exceeded the preliminary fair value of existing net assets by approximately $169.0 million. The excess was allocated principally to identifiable intangible assets including approximately $90.0 million related to customer relationships, approximately $8.4 million related to proprietary technology and trade name and approximately $70.7 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. Goodwill 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 and proprietary technology, up to 5 years and customer relationships, 18 - 20 years. The purchase price allocation is preliminary pending the finalization of certain procedures associated with purchase price, contractually required to be completed subsequent to December 31, 2016 as well as the finalization of the analysis associated with customer relationships and certain other assets. The purchase price allocation is expected to be completed by the first half of 2017.

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

2015 Activity

Lucas Meyer

During the third quarter of 2015, the Company completed the acquisition of 100% of the outstanding shares of Lucas Meyer Cosmetics, a business of Unipex Group ("Lucas Meyer"). The total shares acquired include shares effectively acquired pursuant to put and call option agreements. The acquisition was accounted for under the purchase method. Total consideration was approximately Euro 284.0 million ($312.1 million), including approximately $4.8 million of cash acquired. The Company paid Euro 282.1 million (approximately $309.9 million) for this acquisition, which was funded from existing resources, and recorded a liability of approximately Euro 2.0 million (approximately $2.2 million). The purchase price exceeded the fair value of existing net assets by approximately $290.1 million. The excess was allocated principally to identifiable intangible assets (approximately $156.4 million), goodwill (approximately $179.5 million) and approximately $40.1 million to deferred taxes. Goodwill is the excess of the purchase price over the fair value of net assets acquired. Goodwill represents the value the Company expects to achieve from its expansion into new segments of the industry. Separately identifiable intangible assets are principally related to customer relationships, proprietary technology and patents. The intangible assets are being amortized over the following estimated useful lives: trade names and proprietary technology, 28 years; customer relationships, 23 years; patents, 11 years; and non-solicitation agreements, 3 years. The purchase price allocation was completed during the second quarter of 2016.

No pro forma financial information for 2015 is presented as the impact of the acquisition was immaterial to the Consolidated Statement of Comprehensive Income.

Ottens Flavors

During the second quarter of 2015, the Company completed the acquisition of 100% of the outstanding shares of Henry H. Ottens Manufacturing Co., Inc. ("Ottens Flavors"). The acquisition was accounted for under the purchase method. The Company paid $198.9 million (including $10.4 million of cash acquired) for this acquisition, which was funded from existing resources. The purchase price exceeded the fair value of existing net assets by $162.1 million. The excess was allocated principally to identifiable intangible assets ($80.0 million) and goodwill ($82.1 million, which is deductible for tax purposes). Goodwill represents synergies from the addition of Ottens Flavors to the Company's existing Flavors business. Separately identifiable intangible assets are principally related to customer relationships and proprietary flavors technology. The intangible assets are being amortized using lives ranging from 5-17 years. The purchase price allocation was completed during the fourth quarter of 2015.

No pro forma financial information for 2015 is presented as the impact of the acquisition was immaterial to the Consolidated Statement of Comprehensive Income.

NOTE 4. PROPERTY, PLANT AND EQUIPMENT, NET

Property, plant and equipment consisted of the following amounts:

	December 31,	
(DOLLARS IN THOUSANDS)	**2016**	**2015**
Asset Type		
Land	$ 36,366	$ 22,896
Buildings and improvements	519,947	538,096
Machinery and equipment	1,052,114	991,746
Information technology	182,153	183,759
Construction in process	122,753	75,786
	1,913,333	1,812,283
Accumulated depreciation	(1,137,617)	(1,079,489)
	$ 775,716	$ 732,794

Depreciation expense was $78.6 million for the year ended December 31, 2016, and $74.8 million and $82.0 million for the years ended December 31, 2015 and 2014, respectively.

NOTE 5. GOODWILL AND OTHER INTANGIBLE ASSETS, NET

Goodwill

Movements in goodwill during 2014, 2015 and 2016 were as follows:

(DOLLARS IN THOUSANDS)	Goodwill
Balance at January 1, 2014	$ 665,582
Acquisitions	9,902
Balance at December 31, 2014	675,484
Acquisitions	265,905
Balance at December 31, 2015	941,389
Acquisitions	67,480
Foreign exchange	(8,746)
Balance at December 31, 2016	$ 1,000,123

Goodwill by segment was as follows:

	December 31,	
(DOLLARS IN THOUSANDS)	2016	2015
Flavors	$ 473,820	$ 401,494
Fragrances	526,303	539,895
Total	$ 1,000,123	$ 941,389

The increase reflected in Flavors above represents the preliminary purchase price allocation of David Michael as disclosed in Note 3. The decrease reflected in Fragrances above represents the impact of finalizing the purchase price allocation of Lucas Meyer as disclosed in Note 3.

Other Intangible Assets

Other intangible assets, net consisted of the following amounts:

	December 31,	
(DOLLARS IN THOUSANDS)	2016	2015
Asset Type		
Customer relationships	$ 371,270	$ 293,799
Trade names & patents	30,679	34,182
Technological know-how	119,544	112,393
Other	24,470	22,711
Total carrying value	545,963	463,085
Accumulated Amortization		
Customer relationships	(82,555)	(66,324)
Trade names & patents	(12,198)	(10,282)
Technological know-how	(68,292)	(65,258)
Other	(17,135)	(15,217)
Total accumulated amortization	(180,180)	(157,081)
Other intangible assets, net	$ 365,783	$ 306,004

Amortization expense was $23.8 million for the year ended December 31, 2016, and $15.0 million and $7.3 million for the years ended December 31, 2015 and 2014, respectively. Estimated annual amortization (excluding the recent acquisition of Fragrance Resources) is $27.7 million for the year 2017, $27.2 million for the year 2018, $26.0 million for the year 2019, $25.3 million for the year 2020 and $20.8 million for 2021.

NOTE 6. OTHER ASSETS

Other assets consisted of the following amounts:

(DOLLARS IN THOUSANDS)	December 31, 2016	2015
Overfunded pension plans	$ 4,343	$ 4,906
Cash surrender value of life insurance contracts	43,425	41,957
Other	79,944	71,528
Total	$ 127,712	$ 118,391

NOTE 7. OTHER CURRENT LIABILITIES

Other current liabilities consisted of the following amounts:

(DOLLARS IN THOUSANDS)	December 31, 2016	2015
Accrued payrolls and bonuses	$ 64,357	$ 48,843
VAT payable	15,567	10,241
Interest payable	17,173	12,515
Current pension and other postretirement benefit obligation	10,630	10,620
Accrued insurance (including workers' compensation)	10,798	10,857
Restructuring and other charges	3,277	7,882
Litigation accrual	55,000	5,000
Other	137,486	156,524
Total	$ 314,288	$ 262,482

NOTE 8. SALE AND LEASEBACK TRANSACTIONS

In connection with the disposition of certain real estate in prior years, the Company entered into long-term operating leases. The leases are classified as operating leases and the gains realized on these leases have been deferred and are being credited to income over the initial lease term. Such deferred gains totaled $35.6 million and $38.4 million at December 31, 2016 and 2015, respectively, of which $32.4 million and $35.2 million, respectively, are reflected in the accompanying Consolidated Balance Sheet under Deferred gains, with the remainder included as a component of Other current liabilities.

NOTE 9. BORROWINGS

Debt consisted of the following at December 31:

(DOLLARS IN THOUSANDS)	Rate	Maturities	2016	2015
Senior notes — 2006 [1]	6.14%	2016	$ —	$ 124,964
Senior notes — 2007 [1]	6.40%	2017-27	499,676	499,618
Senior notes — 2013 [1]	3.20%	2023	297,986	297,683
Euro Senior notes - 2016 [1]	1.75%	2024	512,764	—
Credit facilities	1.13%	2019	—	131,196
Bank overdrafts and other			13,599	10,982
Deferred realized gains on interest rate swaps			1,346	3,279
			1,325,371	1,067,722
Less: Bank borrowings, overdrafts and current portion of long-term debt			(258,516)	(132,349)
			$ 1,066,855	$ 935,373

[1] Amount is net of unamortized discount and debt issuance costs.

Euro Senior Notes - 2016

On March 14, 2016, the Company issued Euro 500.0 million face amount of 1.75% Senior Notes ("Euro Senior Notes - 2016") due 2024 at a discount of Euro 0.9 million. The Company received proceeds related to the issuance of these Euro Senior Notes - 2016 of Euro 496.0 million which was net of the Euro 0.9 million discount and Euro 3.1 million underwriting discount (recorded as deferred financing costs). In addition, the Company incurred $1.3 million of other deferred financing costs in connection with the debt issuance. In connection with the debt issuance, the Company entered into pre-issuance hedging transactions that were settled upon issuance of the debt and resulted in a loss of approximately $3.2 million. The discount, deferred financing costs and pre-issuance hedge loss are being amortized as interest expense over the eight year term of the debt. The Euro Senior Notes - 2016 bear interest at a rate of 1.75% per annum, with interest payable on March 14 of each year, commencing on March 14, 2017. The Euro Senior Notes - 2016 will mature on March 14, 2024.

Upon 30 days' notice to holders of the Euro Senior Notes - 2016 , the Company may redeem the Euro Senior Notes - 2016 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 Euro Senior Notes - 2016. However, no make-whole premium will be paid for redemptions of the Euro Senior Notes - 2016 on or after December 14, 2023. 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 Euro Senior Notes - 2016 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 Notes at a price equal to 101% of the principal amount of the Euro Senior Notes - 2016, plus accrued and unpaid interest to the date of repurchase.

As discussed in Note 15, the Euro Senior Notes - 2016 have been designated as a hedge of the Company's net investment in certain subsidiaries.

Senior Notes - 2013

On April 4, 2013, the Company issued $300.0 million face amount of 3.20% Senior Notes ("Senior Notes - 2013") due 2023 at a discount of $0.3 million. The Company received proceeds related to the issuance of these Senior Notes - 2013 of $297.8 million which was net of the $0.3 million discount and a $1.9 million underwriting discount (recorded as deferred financing costs). In addition, the Company incurred $0.9 million of other deferred financing costs in connection with the debt issuance. The discount and deferred financing costs are being amortized as interest expense over the term of the Senior Notes - 2013. The Senior Notes - 2013 bear interest at a rate of 3.20% per year, with interest payable on May 1 and November 1 of each year, commencing on November 1, 2013. The Senior Notes - 2013 mature on May 1, 2023. Upon 30 days' notice to holders of the Senior Notes - 2013, the Company may redeem the Senior Notes - 2013 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. However, no make-whole premium will be paid for redemptions of the Senior Notes - 2013 on or after February 1, 2023. 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, to enter into sale-leaseback transactions or to consolidate with or merge into any other entity or convey, transfer or lease all or substantially all of the Company's properties and assets. 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 - 2013 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 - 2013 at a price equal to 101% of the principal amount of the Senior Notes - 2013, plus accrued and unpaid interest to the date of repurchase.

Senior Notes - 2007

On September 27, 2007, the Company issued $500 million of Senior Unsecured Notes ("Senior Notes - 2007") in four series under the Note Purchase Agreement ("NPA"): (i) $250 million in aggregate principal amount of 6.25% Series A Senior Notes due September 27, 2017, (ii) $100 million in aggregate principal amount of 6.35% Series B Notes due September 27, 2019, (iii) $50 million in aggregate principal amount of 6.50% Series C Notes due September 27, 2022, and (iv) $100 million in aggregate principal amount of 6.79% Series D Notes due September 27, 2027.

Senior Notes - 2006

In 2006, the Company issued $375 million of Senior Unsecured Notes ("Senior Notes - 2006") in four series under another NPA: (i) $50 million in aggregate principal amount of 5.89% Series A Senior Notes due July 12, 2009, (ii) $100 million in aggregate principal amount of 5.96% Series B Notes due July 12, 2011, (iii) $100 million in aggregate principal amount of 6.05% Series C Notes due July 12, 2013, and (iv) $125 million in aggregate principal amount of 6.14% Series D Notes due July 12, 2016.

In 2009, 2011 and 2013, the Company repaid $50 million, $100 million and $100 million, respectively, upon maturity of the first three series. In 2016, the Company made a final payment of $125.0 million on the last series of the Senior Notes - 2006.

Total Senior Notes Outstanding

Maturities on the outstanding Euro Senior Notes - 2016, Senior Notes - 2013 and Senior Notes - 2007 at December 31, 2016 were: 2017, $250 million; 2019, $100 million; 2022 and thereafter, $970.5 million. There is no debt maturing in 2018, 2020 or 2021.

The estimated fair value at December 31, 2016 of the Euro Senior Notes - 2016, Senior Notes - 2013 and Senior Notes - 2007 was approximately $546.0 million, $302.4 million and $556.2 million, respectively, and is discussed in further detail in Note 15.

Credit Facility

On December 2, 2016, the Company and certain of its subsidiaries amended and restated the Company's existing amended and restated credit agreement with Citibank, N.A., as administrative agent, last amended and restated on April 4, 2014 (the "Credit Facility"), to, among other things (i) modify the available tranches of the revolving loan facility provided under the Credit Facility, (ii) extend the maturity date of the Credit Facility until December 2, 2021 and (iii) increase the Company's required ratio of Net Debt to Consolidated EBITDA under the Facility from 3.25 to 1.0 to 3.50 to 1.0. Tranche A of the Credit Facility is now available to borrowers in U.S. dollars, euros, Swiss francs, Japanese yen and British sterling in an aggregate amount up to an equivalent of approximately $564.1 million, with a sublimit of $25 million for swing line borrowings. Tranche B of the Credit Facility is now available to borrowers in U.S. dollars, euros, Swiss francs, Japanese yen and British sterling in an aggregate amount up to an equivalent of approximately $385.9 million, with sublimits of €50 million and $25 million for swing line borrowings.

The Credit Facility is available for general corporate purposes of each borrower and its subsidiaries. The obligations under the Credit Facility are unsecured and the Company has guaranteed the obligations of each other borrower under the Credit Facility. Borrowings under the Credit Facility bear interest at an annual rate of LIBOR plus a margin, currently 112.5 bps, linked to the Company's credit rating. The Company pays a commitment fee on the aggregate unused commitments; such fee is not material. The Credit Facility contains various affirmative and negative covenants, including the requirement for the Company to maintain, at the end of each fiscal quarter, a ratio of net debt for borrowed money to adjusted EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortization) in respect of the previous 12-month period of not more than 3.50 to 1. As of December 31, 2016, the Company was in compliance with all covenants under this Credit Facility. The Company had no borrowings outstanding under the Credit Facility as of December 31, 2016, with $950 million still available for additional borrowings. As the Credit Facility is a multi-year revolving credit agreement, the Company classifies as long-term debt the portion that it has the intent and ability to maintain outstanding longer than 12 months.

During the first quarter of 2016, the Company repaid the full amount outstanding under the credit facility ($131.2 million).

Short term borrowings, including the current portion of the Senior Notes - 2007, commercial paper, the Credit Facility borrowings and bank overdrafts, were outstanding in several countries and averaged $162.4 million in 2016 and $203.0 million in 2015. The highest levels were $289.3 million in 2016, $415.4 million in 2015, and $8.8 million in 2014. The 2016 weighted average interest rate of these borrowings, based on balances outstanding at the end of each month, was 5.17% compared to 2.67% and 4.13%, respectively, in 2015 and 2014.

Commercial Paper

Commercial paper issued by the Company generally has terms of 30 days or less. During 2016, the Company issued approximately $65 million of commercial paper, which was fully repaid by December 31, 2016. As of December 31, 2016, there was no commercial paper outstanding. The Company did not issue commercial paper during 2015.

Subsequent to December 31, 2016, the Company issued approximately $87.5 million of commercial paper.

Other

During 2013, the Company entered into multiple interest rate swap agreements effectively converting the fixed rate on a portion of certain of the long-term senior notes to a variable short-term rate based on the LIBOR plus an interest markup.

In March 2008, the Company realized an $18 million gain on the termination of an interest rate swap, which has been deferred and is being amortized as a reduction to interest expense over the remaining term of the related debt. The balance of this deferred gain was $1.3 million at December 31, 2016.

NOTE 10. INCOME TAXES

Earnings before income taxes consisted of the following:

	December 31,		
(DOLLARS IN THOUSANDS)	2016	2015	2014
U.S. income before taxes	$ 9,078	$ 29,792	$ 17,650
Foreign income before taxes	514,639	509,309	531,411
Total income before taxes	$ 523,717	$ 539,101	$ 549,061

The income tax provision consisted of the following:

	December 31,		
(DOLLARS IN THOUSANDS)	2016	2015	2014
Current			
Federal	$ (2,920)	$ 7,648	$ 1,175
State and local	1,383	199	264
Foreign	105,873	98,964	109,729
	104,336	106,811	111,168
Deferred			
Federal	8,838	14,379	20,795
State and local	(631)	399	113
Foreign	6,143	(1,735)	2,442
	14,350	13,043	23,350
Total income taxes	$ 118,686	$ 119,854	$ 134,518

Effective Tax Rate Reconciliation

A reconciliation between the U.S. federal statutory income tax rate to the actual effective tax rate was as follows:

	December 31,		
	2016	2015	2014
Statutory tax rate	35.0 %	35.0 %	35.0 %
Difference in effective tax rate on foreign earnings and remittances	(12.2)	(10.7)	(9.9)
Unrecognized tax benefit, net of reversals	0.6	(0.8)	0.8
Spanish tax charges	—	(0.4)	—
Spanish dividend withholdings	—	—	(0.7)
State and local taxes	0.1	0.1	0.1
Other, net	(0.8)	(1.0)	(0.8)
Effective tax rate	22.7 %	22.2 %	24.5 %

The effective tax rate reflects the benefit from having significant operations outside the U.S. that are taxed at rates that are lower than the U.S. federal rate of 35%. Included in the 2015 effective tax rate was a $10.5 million benefit related to favorable tax rulings in Spain and another jurisdiction for which reserves were previously recorded. Included in the 2014 effective tax rate was a $3.8 million tax benefit related to the reserve reversal for the 2001 Spanish dividend withholding tax case. The 2016, 2015 and 2014 effective tax rates were also favorably impacted by the reversals of liabilities for uncertain tax positions of $7.5 million, $2.8 million and $2.3 million, respectively, principally due to statutory expiry and effective settlement.

Deferred Taxes

The deferred tax assets consisted of the following amounts:

(DOLLARS IN THOUSANDS)	December 31, 2016	December 31, 2015
Employee and retiree benefits	$ 132,638	$ 132,379
Credit and net operating loss carryforwards[1]	186,062	183,594
Trademarks and other[2]	1,406	143,727
Amortizable R&D expenses[2]	4,040	56,091
Other, net	(2,783)	10,076
Gross deferred tax assets	321,363	525,867
Property, plant and equipment, net	(17,000)	(11,337)
Trademarks and other	(55,899)	(72,710)
Gross deferred tax liabilities	(72,899)	(84,047)
Valuation allowance[1][2]	(152,752)	(339,395)
Total net deferred tax assets	$ 95,712	$ 102,425

(1) During 2016 and 2015, the Company increased its deferred tax assets by $7.6 million and by $10.0 million, respectively, relating to an adjustment to the 2015 and 2014 foreign net operating loss carryforwards, respectively. The entire adjustments of $7.6 million and $10.0 million were offset by corresponding adjustments in valuation allowances. These adjustments are not considered material to the previously issued financial statements.

(2) The Company executed a legal entity restructuring that resulted in a significant reduction of fully valued deferred tax assets.

Net operating loss carryforwards were $149.1 million and $144.1 million at December 31, 2016 and 2015, respectively. If unused, $4.9 million will expire between 2017 and 2036. The remainder, totaling $144.2 million, may be carried forward indefinitely. Tax credit carryforwards were $42.8 million and $42.0 million at December 31, 2016 and 2015, respectively. If unused, the credit carryforwards will expire between 2017 and 2036.

The U.S. consolidated group has historically generated taxable income after the inclusion of foreign dividends. As such, the Company is not in a federal net operating loss position. This allows IFF and its U.S. subsidiaries to realize tax benefits from the reversal of temporary differences and the utilization of its federal tax credits before the expiration of the applicable carryforward periods. The Company has not factored any future trends, other than inflation, in its U.S. taxable income projections. The corresponding U.S. federal taxable income is sufficient to realize $102 million in deferred tax assets as of December 31, 2016.

The majority of states in the U.S. where IFF and its subsidiaries file income tax returns allow a 100% foreign dividend exclusion, effectively converting the domestic companies' reversing temporary differences into net operating losses. As there is significant doubt with respect to realizability of these net operating losses, the Company has established a full valuation allowance against these deferred tax assets.

Of the $191.9 million deferred tax asset for net operating loss carryforwards and credits at December 31, 2016, the Company considers it unlikely that a portion of the tax benefit will be realized. Accordingly, a valuation allowance of $142.6 million of net operating loss carryforwards and $9.4 million of tax credits has been established against these deferred tax assets, respectively. In addition, due to realizability concerns, the Company established a valuation allowance against certain other net deferred tax assets of $3.2 million.

Uncertain Tax Positions

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

(DOLLARS IN THOUSANDS)	December 31, 2016	2015	2014
Balance of unrecognized tax benefits at beginning of year	$ 24,198	$ 23,055	$ 21,553
Gross amount of increases in unrecognized tax benefits as a result of positions taken during a prior year	1,254	18	1,795
Gross amount of decreases in unrecognized tax benefits as a result of positions taken during a prior year	(3)	(43)	(823)
Gross amount of increases in unrecognized tax benefits as a result of positions taken during the current year	8,131	12,011	5,378
The amounts of decreases in unrecognized benefits relating to settlements with taxing authorities	(6,075)	(10,221)	—
Reduction in unrecognized tax benefits due to the lapse of applicable statute of limitation	(1,077)	(622)	(4,848)
Balance of unrecognized tax benefits at end of year	$ 26,428	$ 24,198	$ 23,055

At December 31, 2016, 2015 and 2014, there were $19.1 million, $24.2 million, and $22.3 million, respectively, of unrecognized tax benefits recorded to Other liabilities and $7.3 million and $0.7 million recorded to Other current liabilities for 2016 and 2014, respectively. If these unrecognized tax benefits were recognized, all the benefits and related interest would be recorded as a benefit to income tax expense.

For the year ended December 31, 2016, the Company increased its liabilities for interest and penalties by $0.3 million, net, and reduced its liabilities by $1.4 million, net, and $0.1 million, net for the years ended 2015 and 2014, respectively, principally due to payments made pursuant to the Spanish tax settlement, as discussed below. At December 31, 2016, 2015 and 2014, the Company had accrued $0.8 million, $0.8 million and $1.7 million, respectively, of interest and penalties classified as Other liabilities and $0.3 million and $0.5 million in 2016 and 2014, respectively, recorded to Other current liabilities.

As of December 31, 2016, the Company’s aggregate provision for uncertain tax positions, including interest and penalties, was $27.5 million, associated with various tax positions asserted in foreign jurisdictions, none of which is individually material.

Other

Tax benefits credited to Shareholders’ equity totaled $0.2 million in each of the years ended December 31, 2016, 2015 and 2014 associated with stock option exercises and PRSU dividends.

U.S. income taxes and foreign withholding taxes associated with the repatriation of earnings of its foreign subsidiaries were not provided on a cumulative total of $1.9 billion of undistributed earnings of foreign subsidiaries. The Company intends to, and has plans to, reinvest these earnings indefinitely in the Company's foreign subsidiaries to fund local operations and/or capital projects. The unrecognized deferred tax liability on these undistributed earnings approximates $344 million.

The Company has ongoing income tax audits and legal proceedings which are at various stages of administrative or judicial review, of which the material items are discussed below. In addition, the Company has other ongoing tax audits and legal proceedings that relate to indirect taxes, such as value-added taxes, capital tax, sales and use and property taxes, which are discussed in Note 18.

The Company also has several other tax audits in process and has open tax years with various taxing jurisdictions that range primarily from 2006 to 2015. Based on currently available information, the Company does 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 its financial position.

NOTE 11. SHAREHOLDERS’ EQUITY

Dividends

Cash dividends declared per share were $2.40, $2.06 and $1.72 in 2016, 2015 and 2014, respectively. The Consolidated Balance Sheet reflects $50.7 million of dividends payable at December 31, 2016. This amount relates to a cash dividend of $0.64 per share declared in December 2016 and paid in January 2017. Dividends declared, but not paid as of December 31, 2015 and December 31, 2014 were $44.8 million ($0.56 per share) and $38.0 million ($0.47 per share), respectively.

Share Repurchases

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 $109.3 million available under the repurchase program, approximately 0.9 million shares, or 1.2% of shares outstanding (based on the market price and shares outstanding as of December 31, 2016) could be repurchased under the program as of December 31, 2016. During the year ended December 31, 2016, the Company repurchased 1.1 million shares on the open market at an aggregate cost of $127.4 million or an average of $120.45 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. This plan expires on December 31, 2017.

NOTE 12. STOCK COMPENSATION PLANS

The Company has various equity plans under which its officers, senior management, other key employees and Board of Directors may be granted options to purchase IFF common stock or other forms of stock-based awards. Beginning in 2004, the Company granted Restricted Stock Units ("RSUs") as the principal element of its equity compensation for all eligible U.S.-based employees and a majority of eligible overseas employees. Vesting of the RSUs is solely time based; the vesting period is primarily 3 years from date of grant. For a small group of employees, primarily overseas, the Company granted stock options prior to 2008.

The cost of all employee stock-based awards are principally recognized on a straight-line attribution basis over their respective vesting periods, net of estimated forfeitures. Total stock-based compensation expense included in the Consolidated Statement of Income and Comprehensive Income was as follows:

	December 31,		
(DOLLARS IN THOUSANDS)	**2016**	**2015**	**2014**
Equity-based awards	$ 24,587	$ 23,160	$ 22,648
Liability-based awards	3,884	4,784	4,354
Total stock-based compensation	28,471	27,944	27,002
Less tax benefit	(7,375)	(8,348)	(8,018)
Total stock-based compensation, net of tax	$ 21,096	$ 19,596	$ 18,984

The shareholders of the Company approved the Company's 2015 Stock Award and Incentive Plan (the "2015 Plan") on May 6, 2015. The 2015 Plan replaced the Company's 2010 Stock Award and Incentive Plan (the "2010 Plan") and provides the source for future deferrals of cash into deferred stock under the Company's Deferred Compensation Plan (with the Deferred Compensation Plan being deemed a subplan under the 2015 Plan for the sole purpose of funding deferrals under the IFF Share Fund).

Under the 2015 Plan, a total of 1,500,000 shares are authorized for issuance in addition to 1,552,694 shares remaining available under the 2010 plan that were rolled into the 2015 Plan. At December 31, 2016, 853,746 shares were subject to outstanding awards and 2,715,923 shares remained available for future awards under all of the Company's equity award plans, including the 2015 Plan (excluding shares not yet issued under open cycles of the Company's Long-Term Incentive Plan).

The Company offers a Long-Term Incentive Plan ("LTIP") for senior management. The targeted payout is 50% cash and 50% IFF common stock at the end of the three-year cycle and provides for segmentation in which one-fourth of the award vests during each twelve-month period, with the final one-fourth segment vesting over the full three-year period. Grants under the LTIP are currently earned upon achievement of defined Economic Profit ("EP") targets and the Company's performance ranking of Total Shareholder Return as a percentile of the S&P 500 ("Relative TSR"). EP measures operating profitability after considering (i) all operating costs, (ii) income taxes and (iii) a charge for the capital employed in the business. When the award is granted, 50% of the target dollar value of the award is converted to a number of "notional" shares based on the closing price at the beginning of the cycle. For those shares whose payout is based on Relative TSR, compensation expense is recognized using a graded-vesting attribution method, while compensation expense for the remainder of the performance shares (EP targets) is recognized on a straight-line basis over the vesting period based on the probable outcome of the performance condition.

The 2012-2014 cycle concluded at the end of 2014 and an aggregate 90,062 shares of common stock were issued in March 2015. The 2013-2015 cycle concluded at the end of 2015 and an aggregate 73,134 shares of common stock were issued in March 2016. The 2014-2016 cycle concluded at the end of 2016 and an aggregate 47,267 shares of common stock will be issued in March 2017.

In 2006, the Board of Directors approved the Equity Choice Program (the "Program") for senior management. This program continues under the 2015 Plan. Eligible employees can choose from among three equity alternatives and will be granted such equity awards up to certain dollar awards depending on the participant's employment grade level. A participant may choose among (1) SSARs, (2) RSUs or (3) PRSUs.

SSARs and Options

SSARs granted become exercisable on the third anniversary of the grant date and have a maximum term of 7 years. An immaterial amount of SSARS was granted in 2015. No SSARs were granted in 2016 or 2014. No stock options were granted in 2016, 2015 or 2014.

SSARs and options activity was as follows:

(SHARE AMOUNTS IN THOUSANDS)	Shares Subject to SSARs/Options	Weighted Average Exercise Price	SSARs/ Options Exercisable
Balance at December 31, 2015	38	$ 52.10	38
Exercised	(17)	46.72	
Cancelled	(2)	41.16	
Balance at December 31, 2016	19	$ 59.14	18

The weighted average exercise price of SSARs and options exercisable at December 31, 2016, 2015 and 2014 were $58.24, $52.10 and $47.92, respectively.

SSARs and options outstanding at December 31, 2016 was as follows:

Price Range	Number Outstanding (in thousands)	Weighted Average Remaining Contractual Life (in years)	Weighted Average Exercise Price	Aggregate Intrinsic Value (in thousands)
$51 – $60	10	1.12	$ 55.09	
$61 – $65	8	1.42	62.13	
Over $65	1	5.35	118.10	
	19		$ 59.14	$ 1,112

SSARs and options exercisable as of December 31, 2016 was as follows:

Price Range	Number Exercisable (in thousands)	Weighted Average Remaining Contractual Life (in years)	Weighted Average Exercise Price	Aggregate Intrinsic Value (in thousands)
$51 – $60	10	1.12	$ 55.09	
$61 - $65	8	1.42	62.13	
	18		$ 58.24	$ 1,112

The total intrinsic value of options/SSARs exercised during 2016, 2015 and 2014 totaled $1.3 million, $7.3 million and $7.5 million, respectively.

As of December 31, 2016, there was less than $0.1 million of total unrecognized compensation cost related to non-vested SSARs granted; such cost is expected to be recognized over a period of 1.27 years.

Restricted Stock Units

The Company has granted RSUs to eligible employees and Board of Directors. Such RSUs are subject to forfeiture if certain conditions are not met. RSUs principally vest 100% at the end of 3 years and contain no performance criteria provisions. An RSU's fair value is calculated based on the market price of the Company's stock at date of grant, with an adjustment to reflect the fact that such awards do not participate in dividend rights. The aggregate fair value is amortized to expense ratably over the vesting period.

RSU activity was as follows:

(SHARE AMOUNTS IN THOUSANDS)	Number of Shares	Weighted Average Grant Date Fair Value Per Share
Balance at December 31, 2015	480	$ 93.33
Granted	183	113.76
Vested	(192)	78.44
Forfeited	(27)	106.62
Balance at December 31, 2016	444	$ 107.43

The total fair value of RSUs that vested during the year ended December 31, 2016 was $22.8 million.

As of December 31, 2016, there was $21.3 million of total unrecognized compensation cost related to non-vested RSUs granted under the equity incentive plans; such cost is expected to be recognized over a weighted average period of 1.9 years.

Purchased Restricted Stock and Purchased Restricted Stock Units

In 2014, the grant of awards under the Equity Choice program provided for eligible employees to purchase restricted shares of IFF common stock and deposit them into an escrow account. For each share deposited in escrow by the eligible employee, the Company matched with a grant of a share of restricted stock or, for non-U.S. participants, a restricted stock unit. The shares of restricted stock and restricted stock units generally vest on the third anniversary of the grant date, are subject to continued employment and other specified conditions and pay dividends if and when paid by the Company. Holders of restricted stock have, in most instances, all of the rights of stockholders, except that they may not sell, assign, pledge or otherwise encumber such shares. The PRSUs provide no such rights. During 2015, the Company modified the program so that all participants, including U.S. participants, began to receive a restricted stock unit instead of a share of restricted stock. Restricted stock units pay dividend equivalents and do not have voting rights. The Company issued 58,629 shares of PRSUs in 2016 for an aggregate purchase price of $7.0 million covering 29,315 purchased shares, 52,577 and 14,622 shares of PRS and PRSUs, respectively, in 2015 for $6.2 million and $1.7 million, respectively, covering 33,600 purchased shares and 99,091 shares of PRS in 2014 for $9.7 million covering 49,545 purchased shares.

PRS and PRSU activity was as follows:

(SHARE AMOUNTS IN THOUSANDS)	Number of Shares	Weighted Average Grant Date Fair Value Per Share
Balance at December 31, 2015	234	$ 95.48
Granted	59	119.81
Vested	(91)	75.87
Forfeited	(4)	114.91
Balance at December 31, 2016	198	$ 110.62

The total fair value of PRS and PRSUs that vested during the year ended December 31, 2016 was $10.2 million.

As of December 31, 2016, there was $8.3 million of total unrecognized compensation cost related to non-vested PRS and PRSUs granted under the equity incentive plans; such cost is expected to be recognized over a weighted average period of 1.8 years.

Liability Awards

The Company has granted cash-settled RSUs ("Cash RSUs") to eligible employees that are paid out 100% in cash upon vesting. Such RSUs are subject to forfeiture if certain conditions are not met. Cash RSUs principally vest 100% at the end of three years and contain no performance criteria provisions. A Cash RSU's fair value is calculated based on the market price of the Company's stock at the date of the closing period and is accounted for as a liability award. The aggregate fair value is amortized to expense ratably over the vesting period.

Cash RSU activity was as follows:

(SHARE AMOUNTS IN THOUSANDS)	Cash RSUs	Weighted Average Fair Value Per Share
Balance at December 31, 2015	99	$ 119.64
Granted	33	117.83
Vested	(33)	129.53
Forfeited	(3)	130.89
Balance at December 31, 2016	96	$ 117.83

The total fair value of Cash RSUs that vested during the year ended December 31, 2016 was $3.9 million.

As of December 31, 2016, there was $4.9 million of total unrecognized compensation cost related to non-vested Cash RSUs granted under the equity incentive plans; such cost is expected to be recognized over a weighted average period of 1.8 years. The aggregate compensation cost will be adjusted based on changes in the Company's stock price.

NOTE 13. SEGMENT INFORMATION

The Company is organized into two operating segments, Flavors and Fragrances; these segments align with the internal structure used to manage these businesses. Flavor compounds are sold to the food and beverage industries for use in consumer products such as prepared foods, beverages, dairy, food and sweet products. Fragrances is comprised of (1) Fragrance Compounds, which are ultimately used by our customers in two broad categories: Fine Fragrances, including perfumes and colognes, and Consumer Fragrances, including fragrance compounds for personal care (e.g., soaps), household products (e.g., detergents and cleaning agents) and beauty care, including toiletries; (2) Fragrance Ingredients, consisting of synthetic and natural ingredients that can be combined with other materials to create unique fine fragrance and consumer compounds; and (3) Cosmetic Active Ingredients, consisting of active and functional ingredients, botanicals and delivery systems to support our customers' cosmetic and personal care product lines. Major fragrance customers include the cosmetics industry, including perfume and toiletries manufacturers, and the household products industry, including manufacturers of soaps, detergents, fabric care, household cleaners and air fresheners.

The Company's Chief Operating Decision Maker evaluates the performance of these operating segments based on segment profit which is defined as operating profit before Restructuring, global expenses (as discussed below) and certain non-recurring items, Interest expense, Other income (expense), net and Taxes on income.

The Global expenses caption represents corporate and headquarter-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. Unallocated assets are principally cash and cash equivalents and other corporate and headquarter-related assets.

Reportable segment information is as follows:

(DOLLARS IN THOUSANDS)	December 31, 2016	2015	2014
Net sales			
Flavors	$ 1,496,525	$ 1,442,951	$ 1,457,055
Fragrances	1,619,825	1,580,238	1,631,478
Consolidated	$ 3,116,350	$ 3,023,189	$ 3,088,533

(DOLLARS IN THOUSANDS)	December 31, 2016	2015
Segment assets		
Flavors	$ 1,780,695	$ 1,604,623
Fragrances	1,925,642	1,975,002
Global assets	310,647	122,385
Consolidated	$ 4,016,984	$ 3,702,010

(DOLLARS IN THOUSANDS)	December 31, 2016	2015	2014
Segment profit:			
Flavors	$ 337,242	$ 318,476	$ 331,257
Fragrances	334,220	321,764	335,447
Global expenses	(48,487)	(28,180)	(65,443)
Restructuring and other charges, net [(1)]	(322)	(7,594)	(1,298)
Gain on sales of fixed assets [(2)]	7,818	—	—
Spanish capital tax charge reversal [(3)]	—	10,530	—
Acquisition related costs [(4)]	(12,195)	(18,342)	—
Operational improvement initiative costs [(5)]	(2,402)	(1,115)	(7,642)
Accelerated contingent consideration [(6)]	—	(7,192)	—
Legal charges/credits, net [(7)]	(48,518)	—	—
Operating Profit	567,356	588,347	592,321
Interest expense	(52,989)	(46,062)	(46,067)
Other income (expense), net	9,350	(3,184)	2,807
Income before taxes	$ 523,717	$ 539,101	$ 549,061
Profit margin			
Flavors	22.5%	22.1%	22.7%
Fragrances	20.6%	20.4%	20.6%
Consolidated	18.2%	19.5%	19.2%

[(1)] Restructuring and other charges, net include accelerated depreciation related to restructuring initiatives, severance costs related to the termination of a former executive officer and the partial reversal of restructuring accruals recorded in the prior year for the year ended December 31, 2016, severance and related costs related to restructuring initiatives for the year ended December 31, 2015 and plant shutdown costs related to the Fragrance Ingredients Rationalization for the year ended December 31, 2014.

[(2)] Represents a gain related to the sale of property in Brazil for the year ended December 31, 2016.

[(3)] The Spanish capital tax charge reversal represents the reversal of the charge recorded during the year ended December 31, 2013 (as a result of the unfavorable ruling of the Spanish capital tax case from 2002) in the year ended December 31, 2015 due to a favorable ruling on the Company's appeal.

[4] Acquisition related costs include costs related to the fair value step-up of inventory of the David Michael and Lucas Meyer acquisitions as well as transaction costs related to the Lucas Meyer, David Michael and Fragrance Resources acquisitions for the year ended December 31, 2016 and transaction costs and costs related to the fair value step-up of inventory of the Ottens Flavors and Lucas Meyer acquisitions for the year ended December 31, 2015.

[5] Operational improvement initiative costs include accelerated depreciation and dismantling and idle labor costs in Hangzhou, China, severance costs in Guangzhou, China and the partial reversal of severance accruals related to prior year operational initiatives in Europe for the year ended December 31, 2016 and costs related to the closing of a smaller facility in Europe and certain manufacturing activities in Asia, while transferring production to larger facilities in each respective region for the year ended December 31, 2015 and December 31, 2014.

[6] Acceleration of contingent consideration payments related to the Aromor acquisition.

[7] Legal charges/credits principally relate to litigation accrual as discussed in Note 18 which was partially offset by settlements due to favorable tax rulings in jurisdictions for which reserves were previously recorded for ongoing tax disputes.

The Company has not disclosed revenues at a lower level than provided herein, such as revenues from external customers by product, as it is impracticable for it to do so.

The Company had one customer that accounted for more than 10% of consolidated net sales in each year for all periods presented and had net sales of $364.8 million, $358.9 million and $368.2 million in 2016, 2015 and 2014, respectively. The majority of these sales were in the Fragrances operating segment.

Total long-lived assets consist of net property, plant and equipment and amounted to $775.7 million and $732.8 million at December 31, 2016 and 2015, respectively. Of this total, $191.3 million and $170.2 million were located in the United States at December 31, 2016 and 2015, respectively, $95.1 million and $98.9 million were located in the Netherlands at December 31, 2016 and 2015, respectively, $78.4 million and $63.4 million were located in Singapore at December 31, 2016 and 2015, respectively, and $78.4 million and $82.7 million were located in China at December 31, 2016 and 2015, respectively.

	Capital Expenditures			Depreciation and Amortization		
(DOLLARS IN THOUSANDS)	2016	2015	2014	2016	2015	2014
Flavors	$ 47,064	$ 39,416	$ 91,104	$ 47,705	$ 45,228	$ 36,008
Fragrances	73,345	50,597	43,948	50,724	39,614	43,790
Unallocated assets	6,003	11,017	8,130	4,040	4,755	9,556
Consolidated	$ 126,412	$ 101,030	$ 143,182	$ 102,469	$ 89,597	$ 89,354

	Net Sales by Geographic Area		
(DOLLARS IN THOUSANDS)	2016	2015	2014
Europe, Africa and Middle East	$ 964,931	$ 945,675	$ 1,041,585
Greater Asia	880,040	839,120	856,217
North America	769,081	718,614	690,214
Latin America	502,298	519,780	500,517
Consolidated	$ 3,116,350	$ 3,023,189	$ 3,088,533

Net sales are attributed to individual regions based upon the destination of product delivery. Net sales related to the U.S. for the years ended December 31, 2016, 2015 and 2014 were $735.3 million, $682.2 million and $652.6 million, respectively. Net sales attributed to all foreign countries in total for the years ended December 31, 2016, 2015 and 2014 were $2.4 billion, $2.3 billion and $2.4 billion, respectively. No non-U.S. country had net sales in any period presented greater than 10.0% of total consolidated net sales.

NOTE 14. EMPLOYEE BENEFITS

The Company has pension and/or other retirement benefit plans covering approximately one-fourth of active employees. In 2007 the Company amended its U.S. qualified and non-qualified pension plans under which accrual of future benefits was suspended for all participants that did not meet the rule of 70 (age plus years of service equal to at least 70 at December 31, 2007). Pension benefits are generally based on years of service and on compensation during the final years of employment. Plan assets consist primarily of equity securities and corporate and government fixed income securities. Substantially all pension benefit costs are funded as accrued; such funding is limited, where applicable, to amounts deductible for income tax purposes. Certain other retirement benefits are provided by general corporate assets.

The Company sponsors a qualified defined contribution plan covering substantially all U.S. employees. Under this plan, the Company matches 100% of participants' contributions up to 4% of compensation and 75% of participants' contributions from over 4% to 8%. Employees that are still eligible to accrue benefits under the pension plans are limited to a 50% match up to 6% of the participants' compensation.

In addition to pension benefits, certain health care and life insurance benefits are provided to qualifying U.S. employees upon retirement from IFF. Such coverage is provided through insurance plans with premiums based on benefits paid. The Company does not generally provide health care or life insurance coverage for retired employees of foreign subsidiaries; such benefits are provided in most foreign countries by government-sponsored plans, and the cost of these programs is not material.

The Company offers a non-qualified Deferred Compensation Plan ("DCP") for certain key employees and non-employee directors. Eligible employees and non-employee directors may elect to defer receipt of salary, incentive payments and Board of Directors' fees into participant-directed investments, which are generally invested by the Company in individual variable life insurance contracts it owns that are designed to informally fund savings plans of this nature. The cash surrender value of life insurance is based on the net asset values of the underlying funds available to plan participants. At December 31, 2016 and December 31, 2015, the Consolidated Balance Sheet reflects liabilities of $37.6 million and $34.6 million, respectively, related to the DCP in Other liabilities and $18.8 million and $13.9 million, respectively, included in Capital in excess of par value related to the portion of the DCP that will be paid out in IFF shares.

The total cash surrender value of life insurance contracts the Company owns in relation to the DCP and post-retirement life insurance benefits amounted to $43.4 million and $42.0 million at December 31, 2016 and 2015, respectively, and are recorded in Other assets in the Consolidated Balance Sheet.

The plan assets and benefit obligations of the defined benefit pension plans are measured at December 31 of each year.

	U.S. Plans			Non-U.S. Plans		
(DOLLARS IN THOUSANDS)	2016	2015	2014	2016	2015	2014
Components of net periodic benefit cost						
Service cost for benefits earned	$ 2,497	$ 3,144	$ 3,057	$ 15,210	$ 15,866	$ 14,142
Interest cost on projected benefit obligation	24,096	23,705	25,090	24,413	25,389	33,360
Expected return on plan assets	(33,988)	(32,405)	(27,647)	(45,865)	(50,437)	(49,861)
Net amortization of deferrals	5,821	21,390	17,656	12,802	12,864	10,584
Settlements and curtailments	—	—	—	—	—	43
Net periodic benefit cost	(1,574)	15,834	18,156	6,560	3,682	8,268
Defined contribution and other retirement plans	8,404	7,104	7,854	6,304	7,028	6,323
Total expense	$ 6,830	$ 22,938	$ 26,010	$ 12,864	$ 10,710	$ 14,591
Changes in plan assets and benefit obligations recognized in OCI						
Net actuarial (gain) loss	$ (4,917)	$ 7,623		$ 72,848	$ 3,848	
Recognized actuarial loss	(5,759)	(21,207)		(13,643)	(13,629)	
Prior service cost	—	—		—	459	
Recognized prior service cost	(62)	(183)		742	765	
Currency translation adjustment	—	—		(43,270)	(25,230)	
Total recognized in OCI (before tax effects)	$ (10,738)	$ (13,767)		$ 16,677	$ (33,787)	

(DOLLARS IN THOUSANDS)	Postretirement Benefits 2016	2015	2014
Components of net periodic benefit cost			
Service cost for benefits earned	$ 852	$ 966	$ 1,295
Interest cost on projected benefit obligation	3,326	3,904	4,896
Net amortization and deferrals	(5,088)	(4,476)	(4,109)
(Credit) Expense	$ (910)	$ 394	$ 2,082
Changes in plan assets and benefit obligations recognized in OCI			
Net actuarial loss (gain)	$ 2,868	$ (1,557)	
Recognized actuarial loss	(1,701)	(1,331)	
Prior service credit	—	(33,902)	
Recognized prior service credit	6,789	5,807	
Total recognized in OCI (before tax effects)	$ 7,956	$ (30,983)	

The amounts expected to be recognized in net periodic cost in 2017 are:

(DOLLARS IN THOUSANDS)	U.S. Plans	Non-U.S. Plans	Postretirement Benefits
Actuarial loss recognition	$ 5,181	$ 14,344	$ 1,513
Prior service cost (credit) recognition	31	(696)	(6,334)

Weighted-average actuarial assumption used to determine expense	U.S. Plans 2016	2015	2014	Non-U.S. Plans 2016	2015	2014
Discount rate	4.20%	3.90%	4.70%	3.03%	2.74%	4.18%
Expected return on plan assets	7.30%	7.30%	7.30%	6.40%	6.24%	6.27%
Rate of compensation increase	3.25%	3.25%	3.25%	1.98%	2.00%	2.66%

Changes in the postretirement benefit obligation and plan assets, as applicable, are detailed in the following table:

(DOLLARS IN THOUSANDS)	U.S. Plans 2016	U.S. Plans 2015	Non-U.S. Plans 2016	Non-U.S. Plans 2015	Postretirement Benefits 2016	Postretirement Benefits 2015
Benefit obligation at beginning of year	$ 587,511	$ 625,479	$ 860,240	$ 965,266	$ 77,148	$ 113,497
Service cost for benefits earned	2,497	3,144	15,210	15,866	852	966
Interest cost on projected benefit obligation	24,096	23,705	24,413	25,389	3,326	3,904
Actuarial (gain) loss	(7,078)	(36,338)	134,377	(47,883)	2,868	(1,557)
Plan amendments	—	—	—	459	—	(33,902)
Adjustments for expense/tax contained in service cost	—	—	(1,515)	(1,976)	—	—
Plan participants' contributions	—	—	1,538	1,790	411	809
Benefits paid	(29,694)	(28,479)	(30,648)	(29,121)	(4,760)	(6,569)
Curtailments / settlements	—	—	(487)	—	—	—
Translation adjustments	—	—	(107,562)	(69,550)	—	—
Benefit obligation at end of year	$ 577,332	$ 587,511	$ 895,566	$ 860,240	$ 79,845	$ 77,148
Fair value of plan assets at beginning of year	$ 500,311	$ 501,801	$ 790,614	$ 852,893		
Actual return on plan assets	31,828	(11,556)	105,879	(3,271)		
Employer contributions	23,519	38,545	23,239	29,352		
Participants' contributions	—	—	1,538	1,790		
Benefits paid	(29,694)	(28,479)	(30,648)	(29,121)		
Settlements	—	—	(487)	—		
Translation adjustments	—	—	(97,997)	(61,029)		
Fair value of plan assets at end of year	$ 525,964	$ 500,311	$ 792,138	$ 790,614		
Funded status at end of year	$ (51,368)	$ (87,200)	$ (103,428)	$ (69,626)		

(DOLLARS IN THOUSANDS)	U.S. Plans 2016	U.S. Plans 2015	Non-U.S. Plans 2016	Non-U.S. Plans 2015
Amounts recognized in the balance sheet:				
Other assets	$ 4,343	$ —	$ —	$ 4,096
Other current liabilities	(4,027)	(3,866)	(557)	(613)
Retirement liabilities	(51,684)	(83,334)	(102,871)	(73,109)
Net amount recognized	$ (51,368)	$ (87,200)	$ (103,428)	$ (69,626)

(DOLLARS IN THOUSANDS)	U.S. Plans 2016	U.S. Plans 2015	Non-U.S. Plans 2016	Non-U.S. Plans 2015	Postretirement Benefits 2016	Postretirement Benefits 2015
Amounts recognized in AOCI consist of:						
Net actuarial loss	$ 154,417	$ 165,093	$ 339,654	$ 324,068	$ 19,336	$ 18,169
Prior service cost (credit)	141	203	(7,390)	(8,482)	(31,664)	(38,453)
Total AOCI (before tax effects)	$ 154,558	$ 165,296	$ 332,264	$ 315,586	$ (12,328)	$ (20,284)

(DOLLARS IN THOUSANDS)	U.S. Plans 2016	U.S. Plans 2015	Non-U.S. Plans 2016	Non-U.S. Plans 2015
Accumulated Benefit Obligation — end of year	$ 574,612	$ 583,346	$ 865,585	$ 837,272
Information for Pension Plans with an ABO in excess of Plan Assets:				
Projected benefit obligation	$ 65,101	$ 587,511	$ 895,566	$ 609,922
Accumulated benefit obligation	65,101	583,346	865,585	586,954
Fair value of plan assets	9,389	500,311	790,218	536,200
Weighted-average assumptions used to determine obligations at December 31				
Discount rate	4.20%	3.90%	2.14%	3.03%
Rate of compensation increase	3.25%	3.25%	1.97%	1.98%

(DOLLARS IN THOUSANDS)	U.S. Plans	Non-U.S. Plans	Postretirement Benefits
Estimated Future Benefit Payments			
2017	$ 32,871	$ 22,781	$ 5,005
2018	33,912	23,109	5,132
2019	35,331	23,731	5,227
2020	39,392	23,855	5,431
2021	37,014	24,488	5,417
2022 - 2026	187,696	134,742	25,968
Contributions			
Required Company Contributions in the Following Year (2017)	$ 16,107	$ 13,762	$ 5,005

The Company considers a number of factors in determining and selecting assumptions for the overall expected long-term rate of return on plan assets. The Company considers the historical long-term return experience of its assets, the current and expected allocation of its plan assets and expected long-term rates of return. The Company derives these expected long-term rates of return with the assistance of its investment advisors. The Company bases its expected allocation of plan assets on a diversified portfolio consisting of domestic and international equity securities, fixed income, real estate and alternative asset classes. The asset allocation is monitored on an ongoing basis.

The Company considers a variety of factors in determining and selecting its assumptions for the discount rate at December 31. For the U.S. plans, the discount rate was based on the internal rate of return for a portfolio of high quality bonds rated Aa or higher by either Moody's or Standard & Poor's with maturities that are consistent with the projected future benefit payment obligations of the plan. For the Non-U.S. Plans, the discount rates were determined by region and are based on high quality long-term corporate bonds. Consideration has been given to the duration of the liabilities in each plan when selecting the bonds to be used in determining the discount rate. The rate of compensation increase for all plans and the medical cost trend rate for the applicable U.S. plans are based on plan experience.

The percentage of assets in the Company's pension plans, by type, is as follows:

	U.S. Plans 2016	U.S. Plans 2015	Non-U.S. Plans 2016	Non-U.S. Plans 2015
Percentage of assets invested in:				
Cash and cash equivalents	—%	1%	2%	2%
Equities	36%	41%	27%	27%
Fixed income	64%	58%	56%	55%
Property	—%	—%	5%	7%
Alternative and other investments	—%	—%	10%	9%

With respect to the U.S. plans, the expected return on plan assets was determined based on an asset allocation model using the current target allocation, real rates of return by asset class and an anticipated inflation rate. The target investment allocation is 40% equity securities and 60% fixed income securities.

The expected annual rate of return for the non-U.S. plans employs a similar set of criteria adapted for local investments, inflation rates and in certain cases specific government requirements. The target asset allocation, for the non-U.S. plans, consists of approximately: 40% – 70% in fixed income securities; 15% – 40% in equity securities; 5% – 20% in real estate; and 5% – 10% in alternative investments.

The following tables present the Company's plan assets for the U.S. and non-U.S. plans using the fair value hierarchy as of December 31, 2016 and 2015. The plans' assets were accounted for at fair value and are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The Company's assessment of the significance of a particular input to the fair value measurement requires judgment, and may affect the valuation of fair value assets and their placement within the fair value hierarchy levels. For more information on a description of the fair value hierarchy, see Note 15.

	U.S. Plans for the year ended December 31, 2016			
(DOLLARS IN THOUSANDS)	**Level 1**	**Level 2**	**Level 3**	**Total**
Cash Equivalents	$ —	$ 1,673	$ —	$ 1,673
Fixed Income Securities				
Government & Government Agency Bonds	—	11,845	—	11,845
Corporate Bonds	—	90,843	—	90,843
Municipal Bonds	—	9,682	—	9,682
Asset Backed Securities	—	64	—	64
Assets measured at net asset value(1)	—	—	—	410,533
Total	$ —	$ 114,107	$ —	$ 524,640
Receivables				$ 1,324
Total				$ 525,964

	U.S. Plans for the year ended December 31, 2015			
(DOLLARS IN THOUSANDS)	**Level 1**	**Level 2**	**Level 3**	**Total**
Cash Equivalents	$ —	$ 4,767	$ —	$ 4,767
Equity Securities				
U.S. Common Stock	37,024	—	—	37,024
Balanced Funds	—	8,845	—	8,845
Fixed Income Securities				
Government & Government Agency Bonds	—	11,070	—	11,070
Corporate Bonds	—	77,754	—	77,754
Municipal Bonds	—	10,006	—	10,006
Assets measured at net asset value(1)	—	—	—	350,074
Total	$ 37,024	$ 112,442	$ —	$ 499,540
Receivables				$ 771
Total				$ 500,311

(1) Investments that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in the table above are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the Consolidated Balance Sheet. The total amount measured at net asset value includes approximately $187.3 million and $159.7 million in pooled equity funds and $223.2 million and $190.3 million in fixed income mutual funds for the years ended December 31, 2016 and 2015, respectively.

(DOLLARS IN THOUSANDS)	Non-U.S. Plans for the year ended December 31, 2016			
	Level 1	Level 2	Level 3	Total
Cash	$ 12,726	$ —	$ —	$ 12,726
Equity Securities				
U.S. Large Cap	72,438	17,102	—	89,540
U.S. Mid Cap	504	—	—	504
U.S. Small Cap	382	—	—	382
Non-U.S. Large Cap	69,442	10,606	—	80,048
Non-U.S. Mid Cap	514	—	—	514
Non-U.S. Small Cap	284	—	—	284
Emerging Markets	37,354	1,035	—	38,389
Fixed Income Securities				
U.S. Treasuries/Government Bonds	75	—	—	75
U.S. Corporate Bonds	—	28,843	—	28,843
Non-U.S. Treasuries/Government Bonds	121,987	57,116	—	179,103
Non-U.S. Corporate Bonds	26,412	183,020	—	209,432
Non-U.S. Asset-Backed Securities	—	27,114	—	27,114
Non-U.S. Other Fixed Income	1,969	—	—	1,969
Alternative Types of Investments				
Insurance Contracts	—	31,087	246	31,333
Hedge Funds	—	—	30,739	30,739
Other	—	16,904	—	16,904
Absolute Return Funds	2,443	—	—	2,443
Non-U.S. Real Estate	—	—	41,796	41,796
Total	$ 346,530	$ 372,827	$ 72,781	$ 792,138

(DOLLARS IN THOUSANDS)	Non-U.S. Plans for the year ended December 31, 2015			
	Level 1	Level 2	Level 3	Total
Cash	$ 13,239	$ —	$ —	$ 13,239
Equity Securities				
U.S. Large Cap	74,306	17,118	—	91,424
U.S. Mid Cap	262	—	—	262
U.S. Small Cap	230	—	—	230
Non-U.S. Large Cap	73,578	12,372	—	85,950
Non-U.S. Mid Cap	2,175	—	—	2,175
Non-U.S. Small Cap	226	—	—	226
Emerging Markets	33,291	2,152	—	35,443
Fixed Income Securities				
U.S. Treasuries/Government Bonds	67	—	—	67
Non-U.S. Treasuries/Government Bonds	121,552	55,184	—	176,736
Non-U.S. Corporate Bonds	56,238	174,626	—	230,864
Non-U.S. Asset-Backed Securities	—	26,132	—	26,132
Non-U.S. Other Fixed Income	1,625	—	—	1,625
Alternative Types of Investments				
Insurance Contracts	299	36,447	—	36,746
Hedge Funds	—	—	17,034	17,034
Absolute Return Funds	2,566	16,603	—	19,169
Non-U.S. Real Estate	—	13,985	39,307	53,292
Total	$ 379,654	$ 354,619	$ 56,341	$ 790,614

Cash and cash equivalents are primarily held in registered money market funds which are valued using a market approach based on the quoted market prices of identical instruments. Other cash and cash equivalents are valued daily by the fund using a market approach with inputs that include quoted market prices for similar instruments.

Equity securities are primarily valued using a market approach based on the quoted market prices of identical instruments. Pooled funds are typically common or collective trusts valued at their net asset values (NAVs).

Fixed income securities are primarily valued using a market approach with inputs that include broker quotes and benchmark yields.

Derivative instruments are valued by the custodian using closing market swap curves and market derived inputs.

Real estate values are primarily based on valuation of the underlying investments, which include inputs such as cost, discounted future cash flows, independent appraisals and market comparable data.

Hedge funds are valued based on valuation of the underlying securities and instruments within the funds. Quoted market prices are used when available and NAVs are used for unquoted securities within the funds.

Absolute return funds are actively managed funds mainly invested in debt and equity securities and are valued at their NAVs.

The following table presents a reconciliation of Level 3 non-U.S. plan assets held during the year ended December 31, 2016:

	Non-U.S. Plans		
(DOLLARS IN THOUSANDS)	Real Estate	Hedge Funds	Total
Ending balance as of December 31, 2015	$ 39,307	$ 17,034	$ 56,341
Actual return on plan assets	(8,525)	(1,333)	(9,858)
Purchases, sales and settlements	(528)	15,038	14,510
Transfers in/out	11,788	—	11,788
Ending balance as of December 31, 2016	$ 42,042	$ 30,739	$ 72,781

The following weighted average assumptions were used to determine the postretirement benefit expense and obligation for the years ended December 31:

	Expense		Liability	
	2016	2015	2016	2015
Discount rate	4.20%	3.90%	4.20%	4.20%
Current medical cost trend rate	7.15%	5.80%	8.00%	7.15%
Ultimate medical cost trend rate	4.75%	4.75%	4.75%	4.75%
Medical cost trend rate decreases to ultimate rate in year	2023	2023	2030	2023

	Sensitivity of Disclosures to Changes in Selected Assumptions			
	25 BP Decrease in Discount Rate		25 BP Decrease in Discount Rate	25 BP Decrease in Long-Term Rate of Return
(DOLLARS IN THOUSANDS)	Change in PBO	Change in ABO	Change in pension expense	Change in pension expense
U.S. Pension Plans	$ 15,719	$ 15,620	$ (109)	$ 1,250
Non-U.S. Pension Plans	46,658	44,861	2,876	1,895
Postretirement Benefit Plan	N/A	2,302	100	N/A

The effect of a 1% increase in the medical cost trend rate would increase the accumulated postretirement benefit obligation and the annual postretirement expense by approximately $0.3 million and less than $0.1 million, respectively; a 1% decrease in the rate would decrease the obligation and expense by approximately $0.4 million and less than $0.1 million, respectively.

The Company contributed $20.0 million and $23.2 million to its qualified U.S. pension plans and non-U.S. pension plans in 2016, respectively. The Company made $3.6 million in benefit payments with respect to its non-qualified U.S. pension plan. In addition, $4.8 million of payments were made with respect to the Company's other postretirement plans.

NOTE 15. 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 the Company's 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 the Company to use observable market data, when available, and to minimize the use of unobservable inputs when determining fair value. The Company determines the fair value of structured liabilities (where performance is linked to structured interest rates, inflation or currency risks) using the London InterBank Offer Rate (“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. The Company does not have any instruments classified as Level 1 or Level 3, other than those included in pension asset trusts included in Note 14.

These valuations take into consideration the Company's credit risk and its counterparties’ credit risk. The estimated change in the fair value of these instruments due to such changes in its own credit risk (or instrument-specific credit risk) was immaterial as of December 31, 2016.

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

	2016		2015	
(DOLLARS IN THOUSANDS)	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Cash and cash equivalents[(1)]	$ 323,992	$ 323,992	$ 181,988	$ 181,988
Credit facilities and bank overdrafts[(2)]	13,599	13,599	142,178	142,178
Long-term debt:[(3)]				
Senior notes — 2006[(4)]	—	—	124,964	127,717
Senior notes — 2007[(4)]	499,676	556,222	499,618	563,855
Senior notes — 2013[(4)]	297,986	302,376	297,683	290,830
Euro Senior notes - 2016[(4)]	512,764	546,006	—	—

(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 the Company's credit facilities and bank overdrafts 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 the Company's long-term debt was calculated using discounted cash flows applying current interest rates and current credit spreads based on its own credit risk.

(4) Amount is net of unamortized discount and debt issuance costs.

Derivatives

The Company periodically enters into foreign currency forward contracts with the objective of reducing exposure to cash flow volatility associated with its 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 years ended December 31, 2016 and 2015, the Company entered into several forward currency contracts which qualified as net investment hedges, in order to mitigate a portion of its net European investments from foreign currency risk. The effective portions of net investment hedges are recorded in other comprehensive income ("OCI") as a component of Foreign currency translation adjustments in the accompanying Consolidated Statement of Income and Comprehensive Income. Realized gains/(losses) are deferred in AOCI where they will remain until the net investments in the Company's European subsidiaries are divested. Sixteen of these forward currency contracts matured during the year ended December 31, 2016. The outstanding forward currency contacts have remaining maturities of less than one year.

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 Income and Comprehensive Income.

During the year ended December 31, 2016 and 2015, 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 Income and

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 Income and Comprehensive Income in the same period as the related costs are recognized.

During 2015 and 2014, the Company entered into interest rate swap agreements that effectively converted the fixed rate on a portion of its 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 year ended December 31, 2016.

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 9.

During the fourth quarter of 2016, the Company entered into one interest rate swap to hedge the anticipated issuance of fixed-rate debt, which is designated as a cash flow hedge. 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 Income and Comprehensive Income.

During the first quarter of 2013, the Company entered into three interest rate swap to hedge the anticipated issuance of fixed-rate debt, which are designated as cash flow hedges. 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 Income and Comprehensive Income. During the second quarter of 2013, the Company terminated these swaps and incurred a loss of $2.7 million, which it will amortize as Interest expense over the life of the Senior Notes - 2013 (discussed in Note 9).

The following table shows the notional amount of the Company's derivative instruments outstanding as of December 31, 2016 and December 31, 2015:

(DOLLARS IN THOUSANDS)	December 31, 2016	December 31, 2015
Forward currency contracts	$ 527,500	$ 573,200
Interest rate swaps	$ 412,500	$ 475,000

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 December 31, 2016 and December 31, 2015 (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[a]			
Foreign currency contracts	$ 13,765	$ 7,737	$ 21,502
Interest rate swaps	335	—	335
	$ 14,100	$ 7,737	$ 21,837
Derivative liabilities[b]			
Foreign currency contracts	$ 46	$ 2,209	$ 2,255
Interest rate swaps	725	—	725
	$ 771	$ 2,209	$ 2,980

	December 31, 2015		
	Fair Value of Derivatives Designated as Hedging Instruments	Fair Value of Derivatives Not Designated as Hedging Instruments	Total Fair Value
Derivative assets[a]			
Foreign currency contracts	$ 6,560	$ 3,700	$ 10,260
Interest rate swaps	1,210	—	1,210
	$ 7,770	$ 3,700	$ 11,470
Derivative liabilities[b]			
Foreign currency contracts	$ 2,106	$ 3,022	$ 5,128

(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 Income and Comprehensive Income for the years ended December 31, 2016 and December 31, 2015 (in thousands):

	Amount of Gain For the years ended December 31,		
Derivatives Not Designated as Hedging Instruments	2016	2015	Location of Gain Recognized in Income on Derivative
Foreign currency contract	$ 26,821	$ 8,644	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 Statement of Income and Comprehensive Income for the years ended December 31, 2016 and December 31, 2015 (in thousands):

	Amount of Gain or (Loss) Recognized in OCI on Derivative (Effective Portion) For the years ended December 31,		Location of Gain or (Loss) Reclassified from Accumulated OCI into Income (Effective Portion)	Amount of Gain or (Loss) Reclassified from Accumulated OCI into Income (Effective Portion) For the years ended December 31,	
	2016	2015		2016	2015
Derivatives in Cash Flow Hedging Relationships:					
Foreign currency contract	$ 1,591	$ (3,244)	Cost of goods sold	$ 4,726	$ 16,250
Interest rate swaps (1)	(3,388)	274	Interest expense	(595)	(274)
Derivatives in Net Investment Hedging Relationships:					
Foreign currency contract	3,230	5,231	N/A	—	—
Euro Senior notes - 2016	32,897	—	N/A	—	—
Total	$ 34,330	$ 2,261		$ 4,131	$ 15,976

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

The ineffective portion of the above noted cash flow hedges and net investment hedges was not material for the years ended December 31, 2016 and 2015.

The Company expects approximately $4.1 million (net of tax), of derivative gains included in AOCI at December 31, 2016, based on current market rates, will be reclassified into earnings within the next twelve months. The majority of this amount will vary due to fluctuations in foreign currency exchange rates.

NOTE 16. 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:

(DOLLARS IN THOUSANDS)	Foreign Currency Translation Adjustments	(Losses) Gains on Derivatives Qualifying as Hedges	Pension and Postretirement Liability Adjustment	Total
Accumulated other comprehensive loss, net of tax, as of December 31, 2015	$ (297,499)	$ 9,401	$ (325,342)	$ (613,440)
OCI before reclassifications	(54,526)	2,334	(21,111)	(73,303)
Amounts reclassified from AOCI	—	(4,131)	10,779	6,648
Net current period other comprehensive income (loss)	(54,526)	(1,797)	(10,332)	(66,655)
Accumulated other comprehensive loss, net of tax, as of December 31, 2016	$ (352,025)	$ 7,604	$ (335,674)	$ (680,095)

(DOLLARS IN THOUSANDS)	Foreign Currency Translation Adjustments	(Losses) Gains on Derivatives Qualifying as Hedges	Pension and Postretirement Liability Adjustment	Total
Accumulated other comprehensive (loss) income, net of tax, as of December 31, 2014	$ (173,342)	$ 12,371	$ (379,459)	$ (540,430)
OCI before reclassifications	(124,157)	13,006	33,410	(77,741)
Amounts reclassified from AOCI	—	(15,976)	20,707	4,731
Net current period other comprehensive income (loss)	(124,157)	(2,970)	54,117	(73,010)
Accumulated other comprehensive loss, net of tax, as of December 31, 2015	$ (297,499)	$ 9,401	$ (325,342)	$ (613,440)

(DOLLARS IN THOUSANDS)	Foreign Currency Translation Adjustments	(Losses) Gains on Derivatives Qualifying as Hedges	Pension and Postretirement Liability Adjustment	Total
Accumulated other comprehensive (loss) income, net of tax, as of December 31, 2013	$ (104,278)	$ (4,012)	$ (284,421)	$ (392,711)
OCI before reclassifications	(69,064)	12,434	(111,915)	(168,545)
Amounts reclassified from AOCI	—	3,949	16,877	20,826
Net current period other comprehensive income (loss)	(69,064)	16,383	(95,038)	(147,719)
Accumulated other comprehensive loss, net of tax, as of December 31, 2014	$ (173,342)	$ 12,371	$ (379,459)	$ (540,430)

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

(DOLLARS IN THOUSANDS)	December 31, 2016	December 31, 2015	December 31, 2014	Affected Line Item in the Consolidated Statement of Comprehensive Income
(Losses) gains on derivatives qualifying as hedges				
Foreign currency contracts	$ 5,401	$ 18,571	$ (4,426)	Cost of goods sold
Interest rate swaps	(595)	(274)	(274)	Interest expense
	(675)	(2,321)	751	Provision for income taxes
	$ 4,131	$ 15,976	$ (3,949)	Total, net of income taxes
(Losses) gains on pension and postretirement liability adjustments				
Settlements / Curtailments	$ —	$ —	$ (43)	(a)
Prior service cost	7,469	6,389	(63)	(a)
Actuarial losses	(21,103)	(36,167)	(28,219)	(a)
	2,855	9,071	11,448	Provision for income taxes
	$ (10,779)	$ (20,707)	$ (16,877)	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 to the Consolidated Financial Statements - Employee Benefits for additional information regarding net periodic benefit cost.

NOTE 17. CONCENTRATIONS OF CREDIT RISK

The Company does not have significant concentrations of risk in financial instruments. Temporary investments are made in a well-diversified portfolio of high-quality, liquid obligations of government, corporate and financial institutions. There are also limited concentrations of credit risk with respect to trade receivables because the Company has a large number of customers who are spread across many industries and geographic regions. The Company's larger customers are each spread across many sub-categories of its segments and geographical regions. The Company had one customer that accounted for more than 10% of its consolidated net sales in each year for all periods presented.

NOTE 18. COMMITMENTS AND CONTINGENCIES

Lease Commitments

Minimum rental payments under non-cancelable operating leases are $32.6 million in 2017, $27.2 million in 2018, $25.4 million in 2019, $24.2 million in 2020 and $145.4 million in 2021 and thereafter through 2063. The corresponding rental expense was $35.4 million, $33.6 million and $34.4 million for the years ended December 31, 2016, 2015 and 2014, respectively. None of our leases contain escalation clauses and they do not require capital improvement funding.

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 December 31, 2016, the Company had total bank guarantees and standby letters of credit of approximately $38.6 million with various financial institutions. Included in the above aggregate amount is a total of $15.9 million for other assessments in Brazil for various 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 December 31, 2016.

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 $13.1 million as of December 31, 2016.

Lines of Credit

The Company has various lines of credit which are available to support its ongoing business operations. As of December 31, 2016, the Company had available lines of credit (in addition to the $950.0 million of capacity under the Credit Facility as discussed in Note 9) of approximately $74.1 million with various financial institutions. There were no material amounts drawn down pursuant to these lines of credit as of December 31, 2016.

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, the Company assesses its 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 its 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. The Company records the expected liability with respect to claims in Other liabilities and expected recoveries from its insurance carriers in Other assets. The Company recognizes a receivable when it believes that realization of the insurance receivable is probable under the terms of the insurance policies and its 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.

The Company has been identified as a PRP at eight facilities operated by third parties at which investigation and/or remediation activities may be ongoing. The Company analyzes its potential liability on at least a quarterly basis and accrues for environmental liabilities when they are probable and estimable. The Company estimates its 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, the Company believes the amounts it has paid and anticipates paying in the future for clean-up costs and damages at all sites are not and will not have a material adverse effect on its 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 the Company to materially increase the amounts it anticipates paying for clean-up costs and damages at these sites, and that such increased amounts will not have a material adverse effect on its 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 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 be 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 $69 million as of December 31, 2016.

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 the first half of 2017. The net book value of the current plant was approximately $26 million as of December 31, 2016. Depending upon the ultimate outcome of the discussions with the Chinese government, between $0-$26 million of the remaining net book value may be subject to accelerated depreciation.

Total China Operations

The total carrying value of all five plants in China (one of which is currently under construction) was approximately $135 million as of December 31, 2016.

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 it operates 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, the Company believes it has valid defenses for the underlying positions under dispute; however, in order to pursue these defenses, the Company is required to, and has provided, bank guarantees and pledged assets in the aggregate amount of $29 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.

ZoomEssence

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. ZoomEssence initially sought a temporary restraining order and preliminary injunction, but the Court denied these applications in an order entered on September 27, 2013, finding that ZoomEssence had not demonstrated a likelihood of success on the merits of its claims. On November 3, 2014, ZoomEssence amended its complaint against the Company to include allegations of breach of the duty of good faith and fair dealing, fraud in the inducement, and misappropriation of confidential and proprietary information. On November 13, 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 third quarter of 2016, the Court stayed the case and directed the parties to mediate. During the fourth quarter of 2016, the parties engaged in mediation and various settlement discussions which have not resulted in a resolution of the litigation to date. If the case is not settled, we expect that a trial on the merits of the case will occur during 2017. Based on expert assessment of potential exposure and the status of the settlement discussions, the Company recorded an additional reserve of $50 million during 2016.

Other

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 losses in excess of any accrued liabilities is $0 to approximately $28 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.

Spanish Capital Tax

The Spanish tax authorities alleged claims for a capital tax and the Appellate Court rejected one of the two bases upon which the Company based its capital tax position. On January 22, 2014, the Company filed an appeal and in order to avoid future interest costs in the event its appeal was unsuccessful, the Company paid Euro 9.8 million ($11.2 million, representing the principal amount) during the first quarter of 2014. On February 24, 2016, the Company received a favorable ruling on its appeal from the Spanish Supreme Court which overruled a lower court ruling. As a result of this decision, the Company reversed the previously recorded provision of Euro 9.8 million ($10.5 million) for the year ended December 31, 2015. During 2016, the Company recorded additional income of $2.3 million related to the finalization of amounts received from the authorities. This amount has principally been reflected as a reduction of administrative expense.

NOTE 19. SUBSEQUENT EVENTS

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. Approximately $10 million of these charges are expected to be recorded in the first quarter of 2017, 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 seven quarters. The overall charges are 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.

(a)(3) EXHIBITS

Exhibit Number	Description
3(i)	Restated Certificate of Incorporation of the Registrant, incorporated by reference to Exhibit 10(g) to Registrant's Quarterly Report on Form 10-Q (File No. 001-04858) filed on August 12, 2002.
3(ii)	By-laws of the Registrant, including all amendments adopted as of December 15, 2015, incorporated by reference to Exhibit 3(ii) to Registrant's Current Report on Form 8-K filed on December 17, 2015.
4.1	Note Purchase Agreement, dated as of September 27, 2007, by and among the Registrant and the various purchasers named therein, incorporated by reference to Exhibit 4.7 to Registrant's Current Report on Form 8-K (File No. 001-04858) filed on October 1, 2007.
4.2	Form of Series A, Series B, Series C and Series D Senior Notes incorporated by reference to Exhibit 4.8 to Registrant's Current Report on Form 8-K (File No. 001-04858) filed on October 1, 2007.
4.3	Indenture, dated as of April 4, 2013, between the Registrant and U.S. Bank National Association, as Trustee (including the form of Notes), incorporated by reference to Exhibit 4.1 to Registrant's Current Report on Form 8-K filed on April 4, 2013.
4.4	Indenture, dated as of March 2, 2016, between the Registrant and U.S. Bank National Association, as Trustee, incorporated by reference to Exhibit 4.1 to Registrant's Registration Statement on Form S-3 (Registration No. 333-209889) filed on March 2, 2016.
4.5	Form of Debt Security, incorporated by reference to Exhibit 4.2 to Registrant's Registration Statement on Form S-3 (Registration No. 333-209889) filed on March 2, 2016.
4.6	First Supplemental Indenture, dated as of March 14, 2016, between the Registrant and U.S. Bank National Association, as Trustee (including the form of Notes), incorporated by reference to Exhibit 4.7 to Registrant's Current Report on Form 8-K filed on March 14, 2016.
*10.1	Letter Agreement, dated as of May 26, 2014, between the Registrant and Andreas Fibig, incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on May 28, 2014.
*10.2	Supplemental Retirement Plan, incorporated by reference to Exhibit 10.5 to Registrant's Annual Report on Form 10-K (File No. 001-04858) filed on February 27, 2008.
*10.3	2000 Stock Award and Incentive Plan, as amended and restated December 31, 2007, incorporated by reference to Exhibit 10.6 to Registrant's Annual Report on Form 10-K (File No. 001-04858) filed on February 27, 2008.
*10.4	Form of Employee Stock Option Agreement under the 2000 Stock Award and Incentive Plan, incorporated by reference to Exhibit 10.1 to Registrant's Quarterly Report on Form 10-Q (File No. 001-04858) filed on November 9, 2004.
*10.5	Form of Stock-Settled Appreciation Rights Agreement under the 2000 Stock Award and Incentive Plan, incorporated by reference to Exhibit 10.6 to Registrant's Quarterly Report on Form 10-Q (File No. 001-04858) filed on October 31, 2007.
*10.6	Form of Non-Employee Director's Restricted Stock Units Agreement under International Flavors & Fragrances Inc. 2000 Stock Award and Incentive Plan, incorporated by reference to Exhibit 10.7 to Registrant's Report on Form 10-Q filed on October 31, 2007.
*10.7	2010 Stock Award and Incentive Plan, as amended and restated as of May 6, 2015, incorporated by reference to Exhibit 10.8 to Registrant's Quarterly Report on Form 10-Q filed on May 12, 2015.

Exhibit Number	Description
*10.8	Form of U.S. Stock Settled Appreciation Rights Agreement under the 2010 Stock Award and Incentive Plan, incorporated by reference to Exhibit 10.29 to Registrant’s Annual Report on Form 10-K (File No. 001-04858) filed on February 28, 2012.
*10.9	Form of Restricted Stock Units Agreement - Non-Employee Director under the 2010 Stock Award and Incentive Plan, incorporated by reference to Exhibit 10.32 to Registrant’s Annual Report on Form 10-K (File No. 001-04858) filed on February 28, 2012.
*10.10	Form of Long-Term Incentive Plan Award Agreement under the 2010 Stock Award and Incentive Plan, incorporated by reference to Exhibit 10.30 to Registrant’s Annual Report on Form 10-K filed on February 25, 2014.
*10.11	Form of Restricted Stock Units Award Agreement under the 2010 Stock Award and Incentive Plan, incorporated by reference to Exhibit 10.1 to Registrant’s Quarterly Report on Form 10-Q filed on May 6, 2014.
*10.12	Form of Equity Choice Program Award Agreement under the 2010 Stock Award and Incentive Plan, incorporated by reference to Exhibit 10.2 to Registrant’s Quarterly Report on Form 10-Q filed on May 6, 2014.
*10.13	2015 Stock Award and Incentive Plan, as amended and restated February 7, 2017.
*10.14	Form of Annual Incentive Plan Award Agreement under the 2015 Stock Award and Incentive Plan, incorporated by reference to Exhibit 10.3 to Registrant’s Quarterly Report on Form 10-Q filed on May 12, 2015.
*10.15	Form of Long-Term Incentive Plan Award Agreement under the 2015 Stock Award and Incentive Plan, incorporated by reference to Exhibit 10.4 to Registrant’s Quarterly Report on Form 10-Q filed on May 12, 2015.
*10.16	Form of Equity Choice Program Award Agreement under the 2015 Stock Award and Incentive Plan, incorporated by reference to Exhibit 10.5 to Registrant’s Quarterly Report on Form 10-Q filed on May 12, 2015.
*10.17	Form of Restricted Stock Units Award Agreement under the 2015 Stock Award and Incentive Plan, incorporated by reference to Exhibit 10.6 to Registrant’s Quarterly Report on Form 10-Q filed on May 12, 2015.
*10.18	Form of Non-Employee Director Restricted Stock Units Award Agreement under the 2015 Stock Award and Incentive Plan, incorporated by reference to Exhibit 10.7 to Registrant’s Quarterly Report on Form 10-Q filed on May 12, 2015.
*10.19	Form of Equity Choice Program Award Agreement under the 2015 Stock Award and Incentive Plan, incorporated by reference to Exhibit 10.1 to Registrant’s Quarterly Report on Form 10-Q filed on November 9, 2015.
*10.20	Form of Long-Term Incentive Plan Award Agreement under the 2015 Stock Award and Incentive Plan, incorporated by reference to Exhibit 10.25 to Registrant’s Annual Report on Form 10-K filed on March 1, 2016.

Exhibit Number	Description
*10.21	Amended and Restated Executive Severance Policy, as amended through and including February 7, 2017.
*10.22	Form of Director/Officer Indemnification Agreement, incorporated by reference to Exhibit 10.1 to Registrant’s Current Report on Form 8-K (File No. 001-04858) filed on July 28, 2008.
*10.23	Credit Agreement, dated as of November 9, 2011, amended and restated as of December 2, 2016, among the Registrant, International Flavors & Fragrances (Luxembourg) S.à.r.l., International Flavors & Fragrances (Nederland) Holding B.V., International Flavors & Fragrances I.F.F. (Nederland) B.V. and International Flavors & Fragrances (Greater Asia) PTE. Ltd., as borrowers, the banks, financial institutions and other institutional lenders party thereto, and Citibank, N.A. as administrative agent, incorporated by reference to Exhibit 10.28 to Registrant’s Current Report on Form 8-K filed on December 5, 2016.
*10.24	Form of Executive Death Benefit Program - Plan Agreement, incorporated by reference to Exhibit 10.27 to Registrant’s Annual Report on Form 10-K filed on February 28, 2012.
*10.25	Deferred Compensation Plan, as amended and restated December 12, 2011, incorporated by reference to Exhibit 10.28 to Registrant’s Annual Report on Form 10-K (File No. 001-04858) filed on February 28, 2012.
*10.26	Separation Agreement and General Release, dated as of October 11, 2016, between the Registrant and Alison Cornell.
12	Statement re: Computation of Ratios
21	List of Principal Subsidiaries.
23	Consent of PricewaterhouseCoopers LLP.
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.
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 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

* Management contract or compensatory plan or arrangement

ITEM 16. FORM 10-K SUMMARY.

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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.

By:	/s/ Richard A. O'Leary
Name:	**Richard A. O'Leary**
Title:	*Executive Vice President and Chief Financial Officer*

Dated: February 28, 2017

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated:

Signature	Title	Date
/s/ Andreas Fibig **Andreas Fibig**	Chairman of the Board, Chief Executive Officer and Director (Principal Executive Officer)	February 28, 2017
/s/ Richard A. O'Leary **Richard A. O'Leary**	Executive Vice President, Chief Financial Officer and Chief Accounting Officer	February 28, 2017
/s/ Marcello V. Bottoli **Marcello V. Bottoli**	Director	February 28, 2017
/s/ Linda B. Buck **Linda B. Buck**	Director	February 28, 2017
/s/ Michael Ducker **Michael Ducker**	Director	February 28, 2017
/s/ David R. Epstein **David R. Epstein**	Director	February 28, 2017
/s/ Roger W. Ferguson, Jr. **Roger W. Ferguson, Jr.**	Director	February 28, 2017
/s/ John F. Ferraro **John F. Ferraro**	Director	February 28, 2017
/s/ Christina Gold **Christina Gold**	Director	February 28, 2017
/s/ Henry W. Howell, Jr. **Henry W. Howell, Jr.**	Director	February 28, 2017
/s/ Katherine M. Hudson **Katherine M. Hudson**	Director	February 28, 2017
/s/ Dale F. Morrison **Dale F. Morrison**	Director	February 28, 2017

INTERNATIONAL FLAVORS & FRAGRANCES INC. AND SUBSIDIARIES

SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS AND RESERVES

(IN THOUSANDS)

	For the Year Ended December 31, 2016				
	Balance at beginning of period	Additions (deductions) charged to costs and expenses	Accounts written off	Translation adjustments	Balance at end of period
Allowance for doubtful accounts	$ 8,229	$ 2,452	$ (225)	$ (461)	$ 9,995
Valuation allowance on credit and operating loss carryforwards and other net deferred tax assets	339,395	(171,408) (1)(4)	—	(15,235)	152,752

	For the Year Ended December 31, 2015				
	Balance at beginning of period	Additions (deductions) charged to costs and expenses	Accounts written off	Translation adjustments	Balance at end of period
Allowance for doubtful accounts	$ 9,147	$ 590	$ 60	$ (1,568)	$ 8,229
Valuation allowance on credit and operating loss carryforwards and other net deferred tax assets	355,568	16,445 (2)	—	(32,618)	339,395

	For the Year Ended December 31, 2014				
	Balance at beginning of period	Additions (deductions) charged to costs and expenses	Accounts written off	Translation adjustments	Balance at end of period
Allowance for doubtful accounts	$ 10,493	$ 222	$ (554)	$ (1,014)	$ 9,147
Valuation allowance on credit and operating loss carryforwards and other net deferred tax assets	503,990	(92,204) (3)	—	(56,218)	355,568

(1) The 2016 amount includes an adjustment to the 2015 foreign net operating loss carryforwards in the amount of $7.6 million, as discussed in Note 10 of the Consolidated Financial Statements.
(2) The 2015 amount includes an adjustment to the 2014 foreign net operating loss carryforwards in the amount of $10.0 million, as discussed in Note 10 of the Consolidated Financial Statements.
(3) The 2014 amount includes an adjustment to the 2013 foreign net operating loss carryforwards in the amount of $81.0 million, as discussed in Note 10 of the Consolidated Financial Statements.
(4) The Company executed a legal entity restructuring that resulted in a significant reduction of fully valued deferred tax assets.

INTERNATIONAL FLAVORS & FRAGRANCES INC.

INVESTOR INFORMATION

ANNUAL MEETING

The Annual Meeting of Shareholders will be held at the offices of the Company, 521 West 57th Street, New York, New York, on May 3, 2017 at 10:00 a.m., EDT.

IFF will be furnishing proxy materials to shareholders on the internet, rather than mailing printed copies of those materials to each shareholder. A Notice of Internet Availability of Proxy Materials will be mailed to each shareholder on or about March 20, 2017, which will provide instructions as to how shareholders may access and review the proxy materials for the 2017 Annual Meeting on the website referred to in the Notice or, alternatively, how to request a printed copy of the proxy materials be sent to them by mail.

TRANSFER AGENT AND REGISTRAR

American Stock Transfer & Trust Company
59 Maiden Lane
New York, New York 10038
800-937-5449
www.amstock.com

LISTED

New York Stock Exchange

Euronext Paris

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

PricewaterhouseCoopers LLP

WEBSITE

www.iff.com

International Flavors & Fragrances Inc.

2015 Stock Award and Incentive Plan

As amended on February 7, 2017

1. Purpose of the Plan

The purpose of the 2015 Stock Award and Incentive Plan is to aid the Company (as defined below) in attracting, retaining, motivating and rewarding employees, consultants, non-employee directors and other selected service-providers who contribute to the success of the Company, by authorizing Incentive Awards (as defined below) to incentivize such individuals to perform at the highest level, to strengthen the mutuality of interests between such individuals and the Company's shareholders and, in general, to further the best interests of the Company and its shareholders.

2. Definitions

As used in the Plan (as defined below) or in any instrument governing the terms of any Incentive Award granted under the Plan, the following definitions apply to the terms indicated below:

(a) "Accounting Forfeiture Event" has the meaning set forth in Section 32.

(b) "Affiliate" means, with respect to a specified person, a person that directly, or indirectly through one or more intermediaries, controls or is controlled by, or is under common control with, the specified person.

(c) "Annual Limit" has the meaning set forth in Section 3.

(d) "Award Agreement" means an agreement, in a form approved by the Committee from time to time, including, without limitation, written or electronic, entered into by a Participant (as defined below) and the Company, evidencing the grant of an Incentive Award under the Plan.

(e) "Board" or "Board of Directors" means the Board of Directors of IFF (as defined below).

(f) "Cash Incentive Award" means an award granted to a Participant pursuant to Section 8.

(g) "Cause" has the meaning defined in the Award Agreement, the ESP if the Participant is a participant in the ESP, in any employment or severance agreement between the Company and the Participant then in effect or, if none, as defined under the severance policy applicable to the Participant at the time of the Participant's termination of Employment, if any, or if no such definition exists, the meaning as determined by the Committee in its sole discretion.

(h) A "Change in Control" shall be deemed to have occurred if, after the Effective Date, there shall have occurred any of the following:

(i) any Person (as defined below) becomes the "beneficial owner," as such term is defined in Rule 13d-3 under the Exchange Act (as defined below), directly or indirectly, of securities of the Company representing 40% or more of the combined Voting Power (as defined below) of the Company's then outstanding Voting Securities (as defined below), other than beneficial ownership by the Company, any employee benefit plan of the Company or any Person organized, appointed or established pursuant to the terms of any such benefit plan; or

(ii) individuals who at the Effective Date (as defined below) constitute a majority of the Board (the "Incumbent Directors") cease to constitute a majority of the Board for any reason; provided, however, that any individual becoming a director subsequent to the Effective Date whose election or nomination for election to the Board was approved by a vote of at least two-thirds of the Incumbent Directors then on the Board (either by a specific vote or by approval of the proxy statement of the Company in which such person is named as a nominee for director without objection to such nomination) shall be an Incumbent Director; provided, however, that no individual shall be an Incumbent Director if such individual is initially elected or nominated as a director of the Company as a result of an actual or threatened election contest with respect to directors or as a result of any other actual or threatened solicitation of proxies by or on behalf of any person other than the Board; or

(iii) the consummation of:

(A) A merger, consolidation, reorganization or similar transaction with or into the Company or in which securities of the Company are issued, as a result of which the holders of the outstanding Voting Securities of the Company immediately before such event own, directly or indirectly, immediately after such event less than 60% of the combined Voting Power of the outstanding Voting Securities of the parent entity resulting from, or issuing its Voting Securities as part of, such event;

(B) A complete liquidation or dissolution of the Company; or

(C) The sale or other disposition of all or substantially all of the assets of the Company (on a consolidated basis) to any Person other than (x) the Company, (y) an employee benefit plan (or a trust forming a part thereof) maintained by the Company or (z) a Person whose Voting Securities immediately following such sale or disposition will be owned by the holders of the outstanding Voting Securities of the Company immediately prior thereto, in substantially the same proportions.

Notwithstanding the foregoing, no payment or settlement of any Incentive Award that constitutes "non-qualified deferred compensation" within the meaning of section 409A of the Code (as defined below) shall be made solely upon the occurrence of a Change in Control to the extent such Change in Control does not also qualify as a "change in control event" within the meaning of Treasury Regulation §1.409A-3(i)(5)(i) and such payment or settlement shall occur on its otherwise scheduled payment and/or settlement date(s).

(i) "Code" means the Internal Revenue Code of 1986, as amended from time to time, and all regulations, interpretations, and administrative guidance issued thereunder.

(j) "Committee" means the Compensation Committee of the Board of Directors or such other committee as the Board of Directors shall appoint from time to time to administer the Plan or to otherwise exercise and perform the authority and functions assigned to the Committee under the terms of the Plan.

(k) "Common Stock" means International Flavors & Fragrances Inc.'s common stock, par value 12.5 cents per share, or any other security into which the common stock shall be changed pursuant to the adjustment provisions of Section 10.

(l) "Company" means IFF and all of its Affiliates, collectively (and any successors or assigns thereto).

(m) "Confidential Information" has the meaning set forth in Section 32.

(n) "Covenant Forfeiture Event" has the meaning set forth in Section 32.

(o) "Covered Employee" means each Participant who is an executive officer (within the meaning of Rule 3b-7 under the Exchange Act) of IFF.

(p) "Deferred Compensation Plan" means any plan, agreement, or arrangement maintained by the Company from time to time that provides opportunities for deferral of compensation, including, without limitation, the International Flavors and Fragrances Inc. Deferred Compensation Plan.

(q) "Disabled" or "Disability" means, unless otherwise set forth in the Participant's Award Agreement or any employment agreement between the Company and the Participant then in effect, a condition that entitles the Participant to long term disability benefits under any applicable Company disability plan, any successor plan, or as defined under any applicable local laws, rules, or regulations.

(r) "Early Retirement" means, unless otherwise set forth in the Participant's Award Agreement, the termination of the Participant's Employment at the election of the Participant after attaining age 55 plus ten years of service to the Company.

(s) "Effective Date" has the meaning set forth in Section 30.

(t) "Employment" means the period during which an individual is providing services to the Company as an employee, non-employee director, consultant, or other service provider, as applicable. “Employed” shall have a correlative meaning.

(u) “ESP” means the International Flavors and Fragrances Inc. Executive Severance Policy, as amended and restated from time to time.

(v) “Excess Compensation” has the meaning set forth in Section 32.

(w) “Exchange Act” means the Securities Exchange Act of 1934, as amended.

(x) “Fair Market Value” means, with respect to a share of Common Stock, unless otherwise set forth in the Award Agreement, as of the applicable date of determination, the closing price as reported on the date of determination on the principal national securities exchange in the United States on which shares of Common Stock are then traded. In the event that the price of a share of Common Stock shall not be so reported, the Fair Market Value of a share of Common Stock shall be determined by the Committee in its sole discretion. With respect to the grant of an Incentive Award, the date of determination shall be the trading day on the date on which the Incentive Award is granted, or if such date is not a trading day, the immediately subsequent day on which the market is open for trading. With respect to the exercise of an Incentive Award, the date of determination shall be the date a notice of exercise is received by the Company or its designee, as applicable, or if such date is not a trading day, the immediately subsequent day on which the market is open for trading. With respect to Section 32, Fair Market Value shall be determined by the Committee in its sole discretion.

(y) “Forfeiture Event” has the meaning set forth in Section 32.

(z) “Good Reason” has the meaning defined in the Award Agreement, the ESP if the Participant is a participant in the ESP, or in any employment or severance agreement between the Company and the Participant then in effect.

(aa) “IFF” means International Flavors and Fragrances Inc., a New York corporation.

(bb) “Incentive Award” means one or more Stock Incentive Awards and/or Cash Incentive Awards, collectively.

(cc) “Normal Retirement” means, unless otherwise set forth in the Participant’s Award Agreement, the termination of the Participant’s Employment at the election of the Participant after attaining age 62 or such earlier “Normal Retirement” date under the terms of the applicable Company pension or retirement plan.

(dd) “Option” means a stock option to purchase shares of Common Stock granted to a Participant pursuant to Section 6.

(ee) “Other Stock-Based Award” means an award granted to a Participant pursuant to Section 7.

(ff) "Participant" means an employee, consultant, non-employee director or other selected service provider of the Company who is eligible to participate in the Plan and to whom one or more Incentive Awards have been granted pursuant to the Plan and have not been fully settled or cancelled and, following the death of any such Person, his or her successors, heirs, executors and administrators, as the case may be.

(gg) "Performance-Based Award" means any Incentive Award pursuant to which any compensation paid is intended to be Performance-Based Compensation.

(hh) "Performance-Based Compensation" means compensation that satisfies the requirements of section 162(m) of the Code for "qualified performance-based compensation."

(ii) "Performance Measures" has the meaning set forth in Section 9.

(jj) "Performance Percentage" means, with respect to a Performance-Based Award, the factor determined pursuant to a Performance Schedule (as defined below) that is to be applied to the Target Award (as defined below) and that reflects actual performance in respect of the applicable Performance Measure(s) compared to the Performance Target (as defined below).

(kk) "Performance Period" means, with respect to a Performance-Based Award, the period of time during which the applicable Performance Target(s) must be met in order to determine the degree of payout and/or vesting with respect to such Performance-Based Award. Different Performance-Based Awards may have overlapping Performance Periods.

(ll) "Performance Schedule" means, with respect to a Performance-Based Award, a schedule or other objective method for determining the applicable Performance Percentage to be applied to the Target Award.

(mm) "Performance Target" means, with respect to a Performance-Based Award, the performance goals and objectives relating to the applicable Performance Measures for such Performance-Based Award, as established by the Committee in accordance with Section 9.

(nn) "Person" means a "person" as such term is used in sections 13(d) and 14(d) of the Exchange Act, including any "group" within the meaning of section 13(d)(3) under the Exchange Act.

(oo) "Plan" means the International Flavors and Fragrances Inc. 2015 Stock Award and Incentive Plan, as it may be amended from time to time.

(pp) "Plan Period" has the meaning set forth in Section 3.

(qq) "Prior Plans" means the Company's (i) 2010 Stock Award and Incentive Plan, (ii) 2000 Stock Award and Incentive Plan, and (iii) 2000 Supplemental Stock Award Plan.

(rr) "Securities Act" means the Securities Act of 1933, as amended.

(ss) "Stock Incentive Award" means an Option or Other Stock-Based Award granted pursuant to the terms of the Plan.

(tt) "Target Award" means, with respect to a Performance-Based Award, the target payout amount for such a Performance-Based Award.

(uu) "Voting Power" means the number of votes available to be cast (determined by reference to the maximum number of votes entitled to be cast by the holders of Voting Securities, or by the holders of any Voting Securities for which other Voting Securities may be convertible, exercisable, or exchangeable, upon any matter submitted to shareholders where the holders of all Voting Securities vote together as a single class) by the holders of Voting Securities.

(vv) "Voting Securities" means any securities or other ownership interests of an entity, which entitle, or which may entitle, Persons holding such securities or other ownership interests to vote on matters submitted to such holders generally (whether or not entitled to vote in the general election of directors), or securities or other ownership interests which are convertible into, or exercisable in exchange for, such Voting Securities, whether or not subject to the passage of time or any contingency.

3. Stock Subject to the Plan and Limitations on Cash Incentive Awards

(a) Stock Subject to the Plan

The maximum number of shares of Common Stock that may be covered by Incentive Awards granted under the Plan shall not exceed the sum of (i) 1,500,000 shares of Common Stock and (ii) any shares of Common Stock that become available in connection with the cancellation, forfeiture, or expiration of awards issued and outstanding as of the Effective Date under the Prior Plans and (iii) any shares of Common Stock that remain available for issuance, as of the Effective Date, under the Prior Plans. Out of such aggregate, the maximum number of shares of Common Stock that may be covered by Options that are designated as "incentive stock options" within the meaning of section 422 of the Code shall not exceed 1,500,000 shares of Common Stock. The maximum number of shares referred to in the preceding sentences of this Section 3(a) shall in each case be subject to adjustment as provided in Section 10 and the following provisions of this Section 3. Shares of Common Stock issued under the Plan may be authorized and unissued shares, treasury shares, shares purchased by the Company in the open market, or any combination of the preceding categories as the Committee determines in its sole discretion. The Committee may determine that Incentive Awards may be granted that relate to more shares of Common Stock than the aggregate remaining available under the Plan so long as the number of shares of Common Stock in respect of Incentive Awards that vest or are settled does not exceed the number of shares of Common Stock then available under the Plan.

For purposes of the preceding paragraph, shares of Common Stock covered by Incentive Awards shall only be counted as used to the extent they are actually issued and delivered to a Participant (or such Participant's permitted transferees as described in the Plan) pursuant to the Plan. If shares of Common Stock are issued subject to conditions which may result in the forfeiture, cancellation, return to the Company or expiration of such shares, any portion of the shares forfeited, cancelled, returned or which expire shall be treated as not issued pursuant to the Plan and shall again be available for issuance hereunder.

In addition, if (x) an Incentive Award is settled for cash or if shares of Common Stock are withheld to pay the exercise price of an Option, settle a stock-settled stock appreciation right or to satisfy any tax withholding requirement in connection with an Incentive Award, the shares issued (if any) in connection with such settlement, the shares in respect of which the Incentive Award was cash-settled, and the shares withheld, will be deemed issued for purposes of determining the number of shares of Common Stock that are available for issuance under the Plan and (y) shares of Common Stock owned by a Participant (or such Participant's permitted transferees as described in the Plan) are tendered (either actually or through attestation) to the Company in payment of any obligation in connection with an Incentive Award, the number of shares tendered shall not be added to the number of shares of Common Stock that are available for issuance under the Plan.

Shares of Common Stock covered by Incentive Awards granted pursuant to the Plan in connection with the assumption, replacement, conversion, or adjustment of outstanding equity-based awards in the context of a corporate acquisition or merger (within the meaning of section 303A.08 of the NYSE Listed Company Manual), shall not count as issued under the Plan for purposes of this Section 3. In addition, shares of Common Stock available for issuance under certain plans acquired in corporate acquisitions and mergers that may be issued in connection with certain post-transaction grants of Incentive Awards under the Plan (subject to the requirements of section 303A.08 of the NYSE Listed Company Manual) shall not be counted as issued under the Plan for purposes of this Section 3.

(b) Individual Award Limits

Subject to adjustment as provided in Section 10, the maximum number of shares of Common Stock that may be covered by Performance-Based Awards granted under the Plan to any Covered Employee in any calendar year shall not exceed 1,000,000 shares (the "Annual Limit") plus the amount of such Covered Employee's unused Annual Limit as of the last day of the prior calendar year.

The amount of each Cash Incentive Award payable to any Covered Employee for any Plan Period shall not exceed (i) $5,000,000 for any Cash Incentive Award where the Plan Period is a calendar year and (ii) $5,000,000 per calendar year where the Plan Period is greater than a calendar year. For purposes of the preceding sentence "Plan Period" shall mean one or more calendar years as the Committee may determine, with respect to which any Cash Incentive Award may be payable under the Plan. The Committee may not grant to any Covered Employee more than three Cash

Incentive Awards with Plan Periods that are scheduled to either start or end in the same calendar year.

Subject to adjustment as provided in Section 10, the maximum number of shares of Common Stock that may be covered by Incentive Awards granted under the Plan to any non-employee director in any calendar year shall not exceed 20,000 shares.

4. Administration of the Plan

The Plan shall be administered by a Committee of the Board of Directors consisting of two or more persons, each of whom qualifies as a "non-employee director" (within the meaning of Rule 16b-3 promulgated under section 16 of the Exchange Act), an "outside director" (within the meaning of Treasury Regulation section 1.162-27(e)(3)) and as "independent" as required by the NYSE or any security exchange on which the Common Stock is listed, in each case if and to the extent required by applicable law or necessary to meet the requirements of such rule, section, or listing requirement at the time of determination. The Committee shall, consistent with the terms of the Plan, from time to time designate those individuals who shall be granted Incentive Awards under the Plan and the amount, type, and other terms and conditions of such Incentive Awards. All of the powers and responsibilities of the Committee under the Plan may be delegated by the Committee, in writing, to any subcommittee thereof, in which case the acts of such subcommittee shall be deemed to be acts of the Committee hereunder. The Committee may also from time to time authorize a subcommittee consisting of one or more members of the Board of Directors (including members who are employees of the Company) or employees of the Company to grant Incentive Awards to persons who are not "executive officers" of the Company (within the meaning of Rule 16a-1 under the Exchange Act), subject to such restrictions and limitations as the Committee may specify and to the requirements of New York Business Corporation Law section 505.

The Committee shall have full discretionary authority to administer the Plan, including discretionary authority to interpret and construe any and all provisions of the Plan and any Award Agreement thereunder, and to adopt, amend, and rescind from time to time such rules and regulations for the administration of the Plan, including rules and regulations established to satisfy applicable foreign laws and/or qualify for preferred tax treatment under applicable foreign tax laws, as the Committee may deem necessary or appropriate. Decisions of the Committee shall be final, binding, and conclusive on all parties. For the avoidance of doubt, the Committee may exercise all discretion granted to it under the Plan in a non-uniform manner among Participants.

The Committee may delegate the administration of the Plan to one or more officers or employees of the Company, and such administrator(s) may have the authority to execute and distribute Award Agreements, to maintain records relating to Incentive Awards, to process or oversee the issuance of Common Stock under Incentive Awards, to interpret and administer the terms of Incentive Awards, and to take such other actions as may be necessary or appropriate for the administration of the Plan and of Incentive Awards under the Plan, provided that in no case shall any such administrator be authorized (i) to grant Incentive Awards under the Plan (except in connection with any delegation made by the Committee pursuant to the first paragraph of this

Section 4), (ii) to take any action inconsistent with section 409A of the Code, or (iii) to take any action inconsistent with applicable provisions of the New York Business Corporation Law. Any action by any such administrator within the scope of its delegation shall be deemed for all purposes to have been taken by the Committee and, except as otherwise specifically provided, references in this Plan to the Committee shall include any such administrator. The Committee and, to the extent it so provides, any subcommittee, shall have sole authority to determine whether to review any actions and/or interpretations of any such administrator, and if the Committee shall decide to conduct such a review, any such actions and/or interpretations of any such administrator shall be subject to approval, disapproval, or modification by the Committee.

On or after the date of grant of an Incentive Award under the Plan, the Committee may (i) accelerate the date on which any such Incentive Award becomes vested, exercisable, or transferable, as the case may be, (ii) extend the term of any such Incentive Award, including, without limitation, extending the period following a termination of a Participant's Employment during which any such Incentive Award may remain outstanding, (iii) waive any conditions to the vesting, exercisability, or transferability, as the case may be, of any such Incentive Award or (iv) provide for the payment of dividends or dividend equivalents with respect to any such Incentive Award; provided, that the Committee shall not have any such authority to the extent that the grant of such authority would cause any tax to become due under section 409A of the Code. The Company shall pay any amount payable with respect to an Incentive Award in accordance with the terms of such Incentive Award, provided that the Committee may, in its discretion, defer the payment of amounts payable with respect to an Incentive Award subject to and in accordance with the terms of a Deferred Compensation Plan.

Notwithstanding anything herein to the contrary, without approval of the Company's shareholders, the Company shall not amend or replace previously granted Options or stock appreciation rights in a transaction that constitutes a "repricing," (within the meaning of section 303A.08 of the NYSE Listed Company Manual and any other formal or informal guidance issued by the NYSE) which for this purpose also means any of the following or any other action that has the same effect: (i) lowering the exercise price of an Option or stock appreciation right after it is granted, (ii) any other action that is treated as a repricing under United States generally accepted accounting principles, or (iii) canceling an Option or stock appreciation right at a time when its exercise price exceeds the Fair Market Value of the underlying shares of Common Stock, in exchange for another Option or stock appreciation right, shares of restricted Common Stock, other Incentive Awards, cash or other property; provided, however, that the foregoing transactions shall not be deemed a repricing if pursuant to an adjustment or other action authorized under Section 10.

No member of the Committee shall be liable for any action, omission, or determination relating to the Plan, and IFF shall indemnify and hold harmless each member of the Committee and each other director or employee of the Company to whom any duty or power relating to the administration or interpretation of the Plan has been delegated, against any cost or expense (including counsel fees) or liability (including any sum paid in settlement of a claim with the approval of the Committee) arising out of any action, omission, or determination relating to the Plan, unless, in either case, such action, omission, or determination was taken or made by such member, director, or employee in bad faith and without reasonable belief that it was in the best interests of the Company.

5. <u>Eligibility</u>

The Persons who shall be eligible to receive Incentive Awards pursuant to the Plan shall be those employees, non-employee directors, consultants, and other selected service providers of the Company whom the Committee shall select from time to time, including officers of the Company, whether or not they are directors. Furthermore, any individual who has agreed to accept Employment by, or provide services to, the Company shall be deemed to be eligible to receive Incentive Awards hereunder as of the date of such acceptance of Employment or provision of services; provided that the grant of any Incentive Awards under the Plan shall be determined by the Committee in its sole discretion and further provided that vesting, exercise or settlement of Incentive Awards granted to such individuals are conditioned upon such individual actually becoming an employee of or service provider to, the Company.

6. <u>Options</u>

The Committee may from time to time grant Options on such terms as it shall determine, subject to the terms and conditions set forth in this Plan. The Award Agreement shall clearly identify such Option as either an "incentive stock option" within the meaning of section 422 of the Code or as a non-qualified stock option.

(a) <u>Exercise Price</u>

The exercise price per share of Common Stock covered by any Option shall be not less than one hundred percent of the Fair Market Value of a share of Common Stock on the date on which such Option is granted, other than assumptions in accordance with a corporate acquisition or merger as described in Section 3.

(b) <u>Term and Exercise of Options</u>

(1) The Committee shall determine the term of each Option, provided that in no event shall the term of any Option exceed a period of ten years from the date of grant. Each Option shall become vested and exercisable on such date or dates, during such period and for such number of shares of Common Stock as shall be determined by the Committee on or after the date such Option is granted; <u>provided</u>, <u>however</u>, that each Option shall be subject to earlier termination, expiration, or cancellation as provided in the Plan or the Award Agreement.

(2) Each Option shall be exercisable in whole or in part; <u>provided</u>, <u>however</u> that no partial exercise of an Option shall be for an aggregate exercise price of less than $1,000. The partial exercise of an Option shall not cause the expiration, termination, or cancellation of the remaining portion thereof.

(3) An Option shall be exercised by such methods and procedures as the Committee determines from time to time, including without limitation through net physical

settlement or other method of cashless exercise.

(c) Incentive Stock Options

The terms of any incentive stock option granted under the Plan shall comply in all respects with the provisions of section 422 of the Code.

7. Other Stock-Based Awards

The Committee may from time to time grant equity-based or equity-related Incentive Awards not otherwise described herein in such amounts and on such terms and conditions as it shall determine, subject to the terms and conditions set forth in the Plan. Without limiting the generality of the preceding sentence, each such Other Stock-Based Award may (i) involve the transfer of actual shares of Common Stock to Participants, either at the time of grant or thereafter, or payment in cash or otherwise of amounts based on the value of shares of Common Stock, (ii) be subject to performance-based and/or service-based conditions, (iii) be in the form of stock appreciation rights, phantom stock, restricted stock, restricted stock units, performance shares, deferred share units, or share-denominated performance units, (iv) be designed to comply with applicable laws of jurisdictions other than the United States and (v) be designed to qualify as Performance-Based Compensation; provided, that each Other Stock-Based Award shall be denominated in, or shall have a value determined by reference to, a number of shares of Common Stock that is specified at the time of the grant of such Incentive Awards. Nothing in this Plan is intended to limit the Committee's discretion to adopt performance conditions with respect to any Stock Incentive Award that is not intended to qualify as Performance-Based Compensation.

8. Cash Incentive Awards

The Committee may from time to time grant Cash Incentive Awards on such terms and conditions as it shall determine, subject to the terms and conditions set forth in the Plan. Cash Incentive Awards may be settled in cash or in other property, including shares of Common Stock, provided that the term "Cash Incentive Award" shall exclude any Option or Other Stock-Based Award. Nothing in this Plan is intended to limit the Committee's discretion to adopt performance conditions with respect to any Cash Incentive Award that is not intended to qualify as Performance-Based Compensation.

9. Performance-Based Compensation

The Committee may grant Incentive Awards that are intended to qualify as Performance-Based Compensation. Nothing in this Plan is intended to limit the Committee's discretion to adopt performance measures, goals, targets and other terms and conditions with respect to any Incentive Award that is not a Performance-Based Award. Furthermore, nothing in this Plan shall be construed to require the Committee to grant any Incentive Award intended to qualify as Performance-Based Compensation. The Committee may, subject to the terms of the Plan, amend any previously granted Performance-Based Award in a way that disqualifies it as Performance-

Based Compensation. This Section 9 describes the terms of Performance-Based Awards.

(a) Calculation

The amount payable with respect to a Performance-Based Award shall be determined in any manner permitted by section 162(m) of the Code.

(b) Discretionary Reduction

Unless otherwise specified in the Award Agreement, the Committee may, in its discretion, reduce or eliminate the amount payable to any Participant with respect to a Performance-Based Award, based on such factors as the Committee may deem relevant, but the Committee may not increase any such amount above the amount established in accordance with the relevant Performance Schedule. For purposes of clarity, the Committee may exercise the discretion provided for by the foregoing sentence in a non-uniform manner among Participants.

(c) Performance Measures

The performance goals upon which the payment or vesting of any Performance-Based Award (other than Options and stock appreciation rights) depends shall (a) be objective business criteria and shall otherwise meet the requirements of section 162(m) of the Code, including the requirement that the level or levels of performance targeted by the Committee result in the achievement of performance goals being "substantially uncertain" at the time of grant and (b) relate to one or more of the following measures (collectively the "Performance Measures"): (i) earnings per share, net earnings per share or growth in such measures; (ii) net sales, sales, net revenues or revenues or growth in sales or revenues; (iii) earnings measures, (including earnings before or after any or all of interest, taxes, depreciation, and amortization or extraordinary or special items); (iv) income, net income, net income per share of Common Stock (basic or diluted) or growth in income; (v) cash flow (including net cash provided by operations, cash flow in excess of cost of capital (discounted or otherwise), free cash flow, and cash flow return on capital) or growth in such measures; (vi) return measures, including return on assets (gross or net), return on investment, return on capital, return on equity, return on revenue or return on sales; (vii) economic profit or economic value created; (viii) gross profit or operating profit; (ix) gross margin, operating margin or profit margin or growth in such measures; (x) shareholder value creation measures, including price per share of Common Stock or total shareholder return; (xi) dividend payout levels, including as a percentage of net income; (xii) asset measures, including asset growth; (xiii) asset turnover, (xiv) sales measures; (xv) book value, (xvi) brand contribution, (xvii) market share or growth in market share, (xviii) unit volume, (xix) working capital amounts, including working capital as a percentage of customer sales; (xx) operational costs or cost controls and other expense targets, or a component thereof, or planning or forecasting accuracy; (xxi) supply chain achievements; (xxii) innovation as measured by a percentage of sales of new products; (xxiii) strategic plan development and implementation; or (xxiv) strategic business criteria, consisting of one or more objectives based on meeting specified market penetration, geographic business expansion goals, cost targets, total market capitalization, agency ratings, completion of capital and borrowing transactions, business retention, new product development, customer satisfaction and retention, employee development, satisfaction and retention, market penetration, management of employment practices and employee benefits, diversity, supervision of litigation and information technology, corporate social responsibility, customer growth, customer service, improvements in capital structure, debt leverage, expense management, operating efficiency, strategic planning process reliability, product quality, regulatory compliance, risk mitigation, sustainability and environmental impact and goals relating to acquisitions, divestitures or strategic partnerships or transactions.

A Performance Measure (i) may relate to the performance of the Participant, the Company, IFF, any Affiliate, any business group, business unit, or other subdivision of the Company, or any combination of the foregoing, as the Committee deems appropriate and (ii) may be expressed as an amount, as an increase or decrease over a specified period, as a relative comparison to the performance of a group of comparator companies or a published or special index, or any other measure of the selected performance criteria, as the Committee deems appropriate.

The measurement of any Performance Measure shall exclude the negative impact and include the positive impact of certain items that may occur during the Performance Period, including, without limitation, the following:

unusual, non-recurring, or extraordinary items or expenses; charges for restructurings; discontinued operations; acquisitions or divestitures; the cumulative effect of changes in accounting treatment; changes in tax laws, accounting standards or principles or other laws or regulatory rules affecting reporting results; any impact of impairment of tangible or intangible assets; any impact of the issuance or repurchase of equity securities and/or other changes in the number of outstanding shares of any class of the Company's equity securities; any gain, loss, income, or expense attributable to acquisitions or dispositions of stock or assets; stock-based compensation expense; asset write-downs, in-process research and development expense; gain or loss from all or certain claims and/or litigation and insurance recoveries; foreign exchange gains and losses; any impact of changes in foreign exchange rates and any changes in currency; a change in the Company's fiscal year; litigation legal fees; pension expenses and any other items, each determined in accordance with United States generally accepted accounting principles and as identified in the Company's audited financial statements, including the notes thereto.

(d) Performance Schedules

With respect to each Performance-Based Award, within ninety days after the beginning of the Performance Period for such Performance-Based Award, and in any case before twenty-five percent of such Performance Period has elapsed, the Committee shall establish the (i) Performance Targets, (ii) Target Award, and (iii) Performance Schedule, in each case for such Performance-Based Award, and shall make any other determinations required to be made within such period under section 162(m) of the Code.

(e) Committee Determinations

Determinations by the Committee as to the establishment of Performance Measures, Performance Targets, Target Awards, Performance Schedules, the level of actual achievement of Performance Targets and the amount payable with respect to a Performance-Based Award shall be recorded in writing. Specifically, the Committee shall certify in writing, in a manner conforming to applicable regulations under section 162(m) of the Code, prior to settlement of each such Performance-Based Award granted to a Covered Employee, that the Performance Targets and other material terms upon which settlement of the Incentive Award was conditioned have been satisfied.

10. Adjustment upon Certain Changes

Subject to any action by IFF's shareholders required by law, applicable tax rules or the rules of any exchange on which shares of Common Stock are then listed for trading:

(a) Shares Available for Grants

In the event of any change in the number of shares of Common Stock outstanding by reason of any extraordinary stock dividend or split, recapitalization, merger, consolidation, spin-off, combination, liquidation, dissolution, repurchase or exchange of shares or similar corporate change, the Committee shall, to the extent deemed appropriate by the Committee, adjust any or all of (i) the maximum aggregate number or type of shares of Common Stock with respect to which the Committee may grant Incentive Awards, (ii) the maximum number of shares of Common Stock that may be covered by Options that are designated as "incentive stock options" within the meaning of section 422 of the Code (iii) the maximum aggregate number of shares of Common Stock with respect to which the Committee may grant Incentive Awards to any individual Participant in any year and to any non-employee director and (iv) any other limit set forth in Section 3, to the extent applicable. In the event of any change in the type or number of shares of Common Stock outstanding by reason of any other event or transaction, the Committee shall, to the extent deemed appropriate by the Committee, make such adjustments to the type or number of shares of Common Stock with respect to which Incentive Awards may be granted.

(b) Increase or Decrease in Issued Shares Without Consideration

In the event of any increase or decrease in the number of issued shares of Common Stock resulting from a subdivision or consolidation of shares of Common Stock or the payment of an extraordinary stock dividend (but only on the shares of Common Stock), or any other increase or decrease in the number of such shares effected without receipt or payment of consideration by the Company, the Committee shall, to the extent deemed appropriate by the Committee, adjust the type or number of shares of Common Stock subject to each outstanding Incentive Award and the exercise price per share of Common Stock of each such Incentive Award.

(c) Certain Mergers and Other Transactions

In the event of (i) a dissolution or liquidation of the Company, (ii) a sale of all or substantially all of the Company's assets (on a consolidated basis), (iii) a merger, consolidation or similar transaction involving the Company in which the holders of shares of Common Stock receive securities and/or other property, including cash, the Committee shall, to the extent deemed appropriate by the Committee, have the power to:

(i) cancel, effective immediately prior to the occurrence of such event, each Incentive Award (whether or not then exercisable or vested), and, in full consideration of such cancellation, pay to the Participant to whom such Incentive Award was granted an amount in cash, for each share of Common Stock subject to such Incentive Award, equal to the value, as determined by the Committee, of such Incentive Award, provided that with respect to any outstanding Option such value shall be equal to the excess of (A) the value, as determined by the Committee, of the property (including cash) received by the holder of a share of Common Stock as a result of such event over (B) the exercise price of such Option, provided, however that with respect to any outstanding Option with an exercise price that equals or exceeds the value, as determined by the Committee, of the consideration received by a holder of a share of Common Stock as a result of such event, the Committee may cancel the Option without the payment of consideration; or

(ii) provide for the exchange of each Incentive Award (whether or not then exercisable or vested) for an Incentive Award with respect to (A) some or all of the property which a holder of the number of shares of Common Stock subject to such Incentive Award would have received in such transaction or (B) securities of the acquiror or surviving entity and, incident thereto, make an equitable adjustment as determined by the Committee in the exercise price of the Incentive Award, or the number of shares or amount of property subject to the Incentive Award or provide for a payment (in cash or other property) to the Participant to whom such Incentive Award was granted in partial consideration for the exchange of the Incentive Award.

(d) Other Changes

In the event of any change in the capitalization of the Company, corporate change, corporate transaction, extraordinary cash dividend, or other event other than those specifically referred to in Sections 10(a), (b) or (c), the Committee shall, to the extent deemed appropriate by the Committee, make such adjustments in the number and class of shares subject to Incentive Awards outstanding on the date on which such change occurs and in such other terms of such Incentive Awards as the Committee deems appropriate.

(e) Cash Incentive Awards

In the event of any transaction or event described in this Section 10, including without limitation any corporate change referred to in paragraph (d) hereof, the Committee shall, to the extent deemed appropriate by the Committee, make such adjustments in the terms and conditions of any Cash Incentive Award as the Committee deems appropriate.

(f) No Other Rights

Except as expressly provided in the Plan or any Award Agreement, no Participant shall have any rights by reason of any subdivision or consolidation of shares of stock of any class, the payment of any dividends or dividend equivalents, any increase or decrease in the number of shares of stock of any class or any dissolution, liquidation, merger, or consolidation of the Company. Except as expressly provided in the Plan, no issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no adjustment by reason thereof shall be made with respect to, the number of shares or amount of other property subject to, or the terms related to, any Incentive Award.

(g) Savings Clause

No provision of this Section 10 shall be given effect to the extent that such provision would cause any tax to become due under section 409A of the Code.

With respect to any Performance-Based Awards granted to Covered Employees, no provision of this Section 10 shall be given effect to the extent that such provision would cause such Performance-Based Award to fail to qualify as Performance-Based Compensation under section 162(m) of the Code unless the Committee expressly acknowledges and affirms such consequences.

11. Change in Control; Termination of Employment

(a) Change in Control

(1) Unless otherwise provided in an Award Agreement, the ESP if the Participant is a participant in the ESP, or a Participant's then-effective employment, severance, or other similar agreement with the Company, in the event of a Change in Control of the Company in which the successor company assumes or substitutes for an Incentive Award (or in which the Company is the ultimate parent corporation and continues the Incentive Award), if a Participant's employment with such successor company (or the Company) or a subsidiary thereof is terminated within twenty-four months following such Change in Control (or such other period set forth in the Award Agreement, including prior thereto if applicable) (x) by such successor company or a subsidiary thereof without Cause, or, (y) for those Participants who participate in the ESP, by the Participant for Good Reason: (i) Options and stock appreciation rights outstanding as of the date of such termination of employment will immediately vest, become fully exercisable, and may thereafter be exercised for the period of time set forth in connection with such termination under the Award Agreement, but in no event beyond the end of the regularly scheduled term of such Incentive Award), and (ii) the restrictions, limitations, and other conditions applicable to any Other Stock-Based Awards or any other Incentive Award, including those Incentive Awards (or portions thereof) deemed earned pursuant to Section 11(b) below, shall lapse, and such Other Stock-Based Awards or such other Incentive Awards shall become free of all restrictions, limitations, and conditions and become fully vested and transferable to the full extent of the original grant. For the avoidance of doubt, a termination of a Participant's Employment as a result of the Participant's death, disability, voluntary resignation, Normal Retirement or Early Retirement shall not be a termination "without Cause" for purposes of the Plan.

(2) Unless otherwise provided in an Award Agreement, in the event of a

Change in Control of the Company to the extent the successor company does not assume or substitute for an Incentive Award (or in which the Company is the ultimate parent corporation and does not continue the Incentive Award), then immediately prior to the Change in Control: (i) those Options and stock appreciation rights outstanding as of the date of the Change in Control that are not assumed or substituted for (or continued) shall immediately vest and become fully exercisable for the period of time set forth in the Award Agreement, and (ii) the restrictions, other limitations and other conditions applicable to any Other Stock-Based Awards or any other Incentive Awards that are not assumed or substituted for (or continued) shall lapse, and such Other Stock-Based Awards or such other Incentive Awards shall become free of all restrictions, limitations, and conditions and become fully vested and transferable to the full extent of the original grant or, with respect to any Incentive Award subject to performance conditions, to the extent deemed earned pursuant to Section 11(b) below. Any Cash Incentive Awards, or portions thereof, deemed earned pursuant to Section 11(b) below and that become vested pursuant to this Section 11(a)(2) shall be paid and/or settled as soon as administratively practicable, but in no event later than thirty (30) calendar days following the date of the Change in Control.

(b) Effect of Change in Control on Performance Incentive Awards

With respect to any Incentive Award subject to performance conditions, unless otherwise provided in the applicable Award Agreement, the ESP if the Participant is a participant in the ESP, or a Participant's then-effective employment, severance, or other similar agreement with the Company, in the event of a Change of Control of the Company (x) the Committee will determine as of the Change in Control, in its sole discretion, the deemed level of achievement of the applicable performance conditions underlying such Incentive Award and (y) the provisions of Section 11(a) shall apply to such Incentive Award or portion to the extent such performance conditions are deemed earned .

(c) Termination of Employment

(1) Except as to any Incentive Awards constituting stock rights subject to section 409A of the Code, termination of Employment shall mean a separation from service within the meaning of section 409A of the Code. Without limiting the generality of the foregoing, the Committee shall determine whether an authorized leave of absence, or absence in military or government service, shall constitute termination of Employment, provided that a Participant who is an employee will not be deemed to cease Employment in the case of any leave of absence approved by the Company. Furthermore, no payment shall be made with respect to any Incentive Awards under the Plan that are subject to section 409A of the Code as a result of any such authorized leave of absence or absence in military or government service unless such authorized leave or absence constitutes a separation from service for purposes of section 409A of the Code and the regulations promulgated thereunder.

(2) The Award Agreement or the ESP, if applicable, shall specify the consequences with respect to such Incentive Awards of the termination of Employment of the Participant holding the Incentive Awards.

(3) If a Participant is Employed by or provides services to a Person that is an Affiliate, a business unit, division or facility of IFF and such Person ceases to be an Affiliate, a business unit, division or facility of IFF, the Committee shall, in its sole discretion, determine whether the Employment of a Participant with the Company shall be deemed to have terminated for all purposes under the Plan. Subject to section 409A of the Code and unless otherwise determined by the Committee, a Participant who ceases to be an employee of the Company but continues, or simultaneously commences, services as a director on the Board of Directors shall not be deemed to have had a termination of Employment for purposes of the Plan and a Participant who ceases to be an employee of the Company but continues, or simultaneously commences, services as an independent contractor or consultant to the Company shall be deemed to have had a termination of Employment for purposes of the Plan.

12. Award Agreements, Evidence of Incentive Awards and Acceptance of Incentive Award Terms

The Committee shall determine the appropriate instrument to document the issuance of an Incentive Award, including but not limited to the issuance of an Award Agreement. Except as otherwise determined by the Committee, the Award Agreement or other instrument shall describe the specific terms and conditions of the Incentive Award, and may, subject to the terms of the Plan, describe the amount and form of the Incentive Award, vesting requirements, Performance Targets and Performance Periods, payment terms, rights upon termination of Employment (including Early Retirement and Normal Retirement), or provision of services by the Participant, and other terms specific to the Incentive Award; provided that the vesting period for any Stock Incentive Award shall be for a minimum of one (1) year from the date of grant unless, (a) the Stock Incentive Award was granted through the assumption of, or in substitution for, outstanding awards previously granted to individuals who became employees of the Company as a result of a merger, consolidation, acquisition or other corporate transaction involving the Company, (b) the Stock Incentive Award was granted as an inducement to become an employee, non-employee director, consultant or other service provider to the Company, or (c) there exist other extraordinary or special circumstances, as determined in the sole discretion of the Committee or its designee. A Participant may be required to accept the terms of the Incentive Award and agree to be bound by the terms and conditions of the Plan and the applicable Award Agreement in order for an Incentive Award to become effective.

13. Rights Under the Plan

No Person shall have any rights as a shareholder with respect to any shares of Common Stock covered by or relating to any Incentive Award until the date of the issuance of such shares on the books and records of IFF. Except as otherwise expressly provided in Section 10 hereof, no adjustment of any Incentive Award shall be made for dividends or other rights for which the record date occurs prior to the date of such issuance. Nothing in this Section 13 is intended, or should be construed, to limit authority of the Committee to cause the Company to make payments based on the dividends that would be payable with respect to any share of Common Stock if it were issued or outstanding, or from granting rights related to such dividends.

14. Unfunded Status of Incentive Awards; Creation of Trusts

The Plan is intended to constitute an “unfunded” plan for incentive and deferred compensation, as applicable. With respect to any payments not yet made to a Participant or obligation to deliver shares of Common Stock pursuant to an Incentive Award, nothing contained in the Plan or any Incentive Award shall give any such Participant any rights that are greater than those of a general creditor of the Company; provided that the Committee may authorize the creation of trusts and deposit therein cash, shares of Common Stock, other Incentive Awards or other property, or make other arrangements to meet the Company's obligations under the Plan. Such trusts or other arrangements shall be consistent with the "unfunded" status of the Plan unless the Committee otherwise determines with the consent of each affected Participant.

15. No Special Employment Rights; No Right to Incentive Award

(a) Nothing contained in the Plan or any Award Agreement shall confer upon any Participant any right with respect to the continuation of his or her Employment by the Company or interfere in any way with the right of the Company at any time to terminate such Employment or to increase or decrease the compensation of the Participant from the rate in existence at the time of the grant of an Incentive Award.

(b) No person shall have any claim or right to receive an Incentive Award hereunder. The Committee's granting of an Incentive Award to a Participant at any time shall neither require the Committee to grant an Incentive Award to such Participant or any other Participant or other person at any time nor preclude the Committee from making subsequent grants to such Participant or any other Participant or other person.

16. Securities Matters

(a) IFF shall be under no obligation to affect the registration pursuant to the Securities Act of any shares of Common Stock to be issued hereunder or to effect similar compliance under any state or local laws. Notwithstanding anything herein to the contrary, IFF shall not be obligated to cause to be issued shares of Common Stock pursuant to the Plan unless and until IFF is advised by its counsel that the issuance is in compliance with all applicable laws, regulations of governmental authority, and the requirements of any securities exchange on which shares of Common Stock are traded. The Committee may require, as a condition to the issuance of shares of Common Stock pursuant to the terms hereof, that the recipient of such shares make such covenants, agreements, and representations, and that any related certificates representing such shares bear such legends, as the Committee, in its sole discretion, deems necessary or desirable.

(b) The exercise or settlement of any Incentive Award (including, without limitation, any Option) granted hereunder shall only be effective at such time as counsel to IFF shall have determined that the issuance and delivery of shares of Common Stock pursuant to such exercise is in compliance with all applicable laws, regulations of governmental authority and the requirements of any securities exchange on which shares of Common Stock are traded. IFF may, in its sole discretion, defer the effectiveness of any exercise or settlement of an Incentive Award granted hereunder in order to allow the issuance of shares pursuant thereto to be made pursuant to registration or an exemption from registration or other methods for compliance available under federal or state or local securities laws. IFF shall inform the Participant in writing of its decision to defer the effectiveness of the exercise or settlement of an Incentive Award granted hereunder. During the period that the effectiveness of the exercise of an Incentive Award has been deferred, the Participant may, by written notice, withdraw such exercise and obtain the refund of any amount paid with respect thereto.

17. Certificates for Stock

Any Stock Incentive Award granted under the Plan may be evidenced in such manner as the Committee shall determine, including by issuing certificates or using book-entry. If the Committee evidences Stock Incentive Awards using Common Stock certificates, the Committee may require that such certificates bear an appropriate legend referring to the terms, conditions and restrictions, if applicable, to such Stock Incentive Award, that the Company retain physical possession of the certificates, and that the Participant deliver a stock power to the Company, endorsed in blank, relating to the Stock Incentive Award.

18. Fractional Shares

No fractional shares of Common Stock shall be issued or delivered pursuant to the Plan or any Incentive Award. The Committee shall determine whether cash, other Incentive Awards or other property shall be issued or paid in lieu of such fractional shares of Common Stock or whether such fractional shares of Common Stock or any rights thereto shall be forfeited or otherwise eliminated.

19. No Personal Loans or Reloads

No Incentive Award shall provide for a personal loan to a Participant, including for payment of the exercise price of an Option or withholding taxes relating to any Incentive Award. No term of an Incentive Award shall provide for automatic “reload” grants of additional Incentive Awards upon exercise of an Option or stock appreciation right or otherwise as a term of an Incentive Award.

20. Taxes

(a) Withholding

The Company is authorized to withhold from any Incentive Award granted, any payment relating to an Incentive Award under the Plan, including from a distribution of Common Stock, or any payroll or other payment to a Participant, amounts sufficient to satisfy the minimum federal, state, non-U.S. and local withholding tax requirements, and to take such other action (including without limitation providing for elective payment of such amounts by the Participant) as the Committee may deem advisable to enable the Company and Participants to satisfy the minimum federal, state, non-U.S. and local withholding tax requirements relating to any Incentive Award.

(b) Requirement of Notification Upon Disqualifying Disposition Under Code Section

421(b)

If any Participant shall make any disposition of shares of Common Stock delivered pursuant to the exercise of an incentive stock option under the circumstances described in section 421(b) of the Code (relating to certain disqualifying dispositions), such Participant shall notify the Company of such disposition within ten (10) days thereof.

21. Section 83(b) Election

Except as otherwise provided in an Award Agreement or approved by the Committee, no election under section 83(b) of the Code or under a similar provision of the laws of a jurisdiction outside the United States may be made with respect to any Incentive Award. In any case in which a Participant is permitted to make such an election in connection with an Incentive Award, the Participant shall notify the Company of such election within (10) ten days of filing notice of the election with the Internal Revenue Service or other governmental authority, in addition to any filing and notification required pursuant to regulations issued under section 83(b) of the Code or other applicable law.

22. No Obligation to Exercise

The grant to a Participant of an Incentive Award shall impose no obligation upon such Participant to exercise such Incentive Award.

23. Transfers

Except as otherwise provided in an Award Agreement, Incentive Awards may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution and may be exercised, during the lifetime of a Participant, only by the Participant or, if permissible under applicable law, by the Participant's guardian or legal representative. Upon the death of a Participant, outstanding Incentive Awards granted to such Participant may be exercised only by the executors or administrators of the Participant's estate or by any person or persons who shall have acquired such right to exercise by will or by the laws of descent and distribution. No transfer by will or the laws of descent and distribution of any Incentive Award, or the right to exercise any Incentive Award, shall be effective to bind the Company unless the Committee shall have been furnished with (a) written notice thereof and with a copy of the will and/or such evidence as the Committee may deem necessary to establish the validity of the transfer and (b) an agreement by the transferee to comply with all the terms and conditions of the Incentive Award that are or would have been applicable to the Participant and to be bound by the acknowledgements made by the Participant in connection with the grant of the Incentive Award.

24. Expenses and Receipts

The expenses of the Plan shall be paid by the Company. Any proceeds received by the Company in connection with any Incentive Award will be used for general corporate purposes.

25. Failure to Comply

In addition to the remedies of the Company elsewhere provided for herein, failure by a Participant to comply with any of the terms and conditions of the Plan or any Award Agreement shall be grounds for the cancellation and forfeiture of such Incentive Award, in whole or in part, as the Committee, in its absolute discretion, may determine.

26. Right of Setoff

The Company may, to the extent permitted by applicable law, deduct from and set off against any amounts the Company may owe to the Participant from time to time, including amounts payable in connection with any Incentive Award, owed as wages, fringe benefits, or other compensation owed to the Participant, such amounts as may be owed by the Participant to the Company, including but not limited to amounts owed under Section 32, although the Participant shall remain liable for any part of the Participant's payment obligation not satisfied through such deduction and setoff. By accepting any Incentive Award granted under the Plan, the Participant agrees to any deduction or setoff under this Section 26.

27. Relationship to Other Benefits

No payment with respect to any Incentive Awards under the Plan shall be taken into account in determining any benefits under any pension, retirement, profit sharing, group insurance, or other benefit plan of the Company except as otherwise specifically provided in such other plan. Nothing in the Plan shall limit the right of the Company to pay compensation of any kind outside the terms of the Plan.

28. Governing Law

The Plan and the rights of all persons under the Plan shall be construed and administered in accordance with the laws of the State of New York without regard to its conflict of law principles.

29. Severability

If all or any part of this Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity shall not serve to invalidate any portion of this Plan not declared to be unlawful or invalid. Any Section or part of a Section so declared to be unlawful or invalid shall, if possible, be construed in a manner that will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

30. Effective Date and Term of Plan

The "Effective Date" of the Plan is March 11, 2015. No grants of Incentive Awards may be made under the Plan after March 11, 2025.

31. Amendment or Termination of the Plan

The Board of Directors may at any time suspend, terminate or discontinue the Plan or revise, modify or amend the Plan or any Incentive Award in any respect whatsoever; provided, however, that to the extent that any applicable law, tax requirement, or rule of a stock exchange requires shareholder approval in order for any such revision or amendment to be effective, such revision or amendment shall not be effective without such approval, which shall be submitted to the Company's shareholders no later than the earliest annual meeting for which the record date is after the date of such action by the Board of Directors. The preceding sentence shall not restrict the Committee's ability to exercise its discretionary authority hereunder pursuant to Section 4 hereof, which discretion may be exercised without amendment to the Plan. No provision of this Section 31 shall be given effect to the extent that such provision would cause any tax to become due under section 409A of the Code. Except as expressly provided in the Plan, no amendment hereunder may, without the consent of a Participant, materially adversely affect the Participant's rights under any outstanding Incentive Award granted prior to such amendment.

32. Forfeiture and Clawback

(a) Forfeiture and Clawback of Incentive Awards.

Unless otherwise determined by the Committee, each Incentive Award granted to (i) a Participant who is designated by the Company as job level 7 or above, or (ii) to any other Participant, as may be determined by the Committee from time to time in its sole discretion, shall, in each case, be subject to the forfeiture and clawback provisions set forth in this Section 32.

(b) Covenant and Policy Violations. A Participant's failure to comply with any of the following obligations shall be considered a "Covenant Forfeiture Event":

(1) The Participant acting directly or indirectly, shall not, during the Participant's Employment and the twelve month period following the Participant's termination of Employment, become employed by, render services for, serve as an agent or consultant to, or become a partner, member, principal, shareholder or other owner of any of the following entities: Firmenich, S.A., Givaudan, S.A., V. Mane Fils, S.A., Robertet, S.A., Symrise A.G., Takasago International Corporation, Wild Flavors GmbH, Sensient Technologies Corporation, any of their respective Affiliates, or any other entity that is competitive with the Company, as determined by the Committee in its sole discretion from time to time.

(2) The Participant, acting directly or indirectly, shall not, during the Participant's Employment and the twenty-four month period following the Participant's termination of Employment, (A) solicit, induce, divert, employ or retain, or interfere with or attempt to influence the relationship of the Company, with any Person or entity that is or was, during the last twelve months of the Participant's Employment with the Company, (i) an employee of the Company or (ii) a Person engaged to provide services to the Company; or (B) interfere with or attempt to influence the relationship of the Company with any customer, supplier or other Person with whom the Company does business.

(3) The Participant shall not, at any time, directly or indirectly (a) disclose any Confidential Information (as defined below) to any Person (other than, only with respect to the period that the Participant is Employed, to an employee or outside advisor of the Company who requires such information to perform his or her duties for the Company) or (b) use, sell or

otherwise transfer, any Confidential Information for the Participant's own benefit or the benefit of any third party. "Confidential Information," shall mean confidential, proprietary or commercially sensitive information relating to the Company, or its employees, board members, customers, vendors, or other business partners and its businesses, operations, or affairs, including, without limitation, information relating to products, formulations, protocols, processes, designs, formulae, ideas, know-how, test methods, evaluation techniques, patents, trade secrets, scientific or technical data, regardless of the form in which it is maintained or provided, orally or in writing, whether prepared by the Company, a third party or the Participant, together with all analyses, compilations, notes and other documents relating thereto.

(4) The Participant shall cooperate with the Company by making himself or herself available to testify on behalf of the Company in any action, suit, or proceeding, whether civil, criminal, administrative, or investigative, and shall not otherwise fail to assist the Company in any such action, suit, or proceeding by providing information and meeting and consulting with members of management of, other representatives of, or counsel to, the Company, as reasonably requested.

(5) The Participant shall not, during his or her Employment, engage in willful misconduct or violation of a Company policy that is materially detrimental to the Company or in any action or inaction that would constitute grounds for being terminated for Cause, as determined by the Committee in its sole discretion.

(6) The Participant shall, upon termination of Employment, execute any documentation reasonably requested by the Company and return to the Company all property of the Company, its customers and vendors in the Participant's possession or control including, without limitation, all materials, work product or documents containing or pertaining to Confidential Information, and including without limitation, any Company car, all computers (including laptops), cell phones, keys, PDAs, Blackberries, iPhones, Androids, iPads, credit cards, printers, facsimile machines, televisions, card access to any Company building, customer lists, reports, files, emails, work papers, memoranda, notes, formulae, tapes, programs, records and software, computer access codes or disks, instructional manuals, and other similar materials or documents used, received or prepared or supervised by the Participant in connection with Participant's work for the Company. The Participant shall not retain any copies, duplicates, reproductions or excerpts of any of the aforementioned materials or documents and shall not at any time use, recreate or reproduce any said materials or documents.

(c) Forfeiture and Repayment Obligations

(1) Due to Participant's Failure to Comply with Obligations. If a Participant fails to comply with any of the obligations set forth in Section 32(b), the Participant will forfeit or repay, as the case may be, all Incentive Awards, whether vested or unvested, paid or unpaid, in each case, that were settled, paid or granted by the Company during the 24 month period immediately prior to the Participant's first act or omission that violates any of Section 32(b) through the date on which the Company discovers the Participant's last violation, and the Company shall have no further

obligations to pay, grant or settle any Incentive Awards under this Plan.

(2) Due to an Accounting Restatement or Misstatement. If the Company is required to prepare an accounting restatement, or if the Company determines that it has misstated its financial results, whether or not as a result of misconduct on the part of the Participant (an "Accounting Forfeiture Event" and, together with a Covenant Forfeiture Event, a "Forfeiture Event"), then, the Participant shall forfeit or repay the Excess Compensation (as defined below) in respect of all Incentive Awards, whether vested or unvested, paid or unpaid, that were granted, settled or paid during the period commencing on the first day of the 12-month period covered by such misstated financial statement through the later of (i) the date of the filing of a restatement where an accounting restatement is required to be filed; (ii) the date of the discovery of the misstated financials where any accounting restatement is not required to be filed; or (iii) any later date as may be required by applicable law, including the Dodd-Frank Wall Street Reform and Consumer Protection Act.

(3) For purposes of this Section 32(c)(2), the term "Excess Compensation" means with respect to each Incentive Award, the difference between (A) the Fair Market Value of the cash or shares of Common Stock granted, paid or delivered to or received by the Participant with respect to an Incentive Award less (B) the Fair Market Value of the cash or shares of Common Stock that would have been granted, paid or delivered to or received by the Participant had the financial statements requiring the misstatement or restatement been properly stated, as determined by the Committee in its sole discretion.

(4) Any clawback or recoupment provisions required by law, including under the Dodd-Frank Wall Street Reform and Consumer Protection Act or any rules or regulations thereunder, shall apply to the Incentive Awards granted under the Plan and any policy of the Company providing for forfeiture or recoupment of compensation shall not be deemed limited in any way by this Section 32 or any other provision of this Plan.

(5) Any Incentive Awards, cash or shares of Common Stock (A) subject to repayment by the Participants under this Section 32 must be repaid to the Company (less any amount paid by the Participant to the Company as a condition of or in connection with settlement of a repaid Incentive Award), in the manner and on such terms and conditions as shall be required by the Company by written notice to the Participant and (B) subject to forfeiture will be forfeited immediately upon written notice to the Participant from the Company.

(6) For the avoidance of doubt, nothing in any agreement with the Company, or in any Company policy, including this Plan shall be deemed to prohibit or restrict a Participant from lawfully communicating truthful information, or cooperating with, or otherwise assisting in an investigation by any governmental agency or self-regulatory organization regarding a possible violation of law or responding to any inquiry from any such organization, and a Participant's doing so shall not constitute a Forfeiture Event. If a Participant communicates any Confidential Information to a governmental agency or self-regulatory agency pursuant to this Section, the Participant shall notify the agency of the confidentiality of such Confidential Information and ask the agency to also protect the confidentiality of such Confidential Information.

(7) In accordance with the Defend Trade Secrets Act of 2016, a Participant will not be held criminally or civilly liable under any federal or state trade secret law for disclosure of a trade secret that: (i) is made (A) in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney, and (B) solely for the purpose of reporting or investigating a suspected violation of law; or (ii) is made in a complaint or other document that is filed under seal in a lawsuit or other proceeding. If a Participant files a lawsuit for retaliation by the Company for reporting a suspected violation of law, the Participant may disclose the Company's trade secrets to his or her attorney and use the trade secret information in the court proceeding if the Participant (a) files any document containing the trade secret under seal, and (b) does not disclose the trade secret, except pursuant to court order.

(d) Agreement Does Not Prohibit Competition or Other Participant Activities. A Participant is not prohibited from engaging in an activity identified in Section 32(b) solely as a result of such provision. Rather, the non-occurrence of the Forfeiture Events set forth in Section 32(b) is a condition to the Participant's right to realize and retain value from his or her Incentive Awards, and the consequence under the Plan if the Participant engages in an activity giving rise to any such Forfeiture Event are the forfeitures specified herein. The Company and the Participant shall not be precluded by this provision or otherwise from entering into other agreements concerning the subject matter of Section 32.

(e) No Limitation of Rights. Any forfeiture or repayment under this Section 32 is in addition to, and not in lieu of, any other remedies or rights that may be available to the Company under applicable law, including, without limitation, the right to (i) dismiss the Participant, (ii) adjust the future compensation of the Participant, or (iii) take such other action to enforce the Participant's obligations to Company as the Company may deem appropriate in view of the facts and circumstances surrounding the particular situation.

(f) Committee Discretion. The Committee shall have the authority, in its sole discretion, to interpret and construe the provisions of this Section 32 and to make all determinations with respect hereto, including the determination of whether a Forfeiture Event has occurred, the timing of such Forfeiture Event and the amount and form of any forfeiture or reimbursement to be made to the Company from a Participant. The Committee may consider such factors as it deems relevant in making such determinations, including the factors contributing to the Forfeiture Event, harm or potential harm to the Company, the nature and severity of a Participant's behavior or conduct, legal and tax considerations and other facts and circumstances relating to a particular situation. All interpretations, constructions and determinations made by the Committee hereunder shall be final and binding on the Company and the Participant and the determinations of the Committee need not be uniform with respect to all Participants or situations. The Committee may waive in whole or in part the Company's right of recapture or impose additional conditions on an Incentive Award granted or paid to a Participant under this Plan.

33. Incentive Awards to Participants Outside the United States

The Committee may modify the terms of any Incentive Award under the Plan made to or held by a Participant who is then resident or primarily employed outside of the United States or is subject to taxation by a non-U.S. jurisdiction in any manner deemed by the Committee to be necessary or appropriate in order that such Incentive Award shall conform to laws, regulations, sound business practices and customs of the country in which the Participant is then resident or primarily employed, or so that the value and other benefits of the Incentive Award to the Participant, as affected by foreign tax laws and other restrictions applicable as a result of the Participant's residence or Employment abroad shall be comparable to the value of such an Incentive Award to a Participant who is resident or primarily employed in the United States. An Incentive Award may be modified under this Section 33 in a manner that is inconsistent with the express terms of the Plan, so long as such modifications will not contravene any applicable law or regulation or result in actual liability under section 16(b) of the Exchange Act for the Participant whose Incentive Award is modified.

EXHIBIT 10.21

INTERNATIONAL FLAVORS & FRAGRANCES INC.

Amended and Restated

Executive Severance Policy

(As amended through and including February 7, 2017)

INTERNATIONAL FLAVORS & FRAGRANCES INC.

Executive Severance Policy

INTERNATIONAL FLAVORS & FRAGRANCES INC.

Executive Severance Policy

1. Purpose. The purpose of this International Flavors & Fragrances Inc. Executive Severance Policy (this "Policy") is to provide certain Severance Payments and Benefits (as defined below) to designated key executives and employees of the Company in the event of a termination of their employment in certain specified circumstances. This Policy does not create any contract of employment or right to employment for any period of time. Employment with the Company is at-will, unless otherwise specified in an effective employment agreement between the Company and the Employee, and may be terminated by either the Company or the Employee at any time for any reason consistent with the terms and conditions set forth herein and in any other applicable agreement. This Policy has been adopted in the form set forth herein effective as of February 7, 2017 (the "Effective Date"). This Policy is an amendment and restatement of the International Flavors & Fragrances Inc. Executive Severance Policy, which was last amended and restated effective as of March 9, 2015.

2. Definitions. The following definitions are applicable for purposes of this Policy (including in any Annex hereto), in addition to terms defined in Section 1 above:

(a) "2010 SAIP" means the Company's 2010 Stock Award and Incentive Plan, as it may be amended and/or restated from time to time.

(b) "2015 SAIP" means the Company's 2015 Stock Award and Incentive Plan, as it may be amended and/or restated from time to time.

(c) "Accounting Forfeiture Event" has the meaning specified in Section 9(b)(ii).

(d) "Accrued Obligations" means (i) the Employee's base salary otherwise payable through the Date of Termination, (ii) any incentive compensation and benefits which have become vested or payable prior to the Date of Termination in accordance with the terms of the applicable Company incentive compensation and benefit plans and applicable Award Agreements (as defined below) but which have not yet been paid to the Employee, and (iii) unreimbursed business expenses reimbursable under Company policies then in effect; provided, however, that in each of (i), (ii) and (iii), to the extent permissible under applicable law, the Company may offset such amounts against any obligations and liabilities of the Employee to the Company.

(e) "Affected Employee" has the meaning specified in Section 8(a).

(f) "Affiliate" means with respect to a specified Person, a Person that directly, or indirectly through one or more intermediaries, controls, is controlled by, or is under common control with, the specified Person.

(g) "AIP" means, for each Employee, the plan or arrangement of the Company providing cash-denominated bonuses for annual Company and/or business unit performance in which such Employee participates.

(h) “Award” shall mean any stock-based award or cash award permitted to be granted to an Employee under an SAIP or an AIP.

(i) “Award Agreement” means an agreement (whether in written or electronic form) evidencing an Award granted under an SAIP or an AIP.

(j) “Beneficiary” means a person or entity that an Employee designates in writing to the Company to receive payments or benefits hereunder in the event of the Employee’s death. If no such person or entity is named or there is no surviving designated Beneficiary, such Employee’s Beneficiary shall be the Employee’s estate.

(k) “Benefit Continuation” shall mean, subject to the continued co-payment of premiums by the Employee, the continued participation for the Employee and his or her eligible dependents in the Company’s Benefit Plans, upon the same terms and conditions in effect from time to time for active employees of the Company, as determined in good faith by the Committee.

(l) “Benefit Continuation Period” has the meaning specified in Section 6(b).

(m) “Benefit Plans” shall mean all medical and dental benefit plans of the Company and any group life insurance, group accident insurance and group disability insurance plans of the Company, in each case, as may be in effect from time to time.

(n) “Board” means the Board of Directors of the Company.

(o) “Cause” means, with respect to an Employee, the definition as such term is defined in any effective employment agreement with such Employee as of the Employee’s Date of Termination, otherwise Cause means (i) the Employee’s failure to perform his or her material duties in any material respect, which if such failure is reasonably susceptible to cure as reasonably determined in the sole discretion of the Committee, has continued after the Company has provided written notice of such failure and the Employee has not cured such failure within ten (10) days of receipt by the Employee of such written notice, (ii) willful misconduct or gross negligence by the Employee that has caused or is reasonably expected to result in material injury to the Company’s business, reputation or prospects, (iii) the engagement by the Employee in illegal conduct or in any act of serious dishonesty which could reasonably be expected to result in material injury to the Company’s business or reputation or which adversely affects the Employee’s ability to perform his or her duties, (iv) the Employee being indicted or convicted of (or having pled guilty or nolo contendere to) a felony or any crime involving moral turpitude, dishonesty, fraud, theft or financial impropriety, or (v) a material and willful violation by the Employee of the Company’s rules, policies or procedures. Notwithstanding the foregoing, a Tier I Employee shall not be deemed to have been terminated for Cause unless and until there shall have been delivered to the Employee a copy of the resolution duly adopted by the affirmative vote of the majority of the membership of the Board of Directors of the Company so finding.

(p) A “Change in Control” shall be deemed to have occurred if, after the Effective Date, there shall have occurred any of the following:

(i) any Person (as defined below) becomes the "beneficial owner," as such term is defined in Rule 13d-3 under the Exchange Act (as defined below), directly or indirectly, of securities of the Company representing 40% or more of the combined Voting Power (as defined below) of the Company's then outstanding Voting Securities (as defined below), other than beneficial ownership by the Company, any employee benefit plan of the Company or any Person organized, appointed or established pursuant to the terms of any such benefit plan;

(ii) individuals who at the Effective Date constitute a majority of the Board (the "Incumbent Directors") cease to constitute a majority of the Board for any reason; provided, however, that any individual becoming a director subsequent to the Effective Date whose election or nomination for election to the Board was approved by a vote of at least two-thirds of the Incumbent Directors then on the Board (either by a specific vote or by approval of the proxy statement of the Company in which such person is named as a nominee for director without objection to such nomination) shall be an Incumbent Director; provided, however, that no individual shall be an Incumbent Director if such individual is initially elected or nominated as a director of the Company as a result of an actual or threatened election contest with respect to directors or as a result of any other actual or threatened solicitation of proxies by or on behalf of any person other than the Board; or;

(iii) The consummation of:

A. A merger, consolidation, reorganization or similar transaction with or into the Company or in which securities of the Company are issued, as a result of which the holders of the outstanding Voting Securities of the Company immediately before such event own, directly or indirectly, immediately after such event less than 60% of the combined Voting Power of the outstanding Voting Securities of the parent entity resulting from, or issuing its Voting Securities as part of, such event;

B. A complete liquidation or dissolution of the Company; or

C. The sale or other disposition of all or substantially all of the assets of the Company (on a consolidated basis) to any Person other than (x) the Company, (y) an employee benefit plan (or a trust forming a part thereof) maintained by the Company or (z) a Person whose Voting Securities immediately following such sale or disposition will be owned by the holders of the outstanding Voting Securities of the Company immediately prior thereto, in substantially the same proportions.

Notwithstanding the foregoing, no payment of any payment or benefit under this Policy that constitutes "non-qualified deferred compensation" within the meaning of Section 409A of the Code (as defined below) shall be made solely upon the occurrence of a Change in Control to the extent such Change in Control does not also qualify as a "change in control event" within the meaning of

Treasury Regulation §1.409A-3(i)(5)(i) and such payment or benefit shall be paid on its otherwise scheduled payment date(s).

(q) "CIC Benefit Continuation Period" has the meaning specified in Section 7(f).

(r) "CIC Severance Factor" means, unless otherwise provided in the Employee's effective employment agreement with the Company as of the Date of Termination, the multiple for each Employee as set forth in Annex I hereto.

(s) "COBRA" means the continuation coverage requirements for "group health plans" under Title X of the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended, and as codified in Code Section 4980B and ERISA Sections 601 through 608, each as amended from time to time, including rules thereunder and successor provisions and rules thereto.

(t) "Code" means the Internal Revenue Code of 1986, as amended from time to time, and all regulations, interpretations, and administrative guidance issued thereunder.

(u) "Code Section 409A" means Section 409A of the United States Internal Revenue Code of 1986, as amended from time to time, and the Treasury Regulations promulgated thereunder.

(v) "Committee" means the Compensation Committee of the Board or such other committee as the Board may designate to perform administrative functions under this Policy.

(w) "Company" means International Flavors & Fragrances Inc., a New York corporation, and all of its Affiliates, collectively, (and any successors or assigns thereto).

(x) "Confidential Information" has the meaning specified in Section 9(a)(iii).

(y) "Covenant Forfeiture Event" has the meaning specified in Section 9(b)(i).

(z) "Date of Termination" means, unless otherwise agreed by the Company, (i) if the Employee's employment is terminated by the Company for Cause, or by the Employee for Good Reason (where applicable) and there is an ability to cure, the date that is one day after the last day of any applicable cure period, (ii) if the Employee's employment is terminated by reason of death, the date of death of the Employee, (iii) if the Employee's employment is terminated by reason of disability then the date upon which the Employee becomes Disabled or (iv) if the Employee's employment is terminated for any other reason, the date on which a notice of termination is given or the date set forth in such notice, which, in the event of a termination by the Employee without Good Reason, shall not be less than 60 days after such notice.

(aa) "Delay Period" has the meaning specified in Section 12(c).

(ab) "Disabled" or "Disability" means, unless otherwise set forth in the Employee's employment agreement with the Company, a condition that entitles an Employee to long term disability benefits under any applicable Company disability plan, any successor plan, or as defined under any applicable local laws, rules, or regulations.

(ac) "Effective Date" means the date set forth in the first paragraph of this Policy.

(ad) "Employee" has the meaning specified in Section 3.

(ae) "Entity" has the meaning specified in Section 10(a).

(af) "Equity Choice Award" means an equity choice program award under a SAIP.

(ag) "Excess Benefit Plan" means the Company's Supplemental Retirement Plan and any other supplemental pension plans sponsored or maintained by the Company as may be in effect from time to time.

(ah) "Excess Compensation" has the meaning specified in Section 9(b)(ii)(A).

(ai) "Exchange Act" means the Securities Exchange Act of 1934, as amended.

(aj) "Excise Tax" has the meaning specified in Section 8.

(ak) "Forfeiture Event" has the meaning specified in Section 9(b)(ii).

(al) "Good Reason" means, with respect to an Employee, where applicable, the definition as such term is defined in any effective employment agreement with such Employee as of the Employee's Date of Termination, otherwise Good Reason means the occurrence of any of the following events, unless the Employee has consented in writing thereto:

(i) a material decrease in the Employee's base salary, target bonus under an AIP, LTIP or Equity Choice Award, other than as part of an across-the-board reduction applicable to all similarly situated employees of the Employee's employer;

(ii) a material diminution in the Employee's authority, duties or responsibilities;

(iii) a relocation of the Employee's primary work location more than 50 miles from the Employee's primary work location at the time of such requested relocation;

(iv) the failure of the Company to obtain the binding agreement of any successor to the Company expressly to assume and agree to fully perform the Company's obligations under this Policy, as contemplated in the last sentence of Section 13(a) hereof;

provided, that within 90 days after the initial occurrence of any of the events or the initial existence of any of the conditions set forth in (i) through (iii) above the Employee delivers written notice to the Company of his or her intention to terminate his or her employment for Good Reason which specifies in reasonable details the circumstances claimed to give rise to the Employee's right to terminate employment for Good Reason, and the Company fails to correct such conduct or condition after a period of 30 days following receipt of such notice.

For purposes of this Policy, "Good Reason" is intended to constitute an "involuntary separation" within the meaning of Treasury Regulation § 1.409A-1(n)(2).

(mm) “Independent Advisors” has the meaning specified in Section 8(c)(i).

(nn) “Initial Payment Period” has the meaning specified in Section 12(c).

(oo) “Limit” has the meaning specified in Section 12(c).

(pp) “LTIP” means a long-term performance incentive plan of the Company under an SAIP.

(qq) “Person” means an individual, corporation, partnership, limited liability company, association, trust, other entity, group or organization including a governmental authority.

(rr) “PPACA” means the Patient Protection and Affordable Care Act of 2010 and the related regulations and guidance promulgated thereunder.

(ss) “Reduced Amount” has the meaning specified in Section 8(a).

(tt) “Release” has the meaning specified in Section 9(c)(i).

(uu) “Release Period” has the meaning specified in Section 9(c)(i).

(vv) “Restatement Clawback Period” has the meaning specified in Section 9(b)(ii).

(ww) “SAIP” shall mean each plan, policy, program or arrangement maintained by the Company pursuant to which equity-based awards or cash awards may be granted to Employees, as may be amended and/or restated from time to time.

(xx) “Severance Factor” means, unless otherwise provided in the Employee’s effective employment agreement with the Company as of the Date of Termination, the multiple for each Employee as set forth in Annex I hereto.

(yy) “Severance Continuation Period” means, unless otherwise provided in the Employee’s effective employment agreement with the Company as of the Date of Termination, a period of a number of months following the Date of Termination for each Employee during which certain Severance Payments and Benefits will be provided pursuant to this Policy, as set forth in Annex I hereto.

(zz) “Severance Payments and Benefits” means all benefits provided or payments made by the Company to or for the benefit of an Employee under this Policy.

(aaa) “Supplemental Retirement Plan” means the International Flavors & Fragrances Inc. Supplemental Retirement Plan.

(bbb) “Voting Power” means the number of votes available to be cast (determined by reference to the maximum number of votes entitled to be cast by the holders of Voting

Securities, or by the holders of any Voting Securities for which other Voting Securities may be convertible, exercisable, or exchangeable, upon any matter submitted to shareholders where the holders of all Voting Securities vote together as a single class) by the holders of Voting Securities.

(ccc) "Voting Securities" means any securities or other ownership interests of an entity, which entitle or which may entitle, Persons holding such securities or other ownership interests to vote on matters submitted to such holders generally (whether or not entitled to vote in the general election of directors), or securities or other ownership interests which are convertible into, or exercisable in exchange for, such Voting Securities, whether or not subject to the passage of time or any contingency.

3. Eligibility. Each key executive or employee of the Company who has been designated in writing by the Committee (each an "Employee") shall be eligible for the Severance Payments and Benefits and other provisions of this Policy if his or her termination of employment qualifies hereunder. Each Employee shall be designated in writing by the Committee as either (i) the Chief Executive Officer, (ii) a Tier I Employee or (iii) a Tier II Employee. Employees shall include persons employed outside the United States, if designated by the Committee and subject to Section 13(h) of this Policy. Unless expressly indicated in this Policy, the Chief Executive Officer shall be a Tier I Employee for all purposes under this Policy. For the avoidance of doubt, for purposes of Section 7 herein, an "Employee" shall be each key executive or employee of the Company who has been designated in writing as a Tier I Employee (including the Chief Executive Officer) or Tier II Employee by the Committee as of the date of the Change in Control.

4. Administration. Subject to Section 13(e) hereof, this Policy shall be interpreted, administered and operated by the Committee, which shall have complete authority, subject to the express provisions of this Policy, to interpret this Policy, to prescribe, amend and rescind rules and regulations relating to this Policy, and to make all other determinations necessary or advisable for the administration of this Policy. The Committee may delegate any of its duties hereunder to a subcommittee, or to such person or persons from time to time as it may designate. All decisions, interpretations and other actions of the Committee shall be final, conclusive and binding on all parties who have an interest in this Policy. No member of the Committee, nor any Person acting pursuant to authority delegated by the Committee, shall be liable for any action, omission, or determination relating to this Policy, and the Company shall, to the fullest extent permitted by law, indemnify and hold harmless each member of the Committee and each Person to whom any duty or power relating to the administration or interpretation of this Policy has been delegated, against any cost or liability arising out of any action, omission or determination relating to this Policy, unless, in either case, such action, omission, or determination was taken or made by such member or other Person acting pursuant to authority delegated by the Committee in bad faith and without reasonable belief that it was in the best interests of the Company.

5. Termination of Employment for any Reason. Subject to the terms and conditions contained herein, in the event of any termination of an Employee's employment with the Company for any reason:

(a) The Company shall pay the Employee the Accrued Obligations, payable on the dates such amounts would have been payable under the Company's policies if the Employee's employment had not terminated, but in no event more than 60 days after Employee's Date of Termination, or sooner if required by applicable law.

(b) Except as expressly provided in Section 6 or Section 7 (in the event that either section is applicable), any outstanding Awards (including, for the avoidance of doubt, any AIP, LTIP, restricted stock unit, stock appreciation right, restricted stock and Equity Choice Awards) held by the Employee as of the Date of Termination shall be governed by the terms and conditions of the applicable Award Agreements, SAIP and AIP.

(c) Except as expressly provided in Section 7 (in the event such section is applicable), the Employee's benefits and rights under any of the Company's Benefit Plans, tax-qualified retirement or pension plans and any Excess Benefit Plan shall be determined in accordance with the applicable provisions of such plans, as may be in effect at the Employee's Date of Termination.

In the event of a termination of employment by the Company for Cause, a termination of employment as a result of the Employee's death, Disability or retirement, or the voluntary resignation by Employee other than for Good Reason (where applicable), Employee shall not be entitled to receive any compensation, payments or benefits except as specified in Section 5(a)-(c).

6. Termination of Employment Prior to or More than Two Years After a Change in Control by the Company either Without Cause or by a Tier I Employee for Good Reason. In addition to the payments and benefits set forth in Section 5, in the event the Employee's employment with the Company is terminated prior to a Change in Control or more than two (2) years after a Change in Control either (i) by the Company without Cause or (ii) by a Tier I Employee for Good Reason, the Employee shall also be entitled to receive the following payments and benefits, subject to the terms and conditions contained herein including without limitation Sections 9 and 10:

(a) An amount equal to the product of the Employee's Severance Factor times the sum of (i) the Employee's annual base salary as of the Date of Termination and (ii) the Employee's target annual incentive under the AIP for the year in which the Date of Termination occurs prorated based on the number of the Employee's active days of employment with the Company during the performance period in which the Employee's Date of Termination occurs, payable in equal installments in accordance with the Company's normal payroll practices starting on the first payroll period following the Employee's Date of Termination and continuing until the expiration of the Employee's Severance Continuation Period.

(b) For a period commencing on the Employee's Date of Termination until the earlier of (i) the expiration of the Employee's Severance Continuation Period, (ii) the date of the Employee's commencement of eligibility for benefits under a new employer's welfare benefit plans, and (iii) the Employee attaining age 65 (such period, the "Benefit Continuation Period"), the Employee shall be eligible for Benefit Continuation. Benefit Continuation shall be provided concurrently with any health care benefit required under COBRA. Notwithstanding the foregoing, if the Company's providing Benefit Continuation under this Section 6(b) would violate the nondiscrimination rules applicable to non-grandfathered plans, or would result in the imposition of penalties under the PPACA, the Committee shall have the right to amend this Section 6(b) in a manner it determines, in its sole discretion, to comply with the PPACA. For the avoidance of doubt, in no event shall an Employee's employment be deemed to have been terminated without Cause or for Good Reason as a result of the Employee's death, Disability or retirement.

(c) If a Tier I Employee's employment with the Company is properly terminated by the Tier I Employee for Good Reason, any outstanding Awards under the 2010 SAIP shall be governed by the terms and conditions of the 2010 SAIP and applicable Award Agreements as if the Tier I Employee had been terminated by the Company without Cause.

7. Termination Within Two Years After a Change in Control by the Company either Without Cause or by Employee for Good Reason . In addition to the payments and benefits set forth in Section 5, in the event the Employee's employment with the Company is terminated within two (2) years after a Change in Control either (i) by the Company without Cause or (ii) by the Employee for Good Reason, the Employee shall also be entitled to receive the following payments and benefits, subject to the terms and conditions contained herein including without limitation Sections 9 and 10:

(a) An amount equal to the product of the Employee's CIC Severance Factor times the sum of (i) the Employee's annual base salary as of the Date of Termination and (ii) the greater of (x) the Employee's target annual incentive opportunity under the AIP for the year in which the Date of Termination occurs and (y) the average annual incentive award paid to Employee under the AIP for the three (3) completed fiscal years immediately preceding the year in which the Date of Termination occurs (or, if the Employee was not employed by the Company or eligible for an Award under the AIP for the last three (3) completed fiscal years, such lesser number of completed fiscal years during with the Executive was eligible for an Award under the AIP), payable in a lump sum within 15 days following the Employee's Date of Termination.

(b) A lump-sum cash payment equal to the Employee's target annual incentive Award under the AIP for the year in which the Date of Termination occurs, with such Award prorated based on the number of the Employee's active days of employment with the Company during the performance period in which the Employee's Date of Termination occurs, payable within 15 days following the Employee's Date of Termination, and such payment shall be in full settlement of the Employee's rights under the AIP Award for the year in which the Date of Termination occurs.

(c) Unless otherwise provided in the applicable Award Agreement, with respect to each LTIP Award outstanding as of the Employee's Date of Termination:

(i) For each performance segment that ended prior to the Employee's Date of Termination, the Employee shall receive an LTIP Award payment equal to the LTIP Award payment, if any, the Employee would have been entitled to receive for such performance segment had the Employee's employment with the Company not been terminated, determined in accordance with the LTIP Award and the applicable Award Agreement; and

(ii) For each performance segment in which the Employee's Date of Termination occurs, the Employee shall receive an LTIP Award payment equal to the product of (x) the Employee's target LTIP Award for the performance segment during which the Employee's Date of Termination occurred and (y) a fraction, the numerator of which is the number of days during such performance segment preceding the Employee's Date of Termination and the denominator of which is the total number of days in such performance segment;

with each of (i) and (ii) payable within 15 days following the Employee's Date of Termination.

(d) Unless otherwise provided in Sections 7(b) and 7(c) herein, any outstanding Awards (including, for the avoidance of doubt, any restricted stock unit, stock appreciation right, restricted stock and Equity Choice Awards) held by the Employee as of the Date of Termination shall be governed by the terms and conditions of the applicable SAIP, it being understood that with respect to (i) Awards granted pursuant to the 2010 SAIP, this shall be Section 9(a)(ii) of the 2010 SAIP and (ii) with respect to Awards granted pursuant to the 2015 SAIP, this shall be Section 11(a) of the 2015 SAIP. The foregoing notwithstanding, if an Employee's employment with the Company is properly terminated by the Employee for Good Reason, any outstanding Awards granted under the 2010 SAIP (other than the AIP and LTIP Awards) shall be treated as set forth in Section 9(a)(ii) of the 2010 SAIP as if the Employee had been terminated by the Company without Cause.

(e) The Employee will be deemed to be fully vested in any benefits he or she has accrued, if any, under the Supplemental Retirement Plan, with the time or times at which benefits are payable under the Supplemental Retirement Plan unchanged; provided, however, that with respect to any "grandfathered" accrued obligations or to the extent permitted under Code Section 409A, the Company may elect to satisfy all obligations to the Employee and his beneficiaries under the Supplemental Retirement Plan by a lump sum payment of the present value of the accrued benefit under the Supplemental Retirement Plan.

(f) For a period commencing on the Employee's Date of Termination until the earlier of (i) the expiration of the Employee's Severance Continuation Period, (ii) the date of the Employee's commencement of eligibility for benefits under a new employer's welfare benefit plans, and (iii) the Employee attaining age 65 (such period, the "CIC Benefit Continuation Period"), the Employee shall be eligible for Benefit Continuation. Benefit Continuation shall be provided concurrently with any health care benefit required under COBRA. Notwithstanding the foregoing, if the Company's providing Benefit Continuation under this Section 7(f) would violate the nondiscrimination rules applicable to non-grandfathered plans, or would result in the imposition of penalties under the PPACA, the Committee shall have the right to amend this Section 7(f) in a manner it determines, in its sole discretion, to comply with the PPACA.

8. Effect of Federal Excise Tax. This Section 8 specifies certain adjustments to the Severance Payments and Benefits an Employee may receive under this Policy if the Company determines that any Severance Payment or Benefit would subject such Employee to an obligation to pay an excise tax imposed by Section 4999 of the Internal Revenue Code of 1986, as amended (or any similar tax that may be imposed) or any interest or penalties related to such excise tax (such excise tax, together with any such interest and penalties, are hereinafter collectively referred to as the "Excise Tax").

(a) *Cut-Back to Maximize Retained After-Tax Amounts*. In the event the Company determines that any Severance Payment or Benefits would, in whole or part when aggregated with any other right, payment or benefit to or for the Employee (such Employee, the "Affected Employee") under all other agreements, arrangements or plans of the Company, cause any Severance Payment and Benefit or any other payments or benefits to be subject to the Excise Tax, then the Severance Payments and Benefits and all such rights, payments and benefits shall, at the Company's discretion, either (i) be paid in full or (ii) be reduced (or appropriately adjusted) to an amount that is one dollar less than the smallest amount that would give rise to the Excise Tax (the *"*Reduced Amount*"*), but only if such Reduced Amount would be greater than the net after-tax proceeds (taking into account the Excise Tax) of the unreduced Severance Payments and Benefits and all such other rights, payments and benefits.

(b) *Implementation Rules*. If the Severance Payments and Benefits must be reduced as provided in Section 8(a), any reduction in payments and/or benefits required by this provision will occur in the following order: (1) reduction of cash payments; (2) reduction of vesting acceleration of equity awards; and (3) reduction of other benefits paid or provided. In the event that acceleration of vesting of equity awards is to be reduced, such acceleration of vesting will be cancelled in the reverse order of the date of grant for the equity awards. If two or more equity awards are granted on the same date, each award will be reduced on a pro-rata basis. The Employee shall be advised of the determination as to which compensation will be reduced and the reasons therefor, and the Employee and his or her advisors will be entitled to present information that may be relevant to this determination. In no event shall such reduction be effected through a delay in the timing of any Severance Payment and Benefit that is subject to Code Section 409A (or that would become subject to Code Section 409A as a result of such delay).

(c) For purposes of determining whether any of the Severance Payments or Benefits will be subject to the Excise Tax and the amount of such Excise Tax:

(i) All Severance Payments and Benefits shall be treated as "parachute payments" within the meaning of Section 280G(b)(2) of the Code, and all "excess parachute payments" within the meaning of Section 280G(b)(1) of the Code shall be treated as subject to the Excise Tax, unless, and except to the extent that, in the written opinion of independent compensation consultants, counsel or auditors of nationally recognized standing ("Independent Advisors") selected by the Company, the Severance Payments and Benefits (in whole or in part) do not constitute parachute payments, or such excess parachute payments (in whole or in part) represent reasonable compensation for services actually rendered within the meaning of Section 280G(b)(4) of the Code in excess of the base amount within the meaning of Section 280G(b)(3) of the Code or are otherwise not subject to the Excise Tax.

(ii) The value of any non-cash benefits or any deferred payment or benefit shall be determined by the Independent Advisors in accordance with the principles of Sections 280G(d)(3) and (4) of the Code.

(d) For purposes of determining the amount of the reductions in Severance Payments and Benefits pursuant to Section 8(b), the Affected Employee shall be deemed (i) to pay federal income taxes at the applicable rates of federal income taxation for the calendar year in which the compensation would be payable; and (ii) to pay any applicable state and local income taxes at the applicable rates of taxation for the calendar year in which the compensation would be payable, taking into account any effect on federal income taxes from payment of state and local income taxes.

9. Conditions to Receipt of Severance Payments and Benefits: Forfeiture and Repayment Obligations.

(a) Conditions to Receipt of Payments; Employee Obligations. The following requirements must be met by the Employee as a condition to the right to receive, continue to receive, or retain any Severance Payments or Benefits under this Policy:

(i) The Employee, acting directly or indirectly, shall not, during the period of the Employee's employment and the twelve month period following the Employee's Date of Termination, become employed by, render services for, serve as an agent or consultant to, or become a partner, member, principal, shareholder or other owner of any of the following entities: Firmenich, S.A., Givaudan, S.A., V. Mane Fils, S.A., Robertet, S.A., Symrise A.G., Takasago International Corporation, Wild Flavors GmbH, Sensient Technologies Corporation or any of their respective Affiliates, or any other entity that is competitive with the Company, as determined by the Committee in its sole discretion from time to time.

(ii) The Employee, acting directly or indirectly, shall not, during the Employee's period of employment and the twenty-four month period following the Employee's Date of Termination, (1) solicit, induce, divert, employ or retain, or interfere with or attempt to influence the relationship of the Company, with any Person or entity that is or was, during the last twelve (12) months of the Employee's employment with the Company, (i) an employee of the Company or (ii) a Person engaged to provide services to the Company; or (2) interfere with or attempt to influence the relationship of the Company with any customer, supplier or other Person with whom the Company does business.

(iii) The Employee shall not, at any time, directly or indirectly (a) disclose any Confidential Information (as defined below) to any Person (other than, only with respect to the period that the Employee is employed by the Company, to an employee or outside advisor of the Company who requires such information to perform his or her duties for the Company) or (b) use, sell or otherwise transfer, any Confidential Information for Employee's own benefit or the benefit of any third party. "Confidential Information" shall mean (without limiting any definition of the term "confidential information" set forth in any effective Employment Agreement or Security Agreement), confidential, proprietary or commercially sensitive information relating to the Company or its employees, board members, customers, vendors, or other business partners and its businesses, operations, or affairs, including, without limitation, information relating to products, formulations, protocols, processes, designs, formulae, ideas, know-how, test methods, evaluation techniques, patents, trade secrets, scientific or technical data, regardless of the form in which it is maintained or provided, orally or in writing, whether prepared by the Company, a third party or Employee, together with all analyses, compilations, notes and other documents relating thereto.

(iv) The Employee shall cooperate with the Company by making himself or herself available to testify on behalf of the Company in any action, suit, or proceeding, whether civil, criminal, administrative, or investigative, and shall not otherwise fail to assist the Company in any such action, suit, or proceeding by providing information and meeting and consulting with members of management of, other representatives of, or counsel to, the Company, as reasonably requested.

(v) The Employee shall not have, during the period of employment, engaged in willful misconduct or violation of a Company policy that is materially detrimental to the Company or in any action or inaction that would constitute grounds for being terminated for Cause, as determined by the Committee in its sole discretion.

(vi) The Employee shall, upon termination of employment with the Company, execute any documentation reasonably requested by the Company and return to the Company all property of the Company, its customers and vendors in Employee's possession or control including, without limitation, all materials, work product or documents containing or pertaining to Confidential Information, and including without limitation, any Company car, all computers (including laptops), cell phones, keys, PDAs, Blackberries, iPhones, Androids, iPads, credit cards, printers, facsimile machines, televisions, card access to any Company building, customer lists, reports, files, e-mails, work papers, memoranda, notes, formulae, tapes, programs, records and software, computer access codes or disks, instructional manuals, and other similar materials or documents used, received or prepared or supervised by Employee in connection with Employee's work for the Company. Employee shall not retain any copies, duplicates, reproductions or excerpts of any of the aforementioned materials or documents and shall not at any time use, recreate or reproduce any said materials or documents.

(b) Forfeiture and Repayment Obligations.

(i) Due to Employee Failure to Comply with Obligations. If an Employee fails to comply with any of the obligations set forth in Section 9(a) (a "Covenant Forfeiture Event"), the Employee will forfeit or repay, as the case may be, all Severance Payments and Benefits, whether vested or unvested, paid or unpaid, in each case, that were settled, paid or provided to the Employee under this Policy, and the Company shall have no further obligation to pay, grant, settle, make, provide or continue to make or provide any Severance Payments and Benefits to the Employee under this Policy.

(ii) Due to an Accounting Restatement or Misstatement. If the Company is required to prepare an accounting restatement, or if the Company determines that it has misstated its financial results, whether or not as a result of misconduct on the part of the Employee (an "Accounting Forfeiture Event" and, together with a Covenant Forfeiture Event, a "Forfeiture Event"), then, the Employee shall forfeit or repay the Excess Compensation (as defined below) in respect of Severance Payments and Benefits, whether vested or unvested, paid or unpaid, that was granted, settled, provided or paid during the period commencing on the first day of the 12-month period covered by such misstated financial statement through the later of (x) the date of the filing of a restatement where an accounting restatement is required to be filed; (y) the date of the discovery of the misstated financials where any accounting restatement is not required to be filed; or (z) any later date as may be required by applicable law, including the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Restatement Clawback Period").

(A) For purposes of this Section 9(b)(ii), the term "Excess Compensation" means, the difference between (x) the fair market value of the cash or stock paid to or received by the Employee as part of its Severance Payments and Benefits less (y) the fair market value of the cash or stock that would have been paid to or received by the Employee had the financial statements requiring the misstatement or restatement been properly stated, in all cases as determined by the Committee in its sole discretion.

(iii) For the avoidance of doubt, Severance Payments and Benefits subject to the forfeiture and repayment obligations under this Section 9 shall include any unvested Award, and any amounts paid to Employee on settlement or vesting of an Award but shall not include (A) any earned and unpaid base salary payable through the Employee's Date of Termination, (B) any unreimbursed business expenses reimbursable under Company policies then in effect, and (C) any amount paid by Employee to the Company as a condition of or in connection with settlement of a forfeited Award.

(iv) Any policy of the Company providing for forfeiture or recoupment of compensation, including Section 10 of the 2010 SAIP and Section 32 of the 2015 SAIP, shall apply by its terms and shall not be deemed limited in any way by this Section 9 or any other provision of this Policy.

(v) Any clawback or recoupment provisions required by law, including under the Dodd-Frank Wall Street Reform and Consumer Protection Act or any rules or regulations thereunder, shall apply to the Severance Payments and Benefits paid or payable under this Policy.

(vi) Any Severance Payments and Benefits (A) subject to repayment or reimbursement by the Employee under this Section 9 must be repaid or reimbursed to the Company, in the manner and on such terms and conditions as shall be required by the Company by written notice to the Employee, and (B) subject to forfeiture will be forfeited immediately upon written notice to Employee from the Company.

(vii) For the avoidance of doubt, nothing in any agreement with the Company, or in any Company policy, including this Policy, shall be deemed to prohibit or restrict an Employee from lawfully communicating truthful information, or cooperating with, or otherwise assisting in an investigation by any governmental agency or self-regulatory organization regarding a possible violation of law or responding to any inquiry from any such organization, and an Employee's doing so shall not constitute a Forfeiture Event. If an Employee communicates any Confidential Information to a governmental agency or self-regulatory agency pursuant to this Section, Employee shall notify the agency of the confidentiality of such Confidential Information and ask the agency to also protect the confidentiality of such Confidential Information.

(viii) In accordance with the Defend Trade Secrets Act of 2016, an Employee will not be held criminally or civilly liable under any federal or state trade secret law for disclosure of a trade secret that: (A) is made (1) in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney, and (2) solely for the purpose of reporting or investigating a suspected violation of law; or (B) is made in a complaint or other document that is filed under seal in a lawsuit or other proceeding. If an Employee files a lawsuit for retaliation by the Company for reporting a suspected violation of law, the Employee may disclose the Company's trade secrets to his or her attorney and use the trade secret information in the court proceeding if the Employee (a) files any document containing the trade secret under seal, and (b) does not disclose the trade secret, except pursuant to court order.

(c) Employee Obligation to Execute Release and Termination Agreement.

(i) The Company's obligations under this Policy to make and provide any Severance Payments and Benefits is also conditioned upon the Employee signing the Exiting Employee Acknowledgement/Certification, any other documentation reasonably requested by the Company, and a release and termination agreement (the "Release"), in a form acceptable to, and to be provided by the Company, and such Release becoming effective, enforceable and irrevocable within 60 days following the Employee's Date of Termination or such earlier date as may be set forth in the Release (such period, the "Release Period").

(ii) Any Severance Payment or Benefit that is subject to Code Section 409A that would otherwise have been made to an Employee but that is conditioned upon the execution and effectiveness of the Release shall be paid or provided on the first business day following the Release Period subject to the execution and effectiveness of the Release; provided that any in-kind benefits provided pursuant to this Policy shall continue in effect after the Date of Termination pending the execution and delivery of the Release; provided that if the Release is not executed and delivered within the Release Period, the Employee shall reimburse the Company for the full cost of providing such in-kind benefits during the Release Period.

(d) Agreement Does Not Prohibit Competition or Certain Other Activities. An Employee is not prohibited from engaging in an activity identified in Section 9(a) solely as a result of such provision. Rather, the non-occurrence of the Forfeiture Events set forth in Section 9(a) is a condition to the Employee's right to realize and retain value from his or her Severance Payments and Benefits, and the consequence under this Policy if the Employee engages in an activity giving rise to any such Forfeiture Event are the forfeitures specified herein. The Company and the Employee shall not be precluded by this provision or otherwise from entering into other agreements concerning the subject matter of Section 9.

(e) No Limitation of Rights. Any forfeiture or repayment under this Section 9 is in addition to, and not in lieu of, any other remedies or rights that may be available to the Company under applicable law, including, without limitation, the right to (i) terminate the Employee, (ii) adjust the future compensation of the Employee, or (iii) take such other action to enforce the Employee's obligations to Company as the Company may deem appropriate in view of the facts and circumstances surrounding the particular situation.

(f) Committee Discretion. The Committee shall have the authority, in its sole discretion, to interpret and construe the provisions of this Section 9 and to make all determinations with respect hereto, including the determination of whether a Forfeiture Event has occurred, the timing of such Forfeiture Event and the amount and form of any forfeiture or reimbursement to be made to the Company by an Employee. The Committee may consider such factors as it deems relevant in making such determinations, including the factors contributing to the Forfeiture Event, harm or potential harm to the Company, the nature and severity of an Employee's behavior or conduct, legal and tax considerations and other facts and circumstances relating to a particular situation. All interpretations, constructions and determinations made by the Committee hereunder shall be final and binding on the Company and the Employee and the determinations of the Committee need not be uniform with respect to all Employees or situations. The Committee may waive in whole or in part the Company's right of recapture or impose additional conditions on any Severance Payment or Benefit granted, settled, paid or provided to an Employee under this Policy.

10. Other Provisions Applicable to Severance Payments and Benefits.

(a) *Limitation of Benefits In Case of Certain Business Dispositions*. Notwithstanding anything in this Policy to the contrary, unless the Committee in its sole discretion provides otherwise, an Employee shall not be entitled to any Severance Payments or Benefits upon a termination of employment prior to or more than two years after a Change in Control under Section 6, in the event such termination of employment results from the sale or spin-off of an Affiliate, the sale of a division, other business unit or facility (each an "Entity") in which the Employee was employed immediately prior to such sale, and the Employee has been offered employment with the purchaser of such Entity on substantially the same terms and conditions, as determined by the Committee in its sole discretion, under which the Employee worked prior to the sale, whether or not such Employee accepts or rejects such offer of employment. Such terms and conditions shall include an agreement or plan binding on such purchaser or Entity providing that, upon any termination of the Employee's employment with the purchaser or spun-off Entity of the kinds described in Sections 6 and 7, within two years following such sale or spin-off, the purchaser or spun-off entity shall pay and provide to such Employee payments and benefits comparable to those the Employee would have received under the applicable provisions of Sections 6 and 7 if the Employee had been terminated in like circumstances at the time of such sale and provided Severance Payments and Benefits.

(b) *Deferrals Included in Salary and Bonus*. All references in this Policy to salary and annual incentive amounts mean those amounts before reduction pursuant to any deferred compensation plan or agreement.

(c) *Payments and Benefits to Beneficiary Upon Employee's Death*. In the event of the death of an Employee, all payments and benefits hereunder due to such Employee shall be paid or provided to his or her Beneficiary.

(d) *Transfers of Employment*. Anything in this Policy to the contrary notwithstanding, a transfer of employment from the Company to an Affiliate or vice versa shall not be considered a termination of employment for purposes of this Policy.

(e) *Right of Setoff*. The Company may, to the extent permitted by applicable law, deduct from and set off against any amounts the Company may owe to the Employee from time to time, including amounts payable in connection with any Severance Payment or

Benefit, amounts payable in connection with any Award, owed as wages, fringe benefits, or other compensation owed to the Employee, such amounts as may be owed by the Employee to the Company, including but not limited to amounts owed under Section 9, although the Employee shall remain liable for any part of the Employee's payment obligation not satisfied through such deduction and setoff. By accepting the Severance Payments and Benefits under this Policy, the Employee agrees to any deduction or setoff under this Section 10(e).

11. Other Plans and Policies; Non-Duplication of Payments or Benefits.

(a) *Superseded Agreements and Rights*. This Policy constitutes the entire understanding between the Company and the Employee relating to Severance Payments and Benefits to be paid or provided to the Employee by the Company, and supersedes and cancels all prior agreements and understandings with respect to the subject matter of this Policy, other than (i) as expressly set forth in this Policy, (ii) as determined in writing by the Committee, or (iii) as expressly provided in a plan, program or arrangement of the Company which is established following the Effective Date and in which the Employee is a participant.

(b) *Non-Duplication of Payments and Benefits*. The Employee shall not be entitled to any Severance Payment or Benefit under this Policy which duplicates a payment or benefit received or receivable by the Employee under any employment or severance agreement, or any other plan, program or arrangement of the Company or any severance required by applicable law, regulation, sound business practices and customs; provided, however, that with respect to a benefit or payment that is expressly required to be provided by applicable law, regulation, sound business practices and customs, to the extent permissible under applicable law, the Company may offset the amount of any such benefits or payments against the Severance Payments or Benefits due under this Policy.

12. Special Rules for Compliance with Code Section 409A. This Section 12 serves to ensure compliance with applicable requirements of Code Section 409A. If the terms of this Section 12 conflict with other terms of this Policy, the terms of this Section 12 shall control.

(a) Termination of Employment Defined. For purposes of this Policy, a "termination of employment" means a separation from service within the meaning of Treasury Regulation § 1.409A-1(h), except for a termination of employment providing for payments or benefits that are "grandfathered" or excluded from being a deferral of compensation under Code Section 409A.

(b) Separate Payments. Any payment of Severance Payments and Benefits shall be deemed a separate payment for all purposes, including for purposes of Code Section 409A.

(c) Six-Month Delay Rule. In the event that any Severance Payments or Benefits constitute "nonqualified deferred compensation" within the meaning of Code Section 409A and as of the date of the Employee's "separation from service," Employee is a "specified employee" (within the meaning of that term under Code Section 409A(a)(2)(B), or any successor provision thereto), then, if the amount of any Severance Payments and Benefits, or any other payments and benefits due pursuant to any other agreement with or plan, program, payroll practice of the Company to be paid within the first six months following the date of such separation from service (the "Initial Payment Period") exceed the amount referenced in Treas. Regs. Section 1.409A-1(b)(9)(iii)(A) (the "Limit"), then: (i) any portion of the

Severance Payments and Benefits that is payable or can be provided during the Initial Payment Period that does not exceed the Limit shall be paid or provided at the times set forth in this Policy; (ii) any portion of the Severance Payments and Benefits that is a "short-term deferral" within the meaning of Treas. Regs. Section 1.409A-1(b)(4)(i) shall be paid or provided at the times set forth in in this Policy; and (iii) any portion of the Severance Payments and Benefits that exceeds the Limit and is not a "short-term deferral" (and would have been payable during the Initial Payment Period but for the Limit) shall not be paid or provided, to the extent making or providing such payment or benefit during the Initial Payment Period would result in additional taxes or interest under Code Section 409A of the Code, until the date which is the earlier of (i) the expiration of the six (6)-month period measured from the date of such "separation from service," and (ii) the date of Employee's death (the "Delay Period") and this Policy shall hereby be deemed amended accordingly. Upon the expiration of the Delay Period, all payments and benefits delayed pursuant to this section (whether they would have otherwise been payable in a single sum or in installments in the absence of such delay) shall be paid or reimbursed to Employee in a lump sum, and any remaining payments and benefits due under this Policy shall be paid or provided in accordance with the normal payment dates specified for them herein.

(d) Continued Benefits. To the extent required by Code Section 409A, any reimbursement or in-kind benefit provided under this Policy shall be provided in accordance with the following: (i) the amount of expenses eligible for reimbursement, or in-kind benefits provided during each calendar year cannot affect the expenses eligible for reimbursement, or in-kind benefits to be provided, in any other calendar year; (ii) any payments in lieu of the benefits shall be paid no later than the end of Employee's taxable year next following Employee's taxable year in which the benefit or expense was due to be paid; and (iii) any right to reimbursements or in-kind benefits under this Plan shall not be subject to liquidation or exchange for another benefit.

(e) No Acceleration. The timing of payments and benefits under this Policy may not be accelerated to occur before the time specified for payment hereunder, except to the extent permitted under Treasury Regulation § 1.409A-3(j)(4) or as otherwise permitted under Code Section 409A without the Employee incurring a tax penalty.

(f) Limitation on Offsets. If the Company has a right of offset that could apply to a payment that constitutes a deferral of compensation under Code Section 409A, such right may only be exercised at the time the payment would have been made to the Employee and may be exercised only as an offset against an obligation that arose within 30 days before and within the same year as the payment date if application of such offset right against an earlier obligation would not be permitted under Code Section 409A.

(g) General Compliance. In addition to the foregoing provisions, the terms of this Policy, including any authority of the Company and rights of the Employee which constitute a deferral of compensation subject to Code Section 409A (and which is not grandfathered or excluded from being deemed such a deferral), shall be limited to those terms permitted under Code Section 409A without resulting in a tax penalty to Employee, and any terms not so permitted under Code Section 409A shall be modified and limited to the extent necessary to conform with Code Section 409A but only to the extent that such modification or limitation is permitted under Code Section 409A and the regulations and guidance issued thereunder. The Company and its employees and agents make no representation and are providing no advice regarding the taxation of the payments and benefits under this Policy, including with respect to taxes, interest and penalties under Code Section 409A and similar liabilities under state and local tax laws. No indemnification or gross-up is payable under this Policy with respect to any such tax, interest, or penalty under Code Section 409A or similar liability under state or local tax laws applicable to any Employee.

13. Miscellaneous

(a) Assignment; Non-transferability. No right of an Employee to any payment or benefit under this Policy shall be subject to assignment, anticipation, alienation, sale, transfer, assignment, pledge, encumbrance, attachment, or garnishment by creditors of the Employee or of any beneficiary of the Employee. The terms and conditions of this Policy shall be binding on the successors and assigns of the Company.

(b) Withholding. The Company shall have the right to deduct from all payments hereunder any taxes required by law to be withheld therefrom.

(c) No Right to Employment. Nothing in this Policy shall be construed as giving any person the right to be retained in the employment of the Company, nor shall it affect the right of the Company to dismiss an Employee without any liability except as provided in this Policy.

(d) Legal Fees. The Employee shall pay all legal fees and related expenses incurred in seeking to obtain or enforce any payment, benefit or right provided by this Policy; provided, however, that if the Employee prevails on at least one material claim that forms part of a dispute with the Company regarding the enforceability of any provision of the Policy, the Company shall reimburse the Employee for all reasonable attorneys' fees and related expenses ("Legal Fees") incurred by the Employee in connection with such dispute, provided that the Employee shall have submitted an invoice for such Legal Fees at least 10 days before the end of the calendar year next following the calendar year in which an award to Employee on at least one material claim is rendered. In no event shall the payments by the Company of Legal Fees be made later than the end of the calendar year next following the calendar year in which such Legal Fees were incurred. The amount of such Legal Fees that the Company is obligated to pay in any given calendar year shall not affect the Legal Fees that the Company is obligated to pay in any other calendar year, and an Employee's right to have the Company pay such Legal Fees may not be liquidated or exchanged for any other benefit.

(e) Amendment and Termination. The Board may amend or terminate this Policy at any time; provided, however, (i) during the two years following a Change in Control, this Policy may not be amended or terminated in any manner materially adverse to an Employee without the written consent of such Employee, and (ii) at any other time, this Policy may not be amended or terminated in any manner materially adverse to an Employee except with 60 day's notice to the affected Employee (immediately after which such amendment or termination becomes effective as to all affected Employees), and no such amendment or termination shall be effective to limit any right or benefit relating to a termination during the two years after a Change in Control under Section 7 if a Change in Control has occurred prior to the lapse of such 60-day notice period.

(f) Governing Law; Arbitration. THE VALIDITY, CONSTRUCTION, AND EFFECT OF THIS POLICY AND ANY RULES AND REGULATIONS RELATING TO THIS POLICY SHALL BE DETERMINED IN ACCORDANCE WITH THE LAWS (INCLUDING THOSE GOVERNING CONTRACTS) OF THE STATE OF NEW YORK, WITHOUT GIVING EFFECT TO PRINCIPLES OF CONFLICTS OF LAWS, AND APPLICABLE FEDERAL LAW. If any provision hereof shall be held by a court or arbitrator of competent jurisdiction to be invalid and unenforceable, the remaining provisions shall continue to be fully effective. Any dispute or controversy arising under or in connection with this Policy shall be settled exclusively by arbitration in New York, New York by one arbitrator in accordance with the rules of the American Arbitration Association in effect at the time of submission to arbitration. Judgment may be entered on the arbitrator's award in any court having jurisdiction. For purposes of settling any dispute or controversy arising hereunder or for the purpose of entering any judgment upon an award rendered by the arbitrator, the Company and the Employee hereby consent to the jurisdiction of any or all of the following courts: (i) the United States District Court for the Southern District of New York, or (ii) any of the courts of the State of New York located in New York County. The Company and the Employee hereby waive, to the fullest extent permitted by applicable law, any objection which it may now or hereafter have to such jurisdiction and any defense of inconvenient forum. The Company and the Employee hereby agree that a judgment upon an award rendered by the arbitrator may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law.

(g) No Duty to Mitigate. No employee shall be required to mitigate, by seeking employment or otherwise, the amount of any payment that the Company becomes obligated to make under this Policy, and, except as expressly provided in this Policy, any Severance Payment or Benefit to be paid or provided to an Employee pursuant to this Policy shall not be reduced by reason of the Employee's obtaining other employment or receiving similar payments or benefits from another employer.

(h) Awards to Employees Outside the United States. The Committee may modify the terms and conditions of participation of any Employee who is then resident or primarily employed outside the United States or is subject to taxation by a non-U.S. jurisdiction in any manner deemed by the Committee to be necessary or appropriate in its sole discretion in order that such terms and conditions shall conform to the laws, regulations, sound business practices or customs of the country in which the Employee is then resident or primarily employed.

(i) Notices. All notices shall be in writing and shall be deemed duly given (a) on the date of delivery if delivered personally, (b) on the date sent by electronic mail or other electronic means, (c) on the date of delivery via a recognized overnight courier service (delivery receipt requested), or (d) on the fifth business day following the date of mailing, if mailed by first class mail and registered or certified mail, return receipt requested, postage prepaid to the party to receive such notice (irrespective of whether such registered or certified mail is signed for by the receiving party), at the business address in the case of the Company, and at the address on file with the Company, in the case of the Employee.

<u>Annex I</u>

Title	**Severance Factor**	**Severance Continuation Period**	**CIC Severance Factor**
Tier I Employees			
Chief Executive Officer	2	24 months	3
All Other Tier I Employees	1.5	18 months	2
Tier II Employees	1	12 months	1.5

Exhibit 10.26

SEPARATION AGREEMENT AND GENERAL RELEASE

This Separation Agreement and General Release (this "Agreement"), dated as of October 11, 2016, is entered into by and between International Flavors & Fragrances Inc. (the "Company"), and Alison Cornell ("you").

1. **Termination of Employment.** This Agreement sets forth the benefits you are eligible to receive under the Company's Executive Severance Policy (the "ESP") as a result of your separation from the Company, as well as other benefits being provided to you and obligations you agree to comply with in connection with your separation. You acknowledge and agree that your employment with the Company is hereby terminated, effective as of the close of business on October 11, 2016 (the "Separation Date"). Therefore, as from the Separation Date, you will no longer be employed by the Company or any of its affiliates.

2. **Separation Payments and Benefits.** In exchange for the releases and covenants contained in this Agreement, and subject to your continuing compliance with all of the covenants and provisions contained herein, the Company agrees to provide you with the following payments and benefits:

(a) **Separation Payment.** In accordance with the ESP, the Company will pay you a cash severance amount equal to $1,364,160, less applicable withholdings, which represents 1.5X the sum of your gross annual base salary of $560,000, and a pro-rated target bonus of $349,440 (the "Separation Payment"), payable to you in 18 equal, monthly installment payments in accordance with the Company's normal payroll practices (the "Severance Pay Period"), beginning the first pay period which is at least five (5) days after the Effective Date (as defined in Section 15(e) below) of this Agreement.

(b) Annual Incentive Plan Payment. You will be eligible to receive a prorated payment under, and in accordance with, the terms of the Annual Incentive Plan ("AIP") award agreement for the 2016 fiscal year (the "AIP Agreement"). The amount payable to you, if any, shall be calculated and paid in accordance with the terms of the AIP Agreement based on the achievement of the pre-established performance goals applicable to the 2016 AIP.

(c) Medical, Dental & Life Insurance Coverage. You will be eligible to participate in continued group medical, dental and life insurance coverage at the active employee rate, during the Severance Pay Period, provided that the Company's obligation to provide this continued coverage (i) is subject to you continuing to make your portion of the monthly premium payments to the appropriate health care insurer (such amounts shall be withheld from the monthly installments of the Severance Payment); and (ii) shall immediately cease in the event you become eligible for different employer provided coverage, and you must notify the Company within one (1) week of becoming eligible for such different coverage. After the Severance Pay Period ends, you will be entitled to apply for continuation coverage of medical and dental benefits, at no cost to the Company, pursuant to the Consolidated Omnibus Budget Reconciliation Act ("COBRA") and New York State's Insurance Law (mini-COBRA), if applicable, if you return an election form that will be provided to you under separate cover at your address on file with the Company. Please note that the Company's offer to subsidize the COBRA or mini-COBRA premiums otherwise chargeable to you may adversely impact your eligibility to apply for individual insurance pursuant to the Affordable Care Act. You may wish to consult with a tax advisor or financial planner prior to electing COBRA or mini-COBRA continuation coverage or accepting the Company's offer to subsidize such coverage during the Severance Pay Period.

(d) Outplacement Services. The Company will provide you with twelve months of outplacement services through Mullin International, 212-768-3900. The contact person is Keith Mullin.

(e) Equity Plan Benefits. The terms and conditions relating to the treatment of your Equity Choice Plan ("ECP") awards, long-term incentive plan ("LTIP") awards, or other equity awards in respect of the common stock of the Company (collectively, "Awards"), if any, shall be governed by the provisions of the applicable equity award plans and award agreements under the Company's 2015 Stock Award and Incentive Plan ("SAIP"), as such equity plan, award agreements and SAIP may have been amended from time to time (collectively, "Award Documents"). In accordance with the respective Award Agreements, based on your termination as of the Separation Date:

(i) Cycle XIV, Cycle XV and Cycle XVI LTIP Awards – You will be eligible to receive a payment under, and in accordance with, the LTIP Award Documents with respect to Cycle XIV, Cycle XV and Cycle XVI, prorated based on the number of days in the respective Performance Segment (as defined in the respective LTIP Award Document) through the Separation Date, relative to the total number of days in such Performance Segment, and will be payable on the normally scheduled payout date for the respective Cycle and based on actual performance of the Company against the pre-set targets for such LTIP Awards.

(ii) ECP Awards – You will be eligible to receive your ECP Awards for the 2015 and 2016 fiscal years in accordance with the respective ECP Award Documents for such years, prorated based on the number of days in the vesting period through the Separation Date, relative to the total number of days in the vesting period, payable on the respective vesting dates for such Awards.

(f) **401(k).** If you are a participant in the Company's 401(k) plan, you will receive written correspondence from Vanguard at the beginning of the month following the Separation Date, describing the vested balance in your 401(k) account and disposition options. In the meantime, if you need to contact Vanguard they can be reached at 800-320-6058 or vanguard.com. Your contributions, and the Company's matching contributions on your behalf, to the 401(k) account will cease as of the Separation Date.

(g) **Deferred Compensation Plan**. If you are a participant in the Company's Deferred Compensation Plan, you will receive written correspondence from IFF at the beginning of the month following the Separation Date, describing the vested balance in your deferred compensation account and distribution details. In the meantime, if you need to contact Vanguard they can be reached at 800-320-6058 or vanguard.com. Your contributions, and the Company's matching contributions, if any, will cease as of the Separation Date.

(h) **Termination of All Other Benefits**. Except as specifically set out in this Section 2, all other benefits shall cease as of the Separation Date, including Accidental Death and Dismemberment Insurance, Vision Coverage and Short and Long-Term Disability Insurance.

3. **Payments and Satisfaction.**

(a) You acknowledge and agree that, other than as specifically set forth in this Agreement, you are not due any compensation or benefits under any benefit plan, program or policy of the Company or its affiliates, including without limitation compensation for unpaid salary, unpaid bonus, commissions, disability benefits, severance, or accrued or unused vacation time or vacation pay; that you have received all leave (paid or unpaid), commissions and notice periods to which you are entitled; you have not worked any uncompensated time (regular or overtime), have no known workplace injuries or occupational diseases, and no other remuneration or benefits are due to you arising from or relating to your employment with the Company or the termination of your employment.

(b) Payments under this Agreement will be made by the Company using such method of payment as it may determine in its discretion, including without limitation, by direct deposit to your bank account. Unless you advise the Company's Payroll Department in writing of any changes to your banking information, any payments by direct deposit shall be into such bank account as is currently on file with the Payroll Department.

4. **General Release and Waiver of All Claims.** In consideration of the agreements set forth herein and other good and valuable consideration, you on your own behalf and on behalf of your successors, heirs, beneficiaries, agents, assigns, and representatives (collectively, the "Releasors") voluntarily, knowingly, and willingly release, to the fullest extent permitted by law, the Company, and its parents, subsidiaries, predecessors, affiliated entities, successors and assigns, together with each of those entities' respective current and former owners, officers, directors, partners, shareholders, employees, agents, representatives, fiduciaries, insurers and reinsurers, administrators, and employee benefit plans and programs, both individually and in their business capacities (collectively, the "Releasees"), from any and all known and unknown claims, complaints, causes of action, demands or rights of any nature whatsoever which any Releasor now has or in the future may have against any Releasee, of whatever kind or nature arising out of any actions, inactions, conduct, decisions, behavior, or events occurring on or prior to the date you sign this Agreement, whether known or unknown, including without limiting the generality of the foregoing, any and all claims of discrimination, harassment, whistle blowing or retaliation in employment (whether based on federal, state, local or other law, statutory or decisional), including without limitation, all claims under The National Labor Relations Act; Title VII of the Civil Rights Act of 1964; Sections 1981 through 1988 of Title 42 of the United States Code; The Employee Retirement Income Security Act (except for any vested benefits under any tax qualified benefit plan); The Immigration Reform and Control Act; The Americans with Disabilities Act; The Rehabilitation Act; The Age Discrimination in Employment Act ("ADEA"); The Older Workers Benefit Protection Act ("OWBPA"); The Lilly Ledbetter Fair Pay Act; The Occupational Safety and Health Act; The Worker Adjustment and Retraining Notification Act; The Genetic Information and Discrimination Act; The Fair Credit Reporting Act; The Family and Medical Leave Act; The Equal Pay Act; The Uniformed Services Employment and Reemployment Rights Act; The Employee Polygraph Protection Act; The employee (whistleblower) civil protection provisions of the Corporate and Criminal Fraud Accountability Act (Sarbanes-Oxley Act); the Securities and Exchange Act; the Dodd-Frank Act; and any other federal, state, local or other law, rule, regulation, constitution, code, guideline or ordinance; any public policy, contract (oral or written, express or implied), tort, or common law; or any claims for vacation, sick or personal leave pay, short term or long term disability benefits, or payment pursuant to any practice, policy, handbook or manual; or any basis for recovering costs, fees, or other expenses, including but not limited to attorneys' fees and/or costs. Further you agree to waive all applicable State law claims, including but not limited to those set forth in Exhibit A.

5. **Exclusions from "Release and Waiver" of Claims**.

(a) You understand and agree that nothing in this Agreement limits your right to bring an action to enforce the terms of this Agreement or to bring a proceeding pursuant to the OWBPA to challenge the validity of the release of claims pursuant to the ADEA consistent with the Equal Employment Opportunity Commission ("EEOC") Enforcement Guidance On Non-Waivable Employee Rights Under EEOC-Enforced Statutes dated April 11, 1997.

(b) You understand that the Release and Waiver contained in Section 4 above does not include a waiver of any claims or rights, which cannot be waived by law.

(c) You warrant that you have not filed any suit, charge, complaint, grievance or proceeding against any Releasee in any court of the United States or any state or local governmental subdivision thereof, or with any administrative agency or arbitration panel, concerning any claim, demand, issue or cause of action covered by this Agreement.

(d) You understand and agree that nothing in this Agreement, or any prior agreement you may have with any Releasee, does not prohibit or restrict you from lawfully communicating truthful information, or cooperating with, or otherwise assisting in an investigation by any governmental agency or self-regulatory organization regarding a possible violation of any federal law or responding to any inquiry from any such or organization, including an inquiry about the existence of this Agreement or its underlying facts, without first notifying Releasees.

6. **No Admission of Wrongdoing.** By entering into this Agreement, you agree that the Releasees do not admit, but in fact deny, any wrongdoing or violation of any law. The existence and execution of this Agreement shall not be considered, and shall not be admissible in any proceeding, as an admission by the Releasees of any liability, error, violation or omission. You affirm that all of the Company decisions regarding your pay and benefits through the date you sign this Agreement were not discriminatory based on age, disability, race, color, sex, religion, national origin or any other classification protected by law.

7. **No Other Proceedings or Claims.** Subject to your rights contained in Section 5(d), you affirm that you are not a party to, and have not filed, any claim, complaint, or action against any Releasee in any forum. You affirm that you are not aware of any fraudulent activity or any acts which would form the basis of a claim of fraudulent or illegal activity by the Company or any of its officers, and that you have disclosed to the Company any information you have concerning any conduct involving the Company, any of its affiliates or any of their respective employees that you have any reason to believe may be unlawful. You further acknowledge and agree that as of the date you sign this Agreement: (i) you have advised the Company of all facts of which you are aware that you believe may constitute a violation of the Company's Code of Business Conduct and Ethics (the "Code"), compliance policies, and/or legal obligations; (ii) the Company has resolved those issues to your satisfaction; (iii) you are not aware of any current violations of the Code, compliance policies, or legal obligations; and (iv) you have not suffered any adverse action as a result of your conduct in this regard.

8. Restrictive Covenants.

(a) **Security Agreement**. You acknowledge that, at the time you became employed or during the course of your employment with the Company, you signed a Security Agreement, which is attached hereto as Exhibit B. You represent that you have fully abided by by the terms and conditions of the Security Agreement during the course of your employment.

(b) Non-Disparagement; Public Statements. Subject to your rights contained in Section 5(d), you agree not to directly or indirectly take any actions or make any statements that criticize, ridicule, disparage or are otherwise derogatory to the Company or any of the Releasees (as defined in Section 4) or any of their respective products or services, financial status or businesses, or that damage or is intended to damage the Company or any of the Releasees in any of their respective business relationships, or encourage the making of such statements or the taking of such actions by someone else. In addition, subject to your rights contained in Section 5(d), you agree not discuss, provide interviews or otherwise publicly make any statements about the Company or your experiences at the Company without the prior written consent of the Company.

(c) Confidential and Proprietary Information.

(i) You represent that you have not disclosed, and subject to your rights contained in Section 5(d), agree not to disclose, directly or indirectly any Confidential Information to any person or to use, sell or otherwise transfer any Confidential Information for your own benefit or the benefit of any third party. "Confidential Information" refers to confidential, proprietary or commercially sensitive information relating to the Company or its affiliates or their employees, board members, customers, vendors, or other business partners and their businesses, operations, or affairs, including, without limitation, information relating to products, formulations, protocols, processes, designs, formulae, ideas, know-how, test methods, evaluation techniques, patents, trade secrets, scientific data, pricing, raw materials, budgets, financial information, personnel information, client data, corporate and financial policies and procedures, financial projections, technical data and data systems, business practices, pricing strategies, strategic plans, assessments of the global competitive landscape of the industries in which the Company competes, plans for acquisition or disposition of products or companies or business units, expansion plans, acquisition prospects or internal guidelines and processes regarding acquisitions, regardless of the form in which it is maintained or provided, orally or in writing, whether prepared by the Company, a third party or you, together with all analyses, compilations, notes and other documents.

(ii) Subject to your rights contained in Section 5(d), you further agree that the terms of this Agreement shall be considered Confidential Information and that you shall not disclose any information contained in this Agreement to any person, other than, (A) your immediate family members, (B) as required by law, (C) with the express written authority of the Company, (D) for the purposes of obtaining confidential accounting, financial or legal advice, (E) for the purposes of enforcing this Agreement, or (F) for the purpose of exercising your rights under Section 5(d). If you do tell your lawyer, financial advisor, immediate family members, or any government agency about this Agreement or its contents, you must immediately tell each such individual that he or she must keep such information confidential as well. Notwithstanding the foregoing, you shall be permitted to disclose the covenants contained in this Section 8 to any prospective employers. Except as provided in the preceding sentence, upon inquiry regarding the subject matter contained in this Agreement or regarding the Agreement, you shall either not respond or state only that the matter has been resolved.

(e) **Non-Solicitation.** You agree that for a period of twenty-four (24) months following the Separation Date, you shall not, directly or indirectly, (i) solicit, induce, divert, employ or retain, or interfere with or attempt to influence the relationship of the Company or any of its affiliates, with any person or entity that is or was, during the last twelve (12) months of your employment with the Company, (A) an employee of the Company or any of its affiliates or (B) a person engaged to provide services to the Company or any of its affiliates, or (ii) interfere with or attempt to influence the relationship the Company or any of its affiliates has with any customer, supplier or other person with whom the Company or any of its affiliates does business.

(f) **Non-Compete.** You agree that for a period of twelve (12) months following the Separation Date, without the prior written consent of the Executive Vice President of Human Resources, you shall not, directly or indirectly, become employed by, render services for, serve as an agent or consultant to, or become a partner, member, principal, stockholder or other owner of, any of the following entities: Firmenich, S.A., Givaudan, S.A., V. Mane Fils, S.A., Robertet, S.A., Sensient Technologies Corporation, Symrise A.G., Takasago International Corporation, Wild Flavors GmbH, Kerry, or any of their respective affiliates.

(g) **Return of Company Property.**

(i) As of the Separation Date, and before the Company is obligated to make any payments to you or provide you with any benefit pursuant to this Agreement, you shall return to the Company all property of the Company and its affiliates, customers and vendors in your possession or control, including without limitation, all materials, work product, electronically stored information or documents containing or pertaining to Confidential Information, and including without limitation, any Company car, all computers (including laptops), cell phones, keys, PDAs, Blackberries, iPhones, Androids, iPads, credit cards, printers, facsimile machines, televisions, card access to any Company building, customer lists, reports, files, e-mails, work papers, memoranda, notes, formulae, tapes, programs, records and software, computer access codes or disks, instructional manuals, and other similar materials or documents which you used, received or prepared, helped prepare or supervised the preparation of in connection with your employment with the Company (collectively, "Company Property").

(ii) You represent that you have not, nor will you at any time, (A) retain any copies, duplicates, reproductions or excerpts of or use, recreate or reproduce any Company Property, (B) transmit or store any Company Property to or on any personal electronic messaging systems or devices, or (C) transmit any Company Property to any unauthorized person or store the same on any unauthorized person's electronic messaging system or device. Personal electronic messaging systems and devices include, but are not limited to, personal computers, laptops, e-mail accounts, cell phones, smartphones or other wireless devices, iPads, iPhones, Blackberrys, facsimile machines, instant messaging systems, and copy machines.

(h) **Intellectual Property / Work Product.**

(i) For the purposes of this clause, "Intellectual Property" includes all Confidential Information, inventions whether patentable or not, patents, trademarks, formulae, service marks, designs, design rights, copyrights, utility models, applications for registration of any of the foregoing and the rights to apply for them in any part of the work, drawings, computer programs, trade secrets, processes, ideas, know-how and rights of a like nature arising or subsisting in the work, whether registered or unregistered.

(ii) You agree that all of your work product, including all Intellectual Property, whether created solely or jointly with others, and including any moral rights therein, given, disclosed, created, developed or prepared in connection with your employment with the Company, shall be the sole and exclusive property of the Company. In the event that any such Intellectual Property or other work product does not vest by operation of law as the sole and exclusive property of the Company, you hereby irrevocably assign, transfer and convey to the Company, exclusively and perpetually, all right, title and interest which you may have or acquire in and to such Intellectual Property or other work product throughout the world. The Company and its affiliates or their designees shall have the exclusive right to make full and complete use of, and make changes to, all Intellectual Property or other work product without restrictions or liabilities of any kind, and you shall not have the right to use any such materials, other than within the legitimate scope and purpose of your employment with the Company. You affirm that you have disclosed to the Company the creation or existence of any Intellectual Property or other work product and agree to take whatever additional lawful action may be necessary, and to sign whatever documents the Company may require, in order to secure and vest in the Company or its designee all right, title and interest in and to any Intellectual Property or other work product and any industrial or Intellectual Property rights therein (including full cooperation in support of any Company applications for patents and copyright or trademark registrations). To the extent additional nominal consideration is required pursuant to applicable law, you agree that such nominal consideration shall be sufficient for the assignments described above.

(i) **Cooperation.** You agree to make yourself available to testify on behalf of the Company in any action, suit, or proceeding, whether civil, criminal, administrative, or investigative, and to provide necessary information and meet and consult with members of management or other representatives of, or counsel to, the Company as reasonably requested. The Company's request for reasonable cooperation shall take into consideration your personal and business commitments and the amount of notice provided to you The Company will fully reimburse you for reasonable out-of-pocket expenses incurred in connection with such cooperation provided they are properly documented.

(j) **Compliance with Company Policy.** You represent that, during your employment with the Company, you have not engaged in willful misconduct or violation of a Company policy that is materially detrimental to the Company or in any action or inaction that would constitute grounds for being terminated for Cause, as such term is defined in the ESP.

(k) **Resignation upon Termination.** This Agreement represents your resignation from all board and board committee memberships, and all other offices and positions that you hold with or on behalf of the Company and all of its subsidiaries, affiliates, partnerships and joint ventures, effective as of the Separation Date. You agree to execute and return to the Company, simultaneously with the execution of this Agreement a letter in the form attached as Exhibit C, which separately confirms your resignation from such positions.

(l) **Execution of Documentation**. You agree to execute any other documentation reasonably requested by the Company from time to time, and to deliver the same to the Company within such time as may be reasonably specified by the Company.

9. **Breach, Equitable Relief and Forfeiture.**

(a) You and the Company hereby agree that the period and geographical areas of restriction imposed upon you by the provisions of Section 8 of this Agreement are fair and reasonable and are reasonably required for the protection of the Company. You acknowledge and agree that a breach by you of Section 8 of this Agreement, shall be deemed a material breach of this Agreement and that remedies at law will be inadequate to protect the Company and its affiliates in the event of such breach, and, without prejudice to any other rights and remedies otherwise available to the Company, you agree to the granting of injunctive relief in the Company's favor in connection with any such breach or violation without proof of irreparable harm plus, if the Company prevails, its legal fees and costs to enforce these provisions. You expressly waive any security or bond that might otherwise be required in connection with such relief.

(b) You further acknowledge and agree that the Company's obligation to make any payments to you or provide you with any benefit or right pursuant to this Agreement is subject to your compliance with your obligations under Section 8, and that in the event of a breach by you of any provision of Section 8, (i) you shall be obligated to immediately repay to the Company all amounts and benefits theretofore paid to or received by you pursuant to this Agreement; and/or (ii) you shall forfeit any further payments or benefits under this Agreement.

(c) You further acknowledge that under the terms of the SAIP and your other Award Documents, if you fail to comply with your obligations under Section 32(b) of the SAIP, including the non-competition, non-solicitation, confidentiality and cooperation obligations thereunder, or if a restatement or misstatement of the Company's financial statements is required, some or all of your AIP, LTIP awards, ECP awards and other stock-based or cash awards may be subject to forfeiture or repayment in accordance with the terms of the respective Award Documents. However, nothing in the SAIP shall be deemed or construed to conflict with your rights under Section 5(d) of this Agreement.

10. **Taxes.** You agree that you are responsible for all applicable taxes and contributions relating to the payments and benefits under this Agreement and that all payments and benefits under this Agreement shall be subject to applicable taxation deductions and withholdings. You understand and agree that the Company is providing you with no representations regarding tax obligations or consequences that may arise from this Agreement.

11. **Assignment; Severability.**

(a) You expressly agree that this Agreement shall be assignable by the Company to a successor to any of the businesses of the Company and you hereby expressly consent to such assignment.

(b) In the event that any one or more of the provisions of this Agreement shall be or become invalid, illegal or unenforceable in any respect, including the restrictions in Section 8 but excluding the general release language, the validity, legality and enforceability of the remaining provisions contained herein shall not be affected thereby. If the general release language is found to be illegal or unenforceable, you agree to execute a binding replacement release. In the event that one or more terms or provisions of this Agreement are deemed invalid or unenforceable by the laws of New York or any other state or jurisdiction in which it is to be enforced, by reason of being vague or unreasonable as to duration or geographic scope of activities restricted, or for any other reason, the provision in question shall be immediately amended or reformed to the extent necessary to make it valid and enforceable by the court of such jurisdiction charged with interpreting and/or enforcing such provision. You agree and acknowledge that the provision in question, as so amended or reformed, shall be valid and enforceable as though the invalid or unenforceable portion had never been included herein.

12. **Entire Agreement and Waiver.** Effective as of the Separation Date, this Agreement (including all attachments and schedules hereto and all documents incorporated by reference herein) constitutes the entire agreement between you and the Company with respect to the termination of your employment, and supersedes all other correspondence, offers, proposals, promises, agreements or arrangements relating to the subject matter contained herein. The failure of any party to at any time enforce any of the provisions of this Agreement shall not be deemed or construed to be a waiver of any such provisions, nor in any way affect the validity of this Agreement or any provision hereof or the right of either of the parties to thereafter enforce each and every provision of this Agreement. You acknowledge that you have not relied on any representation, promises, or agreements of any kind made in connection with the decision to sign this Agreement, except for those set forth in this Agreement, including the Exhibit(s) that are incorporated herein in their entirety.

13. No Modification. This Agreement may not be changed unless the changes are in writing and signed by you and an authorized representative of the Company.

14. **Governing Law.** The terms of this Agreement shall for all purposes be enforced, governed by, and construed in accordance with the laws of the State of New York without regard to its choice of law rules.

15. **Acknowledgments.** By signing this Agreement, you acknowledge that:

(a) You have carefully read and understand this Agreement;

(b) The Company has advised you in writing to consult with an attorney of your choosing before signing this Agreement and you have, in fact, retained and been represented by legal counsel of your own choosing in connection with, and before signing, this Agreement*,* and that the time afforded to you to consider the terms of this Agreement has provided you with a full and fair opportunity to thoroughly discuss all aspects of your rights and this Agreement with your attorney;

(c) You acknowledge that you have had a reasonable period of twenty-one calendar days (the "Review Period") to review and consider this Agreement before signing it. You understand that you may use as much of the Review Period as you wish before signing this Agreement. If you sign this Agreement prior to the expiration of the Review Period, you are acknowledging that you have voluntarily and knowingly waived the remainder of the Review Period with respect to such claims, and that the decision to accept a shortened period of time was not induced by the Company or any Released Party;

(d) You understand the consequences of entering into this Agreement, including with respect to the restraints in Section 8 and the release and waiver in Section 4, that this Agreement is **LEGALLY BINDING** and by signing it you give up certain rights;

(e) You understand that, following your execution of the Agreement, you will have a period of seven (7) calendar days to revoke this Agreement by delivering written notification addressed to the Company's Executive Vice President, Chief Human Resources Officer, 521 West 57th Street, New York, NY 10019-2960, no later than the close of business on the seventh (7th) calendar day after you sign it (except that if the seventh (7th) calendar day after you sign the Agreement falls on a Saturday, Sunday or holiday observed by the Company, you shall have until the conclusion of the immediately next business day) (the "Revocation Period"). For purposes of this Agreement, the "Effective Date" as used herein shall mean the first (1st) calendar day after the Revocation Period expires without you revoking the Agreement.

(f) As set forth in Section 4 herein, you KNOWINGLY AND VOLUNTARILY RELEASE the Releasees from any and all claims you may have, known or unknown, as of the date you sign this Agreement, in exchange for the benefits you have obtained in the Agreement, and that these benefits are in addition to any benefit you would have otherwise received if you did not sign this Agreement;

(g) If you refuse to sign this Agreement within the Review Period or revoke this Agreement during the Revocation Period, this Agreement will not be effective and enforceable and you will not receive any of the payments or benefits set forth in Section 2, other than those you have a right to receive by law, if any; and

(h) You have voluntarily chosen to enter into this Agreement and have not been forced or pressured in any way to sign it by any person or party.

16. Counterparts. This Agreement may be executed in counterparts (including by facsimile, PDF, or email), each of which shall be deemed an original and all of which together shall constitute one and the same instrument. You or the Company may execute this Agreement by executing any counterpart.

IN WITNESS WHEREOF, you and the Company hereto knowingly and voluntarily executed this Agreement as of the date first written above.

Alison Cornell International Flavors & Fragrances Inc.

/s/ Alison A. Cornell By: /s/ Angelica Cantlon
Date: October 17, 2016 Name: Angelica Cantlon
Title: EVP, CHRO
Date: 10/17/2016

Exhibit A

The following State laws, regulations, common laws and other theories of recovery, as amended, are hereby incorporated by reference and made part of this Agreement, particularly at Section **4. General Release of Claims**:

The New York State Human Rights Law;
The New York Executive Law;
The New York Labor Law;
The New York Civil Rights Law;

The New York Equal Pay Law;
The New York Whistleblower Law;
The New York Wage-Hour and Wage Payment Laws and Regulations;
The New York Minimum Wage Law;
The Retaliation/Discrimination provisions of the New York Workers' Compensation Law and the New York State Disabilities Benefits Law;
The New York State Worker Adjustment and Retraining Notification Act;
The New York City Human Rights Law;
The New York City Administrative Code and Charter
The New Jersey Law Against Discrimination;
The New Jersey Civil Rights Act;
The New Jersey Family Leave Act;
The New Jersey State Wage and Hour Law;
The Millville Dallas Airmotive Plant Job Loss Notification Act;
The New Jersey Conscientious Employee Protection Act;
The New Jersey Equal Pay Law;
The New Jersey Occupational Safety and Health Law;
The New Jersey Smokers' Rights Law;
The New Jersey Genetic Privacy Act;
The New Jersey Fair Credit Reporting Act;
The New Jersey Statutory Provision Regarding Retaliation/Discrimination for Filing A Workers' Compensation Claim;
The New Jersey Public Employees' Occupational Safety and Health Act;
New Jersey laws regarding Political Activities of Employees, Lie Detector Tests, Jury Duty, Employment Protection, and Discrimination

<u>EXHIBIT B</u>

Signed Security Agreement

<u>EXHIBIT C</u>

<u>Form of Resignation Letter</u>

Date:

Board of Directors of
International Flavors & Fragrances Inc.
521 W 57th Street
New York, NY 10019

Ladies and Gentlemen:

This is to advise you that, effective immediately, I hereby resign from each of the positions (whether as an officer, director or board committee member) that I hold with International Flavors & Fragrances Inc. and any and all of its subsidiaries, affiliates, partnerships and joint ventures (collectively, "IFF") and from each of the positions I hold as representative of IFF in any industry associations, lobbying groups or other organizations and bodies.

Sincerely yours,

[Insert Employee Name]

EXHIBIT 12

Computation of Ratios of Earnings to Fixed Charges

(Amounts in thousands except Ratio of Earnings to Fixed Charges)	Fiscal Year				
Earnings:	**2016**	**2015**	**2014**	**2013**	**2012**
Add:					
Income before taxes	$ 523,717	$ 539,101	$ 549,061	$ 485,210	$ 443,415
Fixed charges	68,838	63,158	63,098	64,194	59,009
Amortization of capitalized interest	4,723	4,198	3,734	3,087	2,864
Less:					
Capitalized interest	(4,035)	(5,893)	(5,572)	(6,629)	(6,762)
Total Earnings available for fixed charges	**$ 593,243**	**$ 600,564**	**$ 610,321**	**$ 545,862**	**$ 498,526**
Fixed Charges:					
Interest expense	$ 52,989	$ 46,062	$ 46,067	$ 46,767	$ 41,753
Capitalized interest	4,035	5,893	5,572	6,629	6,762
Portion of rental expense which represents interest factor[1]	11,814	11,203	11,459	10,798	10,494
Total Fixed charges	**$ 68,838**	**$ 63,158**	**$ 63,098**	**$ 64,194**	**$ 59,009**
Ratio of Earnings to Fixed Charges	**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.

EXHIBIT 21

LIST OF SUBSIDIARIES OF INTERNATIONAL FLAVORS & FRAGRANCES INC.

(the “Company”)

Name of Entity	Jurisdiction
International Flavors & Fragrances S.R.L.	Argentina
Bush Boake Allen Australia Pty Ltd	Australia
IFF Australia Holdings Pty Ltd	Australia
International Flavours & Fragrances (Australia) Pty Ltd	Australia
Lucas Meyer Cosmetics Australia Pty Ltd	Australia
Southern Cross Botanicals Pty Ltd	Australia
IFF Essências e Fragrâncias Ltda.	Brazil
Bush Boake Allen do Brasil Indústria e Comércio Ltda.	Brazil
International Flavors & Fragrances (Canada) Ltd.	Canada
Lucas Meyer Cosmetics Canada Inc.	Canada
Les Laboratories Bio ForeXtra Inc.[2]	Canada
David Michael & Company (Canada) 1986 Ltd.	Canada
Bush Boake Allen Chile S.A.	Chile
IFF Sabores y Fragancias de Chile Ltda.	Chile
International Flavors & Fragrances I.F.F. (Chile) Limitada	Chile
International Flavors & Fragrances (Hangzhou) Co., Ltd.[1]	China
IFF Flavors & Fragrances (Hangzhou) Trading Co., Ltd.	China
International Flavors & Fragrances (Zhejiang) Co., Ltd.	China
International Flavors & Fragrances (China) Ltd.	China
David Michael Hong Kong Limited	China
David Michael (Beijing Flavor Co. Ltd.	China
International Flavors and Fragrances Colombia S.A.S.	Colombia
MISR Company for Aromatic products (S.A.E.)	Egypt
A. Boake, Roberts And Company (Holding), Limited	England
International Flavours & Fragrances (CIL) Limited	England
Bush Boake Allen Enterprises Limited	England
Bush Boake Allen Limited	England
Bush Boake Allen (Pension Trustees) Limited	England
Bush Boake Allen Pension Investments Limited	England
Bush Boake Allen Holdings (U.K.) Limited	England
IFF Augusta Limited	England
IFF Augusta II Limited	England
International Flavours & Fragrances (GB) Holdings Limited	England
International Flavours & Fragrances I.F.F. (Great Britain) Limited	England
Southern Cross Botanicals UK Limited	England
International Flavors & Fragrances I.F.F. (France) SAS	France
International Flavors & Fragrances France Holding I SAS	France
International Flavors & Fragrances France Holding II SAS	France

International Flavors & Fragrances France Holding III SAS	France
Lucas Meyer Cosmetics	France
Institut Européen de Biologie Cellulaire	France
David Michael Europe S.A.S.	France
International Flavors & Fragrances IFF (Deutschland) GmbH	Germany
IFF Worldwide (Gibraltar) Limited	Gibraltar
IFF (Gibraltar) Holdings	Gibraltar
International Flavors & Fragrances (Hong Kong) Limited	Hong Kong
Essence Scientific Research Private Limited	India
Fragrance Holdings Private Limited	India
International Flavours & Fragrances India Private Limited[3]	India
P.T. Essence Indonesia	Indonesia
IFF Capital Services	Ireland
IFF Financial Services	Ireland
Irish Flavours and Fragrances Limited	Ireland
Aromatics Holdings Limited	Ireland
International Flavors & Fragrances Irish Acquisition Company Limited	Ireland
Aromor Flavors and Fragrances Ltd.	Israel
BKF Vision Ltd	Israel
K-Vision Consulting and Investments Ltd	Israel
M.P. Equity Holdings Ltd	Israel
International Flavors and Fragrances I.F.F. (Israel) Ltd.	Israel
International Flavors e Fragrances IFF (Italia) S.r.l.	Italy
International Flavors & Fragrances (Japan) Ltd.	Japan
IFF (Korea) Inc.	Korea
IFF (Gibraltar) Holdings (Luxembourg) S.C.S.	Luxembourg
International Flavors & Fragrances (Luxembourg) S.à r.l.	Luxembourg
International Flavors & Fragrances Ardenne S.à r.l.	Luxembourg
International Flavors & Fragrances (Malaysia) Sdn. Bhd.	Malaysia
International Flavours & Fragrances (Mauritius) Ltd	Mauritius
Bush Boake Allen Controladora, S.A. de C.V.	Mexico
IFF Mexico Manufactura, S.A. de C.V.	Mexico
International Flavors & Fragrances (Mexico), S. de R.L. de C.V.	Mexico
Bush Boake Allen Benelux B.V.	Netherlands
International Flavors & Fragrances (Nederland) Holding B.V.	Netherlands
International Flavors & Fragrances I.F.F. (Nederland) B.V.	Netherlands
IFF Luxar C.V.	Netherlands
IFF Worldwide C.V.	Netherlands
David Michael Netherlands B.V.	Netherlands
International Flavours & Fragrances (NZ) Limited	New Zealand
Bush Boake Allen (New Zealand) Limited	New Zealand
International Flavors & Fragrances (Philippines), Inc.	Philippines
International Flavors & Fragrances (Poland) Sp. z o.o.	Poland

International Flavors & Fragrances I.F.F. (Rus)	Russia
International Flavors & Fragrances (Greater Asia) Pte. Ltd	Singapore
International Flavors & Fragrances (Asia Pacific) Pte Ltd	Singapore
Lucas Meyer Cosmetics Asia Pte. Ltd.	Singapore
International Flavors and Fragrances IFF (South Africa)	South Africa
International Flavors & Fragrances I.F.F. (España), S.A.	Spain
IFF Latin American Holdings (España), S.L.	Spain
IFF Benicarló, S.L.	Spain
International Flavors & Fragrances I.F.F. (Norden) AB	Sweden
International Flavors & Fragrances I.F.F. (Schweiz) AG	Switzerland
International Flavours & Fragrances (Thailand) Limited	Thailand
IFF Aroma Esans Sanayi Ve Ticaret Anonim Şirketi	Turkey
IFF Turkey Aroma Ve Esans Ürünleri Satiş Ticaret Anonim Şirketi	Turkey
International Flavors & Fragrances (Middle East) FZ-LLC	United Arab Emirates
International Flavors & Fragrances (Vietnam) Limited Liability Company	Vietnam
Bush Boake Allen Zimbabwe (Private) Limited	Zimbabwe
International Flavors & Fragrances (Zimbabwe) (Private) Ltd.	Zimbabwe
Aromor Flavors and Fragrances Inc.	Delaware
Asian Investments, Inc.	Delaware
Fragrance Ingredients Holdings Inc.	Delaware
IFF Augusta Holdings LLC	Delaware
IFF Chemical Holdings Inc.	Delaware
IFF Delaware Holdings, LLC	Delaware
International Flavors & Fragrances (Caribe) Inc.	Delaware
Lucas Meyer Cosmetics USA, Inc.	Delaware
International Flavors & Fragrances Holdings, LLC	Delaware
IFF International Inc.	New York
van Ameringen-Haebler, Inc.	New York
Henry H. Ottens Manufacturing Co., Inc.	Pennsylvania
David Michael & Co., Inc.	Pennsylvania
LHFS, LLC	Pennsylvania
Bush Boake Allen Inc.	Virginia

The companies listed above constitute all subsidiaries of the Company as of December 31, 2016. Except as otherwise indicated, such subsidiaries are wholly owned, directly or indirectly, by the Company.

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[1] 90% of the voting stock of International Flavors & Fragrances (Hangzhou) Co., Ltd. is owned indirectly by the Company.
[2] 51% of the voting stock of Les Laboratories Bio ForeXtra Inc. is owned indirectly by the Company.
[3] 93.36% of the voting stock of International Flavours & Fragrances India Private Limited is owned indirectly by the Company.

EXHIBIT 23

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (No. 333-209889 and No. 333-187426) and Form S-8 (No. 333-126421, No. 333-120158, No. 333-102825, No. 333-61072, No. 333-51436, No. 333-50752, No. 033-54423, No. 333-171297, No. 333-187426, and No. 333-203902) of International Flavors & Fragrances Inc. of our report dated February 28, 2017, relating to the financial statements, financial statement schedule and the effectiveness of internal control over financial reporting, which appears in this Annual Report on Form 10-K.

/s/ PricewaterhouseCoopers LLP

New York, New York

February 28, 2017

Exhibit 31.1

CERTIFICATION

I, Andreas Fibig, certify that:

1. I have reviewed this Annual Report on Form 10-K 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(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's 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.

Date: February 28, 2017

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

Exhibit 31.2

CERTIFICATION

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

1. I have reviewed this Annual Report on Form 10-K 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(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant’s other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s 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.

Date: February 28, 2017

By:	/s/ Richard A. O'Leary
Name:	Richard A. O'Leary
Title:	Executive Vice President and Chief Financial Officer

Exhibit 32

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

In connection with the Annual Report on Form 10-K of International Flavors & Fragrances Inc. (the “Company”) for the fiscal year ended December 31, 2016 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), Andreas Fibig, as Chief Executive Officer of the Company, 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.

Dated: February 28, 2017

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