
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, 2021

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

*(State or other jurisdiction
of incorporation or organization)*

13-1432060

(I.R.S. Employer Identification No.)

521 West 57th Street, New York, NY 10019-2960

200 Powder Mill Road, Wilmington, DE 19803-2907

(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	Trading Symbol	Name of Each Exchange on Which Registered
Common Stock, par value 12 1/2¢ per share	IFF	New York Stock Exchange
1.750% Senior Notes due 2024	IFF 24	New York Stock Exchange
1.800% Senior Notes due 2026	IFF 26	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 every Interactive Data File required to be submitted 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 such files). Yes No

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

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

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

The aggregate market value of the voting stock held by non-affiliates of the Registrant was \$37,208,150,825 as of June 30, 2021.

As of February 21, 2022, there were 254,684,699 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 2022 Annual Meeting of Shareholders (the "IFF 2022 Proxy Statement") are incorporated by reference in Part III of this Form 10-K.

INTERNATIONAL FLAVORS & FRAGRANCES INC.

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PART I

In this report, we use the terms “IFF,” “the Company,” “we,” “us” and “our” to refer to International Flavors & Fragrances Inc. and its subsidiaries.

ITEM 1. BUSINESS.

We are a leading creator and manufacturer of food, beverage, health & biosciences, scent and pharma solutions and complementary adjacent products, including cosmetic active and natural health ingredients, which are used in a wide variety of consumer products. Our products are sold principally to manufacturers of dairy, meat, beverages, snacks, savory, sweet, baked goods and other foods, personal care products, soaps and detergents, cleaning products, perfumes and cosmetics, dietary supplements, food protection, infant and elderly nutrition, functional food, pharmaceutical and oral care products. As a result, we hold global leadership positions in the Food & Beverage, Home & Personal Care and Health & Wellness markets, and across key Tastes, Textures, Scents, Nutrition, Enzymes, Cultures, Soy Proteins, Pharmaceutical Excipients, Biocides and Probiotics categories.

On February 1, 2021, pursuant to an Agreement and Plan of Merger (the “Merger Agreement”) with DuPont de Nemours, Inc. (“DuPont”), a wholly owned subsidiary of IFF merged with and into Nutrition & Biosciences, Inc. (“N&B”), a subsidiary of DuPont holding its Nutrition and Biosciences business (the “N&B Business,” and such transaction, the “N&B Transaction”). The shares issued in the merger represented approximately 55.4% of the common stock of IFF on a fully diluted basis, after giving effect to the merger, as of February 1, 2021.

Sales in 2021 were approximately \$11.656 billion. Based on 2021 sales, approximately 41% were to global consumer products companies and approximately 59% were to small and mid-sized companies. During 2021, our 25 largest customers accounted for 29% of our sales. In 2021, no customer accounted for more than 10% of sales.

Our business is geographically diverse, with sales in the U.S. representing approximately 28% of sales in 2021. No other country represented more than 7% of sales.

Our audited consolidated financial information in this report for 2021 includes the results of the N&B Business effective February 1, 2021, whereas the Company’s consolidated financial information for the prior years do not include amounts related to N&B.

Our Product Offerings

Our business consists of four segments: Nourish, Health & Biosciences, Scent and Pharma Solutions.

Nourish

As a leading creator of ingredients and solutions, we help our customers deliver on the promise of healthy and delicious foods and drinks that appeal to consumers. While we are a global leader, our Nourish business operates regionally, with different formulas that reflect local taste preferences. We create products in our regional creative centers which allows us to satisfy local preferences, while also helping to ensure regulatory compliance and production standards. We develop thousands of different Nourish offerings for our customers, most of which are tailor-made, and we continually develop new formulas to meet changing consumer preferences and customer needs.

Our Nourish segment consists of most of our legacy Taste segment combined with N&B’s Food & Beverage division and the food protection business of N&B’s Health & Biosciences division. Our Nourish business spans a diversified portfolio across natural and plant-based specialty food ingredients, flavor compounds, and savory solutions and inclusions and consists of three business units: Ingredients, Flavors and Food Designs.

Ingredients include a diversified portfolio across natural and plant-based specialty food ingredients derived from herbs and plants that provide texturizing solutions used in the food industry, food protection solutions used in food and beverage products, as well as specialty soy and pea protein with value-added formulations, emulsifiers and sweeteners. Natural food protection ingredients consist of natural antioxidants and anti-microbials used for natural food preservation and shelf-life extension for beverages, cosmetic and healthcare products, pet food and feed additives.

Flavors include a range of flavor compounds and natural taste solutions that are ultimately used by our customers in savory products (soups, sauces, meat, fish, poultry, snacks, etc.), beverages (juice drinks, carbonated or flavored beverages, spirits, etc.), sweets (bakery products, candy, cereal, chewing gum, etc.), and dairy products (yogurt, ice cream, cheese, etc.). Flavors also include value-added spices and seasoning ingredients for meat, food service, convenience, alternative protein and culinary products.

Food Designs include savory solution products such as spices, sauces, marinades and mixtures. Additionally, Food Designs provide inclusion products that help with taste and texture by, among other things, combining flavorings with fruit, vegetables and other natural ingredients for a wide range of food products, such as health snacks, baked goods, cereals, pastries, ice cream and other dairy products.

Health & Biosciences

Our Health & Biosciences business consists of a biotechnology-driven portfolio of enzymes, food cultures, probiotics and specialty ingredients for food, home and personal care, and health and wellness applications.

Our Health & Biosciences business comprises N&B's Health & Biosciences division (except the food protection business which is part of Nourish) in combination with the Natural Product Solutions business of legacy IFF. Health & Biosciences is comprised of six business units: Health, Cultures & Food Enzymes, Home & Personal Care, Animal Nutrition, Grain Processing and Microbial Control. During the third quarter of 2021, we entered into an agreement to divest the Microbial Control business. We expect that the transaction will close in the second quarter of 2022, subject to customary closing conditions.

Health provides ingredients for dietary supplements, functional food and beverage, specialized nutrition and pharma.

Cultures & Food Enzymes provides products that aim to serve the global demand for healthy, natural, clean label and fermented food for fresh dairy, cheese, bakery and brewing products. Such products contribute to extended shelf life and stability helping our customers to improve their product offerings. The business's enzyme solutions also allow our customers to provide low sugar, high fiber and lactose-free dairy products.

Home & Personal Care produces enzymes for laundry and dishwashing detergents, cleaning and textiles to help enhance the product and process performance of products in the fabric and homecare, textiles and industrials and personal care markets.

Animal Nutrition produces feed enzymes and animal health solutions that help to improve welfare, performance and sustainability of livestock animal farming.

Grain Processing produces yeasts and enzymes for biofuel production and carbohydrate processing.

Microbial Control produces biocides for controlling microbial populations for oil and gas production, home and personal care and industrial preservation markets.

Scent

Our Scent business creates fragrance compounds, fragrance ingredients and cosmetic ingredients that are integral elements in the world's finest perfumes and best-known household and personal care products. Consumer insights science and creativity are at the heart of our Scent business, and, along with our unique portfolio of natural and synthetic ingredients, global footprint, innovative technologies and know-how, and customer intimacy, we believe make us a market leader in scent products. Our Scent business consists of our legacy Scent segment as well as our Flavor Ingredients business, formerly part of our legacy Taste business. The Scent segment is comprised of three business units: Fragrance Compounds, Fragrance Ingredients and Cosmetic Actives.

Fragrance Compounds are unique and proprietary combinations of multiple fragrance 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.

Our perfumers harness creativity and leverage our innovative captive molecules, sustainable natural ingredients obtained with innovative processes, biotech ingredients, data science, and consumer insights to create unique and inspiring fragrances driving consumer preferences.

Our fine fragrances focus on perfumes and colognes, creating global and local namesake brands, from high luxury to mass market, from market leading to ultra-niche products.

Our consumer fragrances include three end-use categories of products:

- Fabric Care, including laundry detergents, fabric softeners and specialty laundry products;
- Home Care, including household cleaners, dishwashing detergents and air fresheners; and
- Body Care, including personal wash, hair care and toiletries products.

Fragrance Ingredients. Fragrance ingredients are natural and synthetic, and active and functional ingredients that are used internally and sold to third parties, including competitors, for use in the preparation of compounds. While the principal role of our fragrance ingredients facilities is to support our fragrance compounds business, we utilize excess manufacturing capacity to manufacture and sell certain fragrance ingredients to third parties, enabling us to leverage our fixed costs while maintaining the security of our supply for our perfumers and ultimately our customers. Flavor ingredients include natural flavor extracts, specialty botanical extracts, distillates, essential oils, citrus products, aroma chemicals and natural gums and resins. Such ingredients are used for food, beverage and flavors, and are often sold directly to food and beverage manufacturers who use them in producing consumer products.

Cosmetic Actives designs, develops, manufactures and markets innovative ingredients for the cosmetics and personal care industry, while offering active ingredients, functional ingredients, and delivery systems.

Pharma Solutions

Our Pharma Solutions business produces a vast portfolio including cellulose and seaweed-based pharma excipients, used to improve the functionality and delivery of active pharmaceutical ingredients, including controlled or modified drug release formulations, and enabling the development of more effective pharmaceutical finished dosage formats. Our excipients are used in prescription and over-the-counter pharmaceuticals and dietary supplements. Our Pharma Solutions products also serve a variety of other specialty and industrial end-uses including coatings, inks, electronics, agriculture, and consumer products. Pharma Solutions is comprised of N&B's Pharma Solutions business.

Consumer Insights, Research and Product Development Process

The markets in which we compete require constant innovation to remain competitive. Consumer preferences tend to drive change in our markets, and as science evolves and sustainability continues to be a key factor to customers and consumers, we must continue to strengthen our research and development platforms and adapt our capabilities to provide differentiated products.

Consumer Insights

We believe that the first step to creating an innovative and unique product experience begins with gaining insight into the consumer and emerging industry trends. By developing a deep understanding of what consumers value and prefer through our consumer insight programs, we are better able to focus our research and development and creative efforts.

Our consumer science, insight and marketing teams interpret trends, monitor product launches, analyze quantitative market data and conduct numerous consumer interviews annually.

Based on this information, we develop innovative and proprietary 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 for IFF.

Research and Development

We consider our research and development infrastructure to be one of our key competencies and critical to our ability to provide differentiated products to our customers. We have strong product and application development pipelines built upon a global network that includes research and development, as well as regulatory and product stewardship capabilities.

We focus and invest substantial resources in the research and development of new and innovative molecules, compounds, formulations and technologies and the application of these to our customers' products. Using the knowledge gained from our consumer insights programs and business unit needs, we strategically focus our resources around key research and development platforms that address or anticipate consumer needs or preferences. By aligning our capabilities and resources to these platforms, we ensure the proper support and focus for each program so that our products can be further developed and eventually accepted for commercial application.

As of December 31, 2021, we have been granted 1,346 patents in the United States, since 2000, and have 608 pending patent applications. We have developed many unique molecules and delivery systems for our customers that are used as the foundations of successful products around the world.

Our principal basic research and development activities are located in Union Beach, New Jersey; Wilmington, Delaware; Palo Alto, California; Brabrand, Denmark; and Leiden, The Netherlands. At those locations, our scientists and application engineers, while collaborating with our other research and development centers around the world, 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, 2021, we employed approximately 3,400 people globally in research and development activities.

Creative Application

Through our global network of creative centers and application laboratories, we create or adapt the basic Nourish, Health & Biosciences, Scent and Pharma Solutions that we have developed in the research and development process to commercialize for use in our customers' consumer products. Our global creative teams consist of marketing, consumer science, 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 experiences that our customers are seeking in order to satisfy consumer demands in each of their respective markets.

New product development is driven by a variety of sources including requests from our customers, who are in need of specific products 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 and relevance of our offerings. We use a collaborative process between our researchers, our product development team and our customers to perfect our offerings so they are ready to be included in the final consumer product.

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

Most of our formulas are treated as trade secrets and remain our proprietary assets. Our business is not materially dependent upon any individual patent, trademark or license.

Supply Chain

We strive to provide our customers with consistent and 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

In connection with the manufacture of our products, we use natural and synthetic ingredients. As of December 31, 2021, we purchased approximately 28,500 different raw materials sourced from an extensive network of domestic and international suppliers and distributors.

Natural ingredients are derived from flowers, fruits and other botanical products, as well as from animal and marine products, and commodity crops like wheat, corn and soy. They contain varying numbers of organic chemicals that are responsible for the fragrance, flavor, antioxidant properties and nutrition of the natural products. Natural products are purchased directly from farms or in processed and semi-processed forms. Some natural products are used in compounds in the state in which they are obtained 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.

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 focus on:

- purchasing under contract with fixed or formula-based pricing for set time periods;
- entering into hedging for raw materials we purchase that can be hedged against liquid commodity assets;
- entering into supplier relationships to gain access to supplies we would not otherwise have;
- implementing indexed pricing;
- reducing the complexity of our formulations;
- evaluating the profitability of whether to buy or make an ingredient; and
- sourcing from local countries with our own procurement professionals.

Manufacturing and Distribution

As of December 31, 2021, we had approximately 210 manufacturing facilities, creative centers and application laboratories located in approximately 45 different countries. Our major manufacturing facilities are located in the United States, The Netherlands, Spain, Great Britain, Germany, Indonesia, Turkey, Brazil, Mexico, Slovenia, China, India, Ireland, Finland, Denmark, Belgium and Singapore.

During the last few years, we undertook an initiative to optimize our global operations footprint to efficiently and cost-effectively deliver value to our global customers. Between 2019 and 2020, the Company completed the closure of 21 sites. During 2021, the Company completed the closure of one site. By the completion of this initiative, targeted for the end of 2022, we expect to close approximately 30 manufacturing sites.

Our supply chain initiatives are focused on increasing capacity and investing in key technologies. Within our more mature markets, we tend to focus on consolidation and cost optimization as well as the implementation of new technologies. In addition to our own manufacturing facilities, we develop relationships with third parties, including contract manufacturing organizations, that expand our access to the technologies, capabilities and capacity that we need to better serve our customers.

For more detailed information about risks related to our supply chain, please refer to Item 1A, “Risk Factors” – *Supply chain disruptions, geopolitical developments or climate-change events may adversely affect our suppliers or our procurement of raw materials, and thus may impact our business and financial results.*

Environmental, Social, and Governance

Since the N&B Transaction, we have been working to integrate all aspects of environmental, social and governance (ESG) topics into a combined program. As a part of our integration with N&B, we have developed an ESG roadmap, the 2030 ‘Do More Good Plan’ (“the Plan”), which aligns with IFF’s purpose of applying science and creativity for a better world. The Plan includes four key focus areas:

Environmental

Supporting environmental stewardship across our operations, including commitments to climate action, zero waste to landfill, water stewardship solutions and an acceleration of our responsible sourcing practices by promoting regenerative ecosystems and achieving zero deforestation for strategic raw material supply chains.

Social

Advancing our commitment to people and communities by strengthening diversity, equity & inclusion within our workforce, while continuously improving our safety program by striving for an injury-free workplace, and achieving world-class safety performance. Within our responsible sourcing program, the Company will continue to promote human rights and animal welfare, while supporting farmers’ livelihoods and ensuring prosperous and equitable value chains.

Governance

Continuing our commitment to good governance which starts with our Board and Executive Committee and is supported by a strong governance framework, including having a robust program to ensure compliance with our Codes of Conduct and adherence to the highest standards of ethics, integrity, honesty and respect in our dealings internally and with our business partners. To enhance accountability in line with evolving stakeholder expectations, the Company plans to launch ESG metrics tied to executive compensation, while expanding oversight for ESG at the Board of Directors level. IFF remains on track to increase our transparency in disclosures and key performance indicators.

Sustainable Solutions

Focusing on the sustainability value proposition and growth for all new innovations as we assist customers in achieving their own ESG goals by delivering an expanded suite of sustainable solutions for the market.

In 2021, our Company continued to achieve notable recognitions in these areas. We were named to the Dow Jones Sustainability Indices for the second consecutive year, a family of best-in-class benchmarks for investors who recognize that sustainable business practices are critical to generating long-term shareholder value. Once again named to both the 2021 World Index and the North America Index, this distinction validates IFF’s leadership position in sustainability performance and underscores our commitment to executing on key ESG priorities. IFF was also recognized by the Human Rights Campaign as a 2021 Best Place to Work for LGBTQ Equality and named among the 2021 Best Places to Work for Disability Inclusion by Disability:IN, for the third and second consecutive years, respectively. For the first time in 2021, we were also recognized by CDP as a triple A list company for corporate transparency and action on climate change, water stewardship and deforestation. IFF continues to be named one of Barron’s 100 Most Sustainable Companies and listed in the FTSE4Good Index series as well as in the Euronext Vigeo World 120 Index for ESG performance.

For more detailed information about our ESG programs and performance, please refer to our annual sustainability report.

Governmental Regulation

We develop, produce and market our products in a number of jurisdictions around the world and are subject to federal, regional and local legislation and regulations in various countries. Our products, which among other industries, are intended for use in food, beverage, pharmaceutical and dietary supplements, home and personal care, feed, cosmetics industries, are subject to strict quality and regulatory standards and environmental laws and regulations. We in turn are required to meet strict standards which, in recent years, have become increasingly stringent and affect both existing as well as new products. While the cost of compliance with such laws and regulations leads to higher overall capital expenditure, which can be significant in certain periods, we do not currently anticipate any material capital expenditures necessary to comply with such laws and regulations. We continue to monitor existing and pending laws and regulations and while the impact of regulatory changes cannot be predicted with certainty, compliance has not had, and is not expected to have a material adverse effect on capital expenditure, earnings or competitive position.

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, pharmaceutical excipients and other ingredients in consumer products, (2) the Environmental Protection Agency and equivalent international agencies that regulate our manufacturing facilities, as well as fragrance products (including encapsulation systems) and microbial products, (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, (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, and (7) the U.S. Department of Agriculture and equivalent international authorities with respect to, among other things, labeling of consumer 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, Authorization and Restriction of Chemicals (“REACH”) regulations in the European Union, as well as similar regulations in other countries.

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 an 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.

For more detailed information about risks related to governmental regulation applicable to the Company, please refer to Item 1A, “Risk Factors” – *If we are unable to comply with regulatory requirements and industry standards, including those regarding product safety, quality, efficacy and environmental impact, we could incur significant costs and suffer reputational harm which could adversely affect results of operations.*

Competition

The markets for our products are part of a larger market that supplies a wide variety of ingredients and compounds used in consumer products. The broader market includes functional foods and food additives, including seasonings, texturizers, spices, enzymes, certain food-related commodities, and fortified products, as well as natural ingredients, nutritional ingredients, supplements and active cosmetic ingredients. Our recent acquisitions have also expanded our reach in products within the functional food ingredient market, including ingredients focused on improving the health and wellness characteristics of a consumer good, the dietary supplement, pharmaceutical ingredient, infant nutrition markets and the cosmetic actives market.

The global market for our products has expanded, primarily as a result of an increase in demand for, and an increase in the variety of, consumer products.

The market for our products is highly competitive. Our main competitors consist of (1) other large global companies, such as Givaudan, Firmenich Symrise, Kerry, ADM, Novozymes, Chr. Hansen, (2) mid-sized companies, (3) numerous regional and local manufacturers and (4) consumer product companies who may develop their own competing products.

We believe that our ability to create products with the sustainability related attributes customers expect and compete successfully in the various sub-market is based on:

- our in-depth understanding of consumers,
- vertical integration,
- innovation and technological advances from our research and development activities and, as applicable, our scientists,
- our ability to tailor products to customers’ needs,

- our ability to manufacture products on a global scale, and
- broad-based regulatory capabilities.

In certain industries, 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, 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 these “core lists.”

Private label manufacturers, mostly medium-sized, local or small food manufacturers, constitute a growing segment in certain markets where we are active. Over the last decade, with the strengthening of supermarket chains, online platforms and growing consumer price consciousness, consumption of private label products has grown at a faster rate than the brand food industry rate. We believe that new business opportunities will continue to arise from these clients as they are increasing their demand for products that are similar to existing products in the market, distinctive premium products, as well as more innovative products.

Our People

The success of our business is built on our talented employees. At December 31, 2021, we had approximately 24,000 employees worldwide, of whom approximately 5,300 are employed in the United States.

Culture and Values

Our culture is based on our five corporate values of empowerment, expertise, innovation, integrity and responsibility, and the expression of these values can be seen and felt throughout our history. Our employees appreciate that they contribute to products that touch and enhance the lives of millions of people around the world. In 2021, we implemented an employee engagement initiative through our cultural ambassador program to build a common identity and shared purpose, drive positive organizational change, strengthen engagement and motivation. Cultural ambassadors were nominated by each site and led programs and sessions on promotion of the IFF values and recognition of individuals who exemplified such values. To date, approximately half of the IFF employees worldwide have attended such sessions.

Leadership and Development

Our leadership development efforts empower employees to become forward-looking, inspiring and capable decision-makers, agents of change and great leaders. To cultivate our employees’ talent and build sustainable long-lasting careers at IFF, we provide tools that enable our employees to envision their career journeys in the form of articulated career “ladders” and “frameworks”. We offer corresponding development opportunities to include specialized courses for employees globally by partnering with leading institutions and universities to help provide the latest training and development offerings at all levels. We also offer to our employees an extensive library of on-demand courses and materials on leadership, management and professional skills development. Those learning resources are integrated into our human capital platform, allowing managers and employees to establish digitalized learning plans that are ultimately captured as a part of their employee profile. Further, those offerings complement our talent acquisition strategy and organized and personalized feedback process, supported by industry-leading assessment tools.

Diversity, Equity, & Inclusion (DE&I)

Our DE&I vision: “*Your Uniqueness Unleashes Our Potential.*” sets the tone for our colleagues to be empowered to bring their whole authentic selves to work. To this end, we are dedicated to nurturing a truly inclusive and equitable culture through the three pillars of our DE&I mission:

- Our People embody the mosaic of the markets we serve and are empowered to transform the future
- Our Spirit nurtures an inclusive and fair culture where every voice is valued and heard
- Our World embraces diversity of thought and strives to do more good, creating a better future for all

In 2021, our primary focus was harmonizing the two corresponding DE&I programs from the legacy N&B and IFF organizations. We reorganized IFF's DE&I Steering Committee to ensure there was equitable representation of our employee population, including heritage N&B colleagues. We continued our commitment of gender equality using the Economic Dividends for Gender Equity Methodological Framework. IFF was also listed as a "Best Place to Work for Disability Inclusion" for the second consecutive year with a 100% score; part of this achievement was due to the fact that we have launched a Disability Inclusion Taskforce that is auditing our policies & practices for any opportunities to be more inclusive of People with Disabilities. Moreover, IFF maintained our "Best Place to Work for LGBTIQ+ Equality" with 100% scores in Human Rights Campaign Corporate Equality Index and the HRC Equidad Mexico and also achieved a Bronze Level recognition from the India Workplace Equality Index. Throughout 2021, our employee resource groups known as "colleague communities" continued to thrive and mature. Our existing communities; Women@IFF, Prisma, Black Excellence, NextGen@IFF and SERVE (which supports veteran and first responder issues), hosted several events throughout the year and continued to expand their footprint around the globe through chapter development & new members. We were also excited to launch our newest communities, such as Asian Colleagues for Equity, Empowerment, & Excellence, IFFers UNIDOS, and AccessAbility. Lastly, we hosted our first annual Global Inclusion Week delivering over 5,000 hours of training, which further advances our journey towards full inclusion.

Occupational Health & Safety

Employee safety is one of the cornerstones of our business. Our occupational health and safety management system requires and encourages employees and supervised contractors at sites globally to uphold IFF's protocols, report any incidents and suggest improvements that will increase the safety of work sites. Our safety management system in each country is based on local regulations. In the absence of country-specific requirements, IFF guidelines are implemented, which are based on U.S. Occupational Safety and Health Administration ("OSHA") standards. To work toward a safer workplace, we have put in place a set of protocols and programs related to three areas of focus: (a) safety governance (setting and updating comprehensive safety policies and procedures), (b) safety training of employees on local requirements and IFF policies, and (c) safety culture characterized by awareness and communication. In response to the novel coronavirus ("COVID-19") pandemic, we have been following the requirements of governmental authorities and taking additional preventative and protective measures to ensure the safety of our workforce. Moreover, we have developed return-to-workplace protocols and mandatory site guidelines to continue to protect the health and safety of employees at each location and to promote an orderly and phased return for employees who have been working from home.

Availability of Reports

We make available free of charge on or through the "Investors" 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.

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 By-Laws, Corporate Governance Guidelines, Codes of Conduct, and the charters of the Audit Committee, Human Capital and Compensation Committee, Nominating and Governance Committee and Innovation and Sustainability Committee of the Board of Directors are posted on the "Investors" section of our website, www.iff.com.

Our principal executive offices are located at 521 West 57th Street, New York, New York 10019 and 200 Powder Mill Road, Wilmington, DE 19803.

Executive Officers of Registrant

The current executive officers of the Company, as of February 28, 2022, are listed below.

Name	Age	Position
Frank Clyburn	57	Chief Executive Officer and member of our Board of Directors
Glenn Richter	60	Executive Vice President and Chief Financial Officer
Nicolas Mirzayantz	59	President, Nourish
Simon Herriott	58	President, Health & Biosciences
Christophe de Villenlee	57	President, Scent
Angela Strzelecki	55	President, Pharma Solutions
Francisco Fortanet	53	Executive Vice President, Global Operations Officer
Jennifer Johnson	47	Executive Vice President, General Counsel
Susana Suarez-Gonzalez	52	Executive Vice President, Chief Human Resources and Diversity and Inclusion Officer
Vic Verma	53	Executive Vice President, Chief Information Officer
Gregory Yep	56	Executive Vice President, Chief Research & Development, Global Integrated Solutions & Sustainability Officer
Michael DeVeau	41	Senior Vice President, Chief Investor Relations & Communication Officer

Frank Clyburn has served as our Chief Executive Officer and a member of our Board of Directors since February 14, 2022. Mr. Clyburn joined us from Merck, where he served as Executive Vice President and President of Human Health. While at Merck since 2008, Mr. Clyburn held a number of positions, including Chief Commercial Officer, inaugural president of the company's Global Oncology business, and President of the Primary Care and Women's Health businesses. Before joining Merck, Mr. Clyburn was Vice President of the Oncology and Internal Medicine business units at Sanofi Aventis and held a wide range of leadership roles with that company.

Glenn Richter has served as our Executive Vice President, Chief Financial Officer since September 2021. Prior to joining IFF, Mr. Richter was Chief Financial Officer of TIAA, having worked at the company in various leadership roles from April 2015 to July 2021. Previously, Mr. Richter worked for Nuveen Investments as Chief Operating Officer and Chief Administrative Officer and before joining Nuveen Investments in 2006, he served as Executive Vice President, Chief Financial Officer for RR Donnelley & Sons, and prior to that he was Executive Vice President & CFO of Sears, Roebuck and Co. and Chairman of Sears Canada, a publicly-traded affiliate.

Nicolas Mirzayantz has served as our President, Nourish since September 2021 and, previously, as President, Scent since October 2018. Mr. Mirzayantz originally joined our Company in 1988 and was our Group President, Fragrances from January 2007 to October 2018. Mr. Mirzayantz has also served as a member of our Temporary Office of the Chief Executive Officer, our Senior Vice President, Fine Fragrance and Beauty Care and Regional Manager, North America, our Senior Vice President, Fine Fragrance and Beauty Care, and our Vice President Global Fragrance Business Development.

Simon Herriott has served as our President, Health & Biosciences since February 2021. From 2019 to February 2021, Mr. Herriott was Vice President and Global Business Director, Health & Biosciences for the N&B Business and from 2016 to 2019, he served as Global Business Director, Bioactives, Industrial Biosciences and Vice President, Danisco Inc. Mr. Herriott was employed by DuPont's predecessor or formerly affiliated companies for 15 years and held a variety of roles, including Global Business Director, Biomaterials, Industrial Biosciences and leadership positions for various businesses that are currently part of DuPont's Non-Core segment.

Christophe de Villeplee has served as our President, Scent since September 2021. Mr. de Villeplee previously served as President, Global Consumer Fragrances. He originally joined our Company in 1999 and has previously held positions of increasing responsibility, including sales, group country management, regional general management of fragrances, North America, and vice-president of Global Fine Fragrances and Beauty Care.

Angela Strzelecki has served as President, Pharma Solutions since February 2021. From 2019 to February 2021, Dr. Strzelecki was Platform Leader, Pharma Solutions for the N&B Business. From 2013 to 2019, Dr. Strzelecki held a variety of leadership positions at Dupont or its formerly affiliated companies, including Platform Leader, Pharma Solutions for the Nutrition and Health business, Planning Director – Corporate Planning and M&A, Global Business Director – Electronics & Communications, and the North America Business Director – Building Innovations.

Francisco Fortanet has served as our Executive Vice President, Global Operations Officer since August 2015. Prior to his current role, Mr. Fortanet held various leadership positions within the Company, including serving as Frutarom Integration lead and Senior Vice President, Operations, Vice President, Global Manufacturing Compounding, Vice President, Global Manufacturing, Regional Director of North America Operations, the Project Manager of a special project in Ireland, and as Plant Manager in Hazlet, New Jersey. Mr. Fortanet started his career in IFF-Mexico.

Jennifer Johnson has served as Executive Vice President, General Counsel since February 2021. From 2019 to February 2021, Dr. Johnson served as Associate General Counsel for the N&B Business. Dr. Johnson joined DuPont's predecessor or formerly affiliated companies in 2013, where she led the legal team for DuPont's former Industrial Biosciences business as Associate General Counsel and subsequently served as Assistant Chief Intellectual Property Counsel for Industrial Biosciences. Prior to joining DuPont, Dr. Johnson was a Partner at the law firm of Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P.

Susana Suarez-Gonzalez has served as our Executive Vice President, Chief Human Resources and Diversity & Inclusion Officer since February 2021. From November 2016 to February 2021, Dr. Suarez-Gonzalez served as our Executive Vice President, Chief Human Resources Officer. From 2014 to 2016, Dr. Suarez-Gonzalez was Senior Vice President, Global Operations & Centers Expertise, Human Resources of Fluor Corporation, an engineering construction company. Dr. Suarez-Gonzalez began her career at Fluor Corporation in 1991, and during her 25 years with the company, she held various leadership positions across several business groups and functions including construction, marketing, sales, project engineering and human resources.

Vic Verma has served as our Executive Vice President, Chief Information Officer since February 2021 and had previously served as our Senior Vice President, Chief Information Officer from 2016 to February 2021. Before joining the Company, Mr. Verma served as Vice President of Global Infrastructure Operations at American Express, a multinational financial services company. Prior to that, Mr. Verma held several other leadership positions at American Express as well as Vice President, Division CIO and management consulting roles with GlaxoSmithKline, Bristol Myers Squibb and PricewaterhouseCoopers.

Gregory Yep has served as our Executive Vice President, Chief Research & Development, Global Integrated Solutions & Sustainability Officer since February 2021. From June 2016 to February 2021, he served as our Executive Vice President, Chief Research & Development and Sustainability Officer. From January 2015 to June 2016, Dr. Yep was Senior Vice President of Research, Development & Applications with The Kerry Group, a taste and nutrition company. Prior to The Kerry Group, Dr. Yep was Senior Vice President of R&D at PepsiCo, a multinational food, snack and beverage corporation, and was Global Vice President, Application Technologies at Givaudan Flavors and Fragrances, a multinational manufacturer of flavors, fragrances and active cosmetic ingredients. Earlier in his career, Dr. Yep was at McCormick & Company, a flavor, seasonings and spices company, where he held executive roles of increasing responsibility in food science.

Michael DeVeau has served as our Senior Vice President, Chief Investor Relations & Communications Officer since February 2021 and had previously served as our Vice President, Investor Relations, Communications, and Chief of Staff from September 2014 to February 2021, as well as divisional Chief Financial Officer, Scent from 2018 to 2020 and head of Corporate Strategy from 2016 to 2018. Since joining the Company in 2009 as head of investor relations, Mr. DeVeau has held various roles of increasing scope and responsibility in communications, finance and strategy. Prior to joining the Company, he served in leadership positions in investor relations, finance and corporate development at PepsiCo, a multinational food, snack and beverage company. Mr. DeVeau began his career as an Equity Research Analyst at Citigroup Investment Research.

ITEM 1A. RISK FACTORS.

Risk Factor Summary

The following summary highlights some of the principal risks that could adversely affect our business, financial condition or results of operations. This summary is not complete and the risks summarized below are not the only risks we face. These risks are discussed more fully further below in this section entitled "Risk Factors" in Item 1A. of this report. These risks include, but are not limited to, the following:

- Inflationary trends in the price of our input costs, such as raw materials, transportation and energy, could adversely affect our business and financial results.
- Supply chain disruptions, geopolitical developments or climate change events may adversely affect our suppliers or our procurement of raw materials, and thus may impact our business and financial results.
- The COVID-19 pandemic may materially and adversely impact our operations, financial condition, results of operations and cash flows.
- The integration of the N&B Business may continue to present significant challenges, and we may not fully realize anticipated synergies and other benefits of the N&B Transaction.
- We have a substantial amount of indebtedness that could materially adversely affect our financial condition.

- We may not realize all the synergies and other benefits anticipated from the Frutarom acquisition, which could adversely affect our business.
- If we are unable to successfully market to our expanded and diverse customer base, our operating results and future growth may be adversely affected.
- Failure to successfully establish and manage acquisitions, collaborations, joint ventures or partnerships, or the failure to close or delays in closing strategic transactions or divestments, could adversely affect our growth.
- Our business is highly competitive, and if we are unable to compete effectively our sales and results of operations will suffer.
- 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.
- A significant portion of our sales is generated from a limited number of large multi-national customers, which are currently under competitive pressures that may affect the demand for our products and profitability.
- We may not successfully develop and introduce new products that meet our customers' needs, which may adversely affect our results of operations.
- Natural disasters, public health crises (such as the COVID-19 pandemic), international conflicts, terrorist acts, labor strikes, political crisis, accidents and other events could adversely affect our business and financial results by disrupting development, manufacturing, distribution or sale of our products.
- A significant data breach or other disruption to our information technology systems could disrupt our operations, result in the loss of confidential information or personal data, and adversely impact our reputation, business or results of operations.
- We have made investments in and continue to expand our business into emerging markets, which exposes us to certain risks.
- The impact of currency fluctuation or devaluation in the international markets in which we operate may negatively affect our results of operations.
- International economic, political, legal, compliance and business factors could negatively affect our financial statements, operations and growth.
- Economic uncertainty, including increased inflation, may adversely affect demand for our products which may have a negative impact on our operating results and future growth.
- If we are unable to react in a timely and cost-effective manner to changes in consumer trends, such as increasing awareness of health and wellness, our results of operations and future growth may be adversely affected.
- We are subject to increasing customer, consumer, shareholder and regulatory focus on sustainability, which may result in additional costs in order to meet new requirements or integrate the N&B Business and Frutarom with our sustainability practices.
- Our performance may be adversely impacted if we are not successful in managing our inventory and/or working capital balances.
- Any impairment of our tangible or intangible long-lived assets, including goodwill, may adversely impact our profitability.
- Our funding obligations for our pension and postretirement plans could adversely affect our earnings and cash flows.
- The expected phase out of the London Interbank Office Rate ("LIBOR") could impact the interest rates paid on our variable rate indebtedness and cause our interest expense to increase.
- Our business may be negatively impacted as a result of the United Kingdom's departure from the European Union.
- If we are unable to comply with regulatory requirements and industry standards, including those regarding product safety, quality, efficacy and environmental impact, we could incur significant costs and suffer reputational harm which could adversely affect results of operations.
- Defects, quality issues (including product recalls), inadequate disclosure or misuse with respect to the products and capabilities could adversely affect our business, reputation and results of operations.
- Our results of operations may be negatively impacted by the outcome of uncertainties related to litigation.
- 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, and expose us to civil or criminal liability, which could adversely affect our operating results and future growth.
- 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 or applicable sanctions laws and regulations in the jurisdictions in which we operate.

- Our ability to compete effectively depends on our ability to protect our intellectual property rights.
- Changes in our tax rates, the adoption of new U.S. or international tax legislation, or changes in existing tax laws could expose us to additional tax liabilities that may affect our future results.
- The N&B Transaction could result in significant tax liability, and we may be obligated to indemnify DuPont for any such tax liability imposed on DuPont.
- If we fail to comply with data protection laws in the U.S. and abroad, we may be subject to fines, penalties and other costs.

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.

Risks Related to Our Business and Industry

Inflationary trends in the price of our input costs, such as raw materials, transportation and energy, could adversely affect our business and financial results.

We have experienced, and may continue to experience, volatility and increases in the price of certain raw materials, transportation and energy costs as a result of global market and supply chain disruptions and the broader inflationary environment.

If we are unable to increase the prices to our customers of our products to offset inflationary cost trends, 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. Our ability to price our products competitively to timely reflect higher input costs is critical to maintain and grow our sales. Increases in prices of our products to customers or the impact of the broader inflationary environment on our customers and may lead to declines in demand and sales volumes. Further, we may not be able to accurately predict the volume impact of price increases, especially if our competitors are able to more successfully adjust to such input cost volatility. 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 rely less on our products, which could have an adverse long-term impact on our results of operations.

Supply chain disruptions, geopolitical developments or climate-change events may adversely affect our suppliers or our procurement of raw materials, and thus may impact our business and financial results.

In connection with our manufacturing of our products, we often rely on third party suppliers for raw materials. We use many different raw materials for our business, such as essential oils, extracts and concentrates derived from fruits, vegetables, flowers, woods and other botanicals, animal products, raw fruits, organic chemicals and petroleum-based chemicals, as well as, gelatin, glycols, cellulose processed grains, guar, locust bean gum, organic vegetable oils, peels, saccharides, seaweed, soybeans, and sugars and yeasts.

Supply chain disruptions, such as the ones related to the COVID-19 pandemic, may impair or delay our ability to obtain sufficient quantities of certain raw materials through our ordinary supply channels and cause us to incur higher costs by procuring raw materials from other sources in order to compensate for such delays or lack of availability.

In addition, our suppliers, similar to us, are subject to risks, inherent in agriculture, manufacturing and distribution on a global scale, including industrial accidents, environmental events, climate change, 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 and environmental compliance issues, licensing requirements and other regulatory issues, as well as natural disasters, global or local health crisis, international conflicts, terrorist acts, geopolitical developments, trade wars, and other external factors over which neither they nor we have control. These suppliers also could become insolvent or experience other financial distress. For example, in 2017, a fire at the manufacturing facility of BASF Group (“BASF”), one of our suppliers, caused them to declare a force majeure event which resulted in industry disruption due to the lack of availability of certain ingredients used in many fragrance compounds.

If our suppliers are unable to supply us with sufficient quantities of ingredients and raw materials to meet our needs, we would need to seek alternative sources of such materials (which may result in higher transportation or procurement costs) or pursue our own production of such ingredients or direct acquisition of such raw materials. However, for certain of our ingredients and raw materials we rely on a limited number of suppliers where there are not readily available alternatives. If we are unable to obtain or manufacture alternative sources of such ingredients or raw materials at a similar cost, we may seek to (i) reformulate our products and/or (ii) increase pricing to reflect the higher supply cost. 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 or competitively price our products, our margins could be adversely affected.

At the same time, climate-change related disruptions, like the February 2021 winter storm in Texas, may affect the availability, quality and pricing of raw materials. There is growing evidence that carbon dioxide and other greenhouse gases in the atmosphere may have an adverse impact on global temperatures, weather and precipitation patterns, growing and harvesting conditions (both on land and in the sea), and the frequency and severity of extreme weather and natural disasters, such as floods, wildfires, droughts and water scarcity. To the extent such climate change effects have a negative impact on crop size and quality, supply chain, energy or transportation costs, it could impact the availability, quality and pricing of affected raw materials. Climate related policies and energy production restrictions and pricing may exacerbate such negative impacts.

More generally, as we source many of our raw materials globally to help ensure quality control or to mitigate supply chain disruptions, we are subject to additional risks related to the increases to energy or transportation costs. Energy prices are in turn subject to significant volatility caused by, among other things, market fluctuations, supply and demand, currency fluctuations, production and transportation disruptions, geopolitical developments, and other world events, as well as climate change related conditions discussed above. For instance, the Russia-Ukraine conflict could adversely impact, among other things, our raw material, energy and transportation costs, as well as certain of our suppliers and local markets, global and local macroeconomic conditions, and cause further supply chain disruptions.

If we are not able to successfully mitigate such supply chain and climate-change related risks, we could experience disruptions in production or increased costs, which may result in decrease in our gross margin or reduced sales, and have a material adverse effect on our business, results of operations and financial condition.

The COVID-19 pandemic may materially and adversely impact our operations, financial condition, results of operations and cash flows.

On March 11, 2020, the World Health Organization designated COVID-19 as a global pandemic. Since then, government and local authorities, including those in countries where we have manufacturing and other operations, have taken various measures to contain the spread of the pandemic, including the closure of non-essential businesses, reduced travel, the closure of retail establishments, the promotion of social distancing and remote working policies where appropriate.

While increase in vaccination rates and new treatment measures have proven effective to date, the COVID-19 pandemic remains a serious threat to the health of the world's population and certain countries and regions continue to suffer from outbreaks or have seen a resurgence of infections, especially with the emergence of new variants of the virus. The continuing uncertainty related to the COVID-19 pandemic leads to continued volatility and risk of new government restrictions or market disruptions. The scope, location and timing of such restrictions or disruptions (if any) are difficult to predict and may materially impact our operations in the future. The pandemic may also affect our operating and financial results in a manner that is not presently known to us or that we currently do not expect to present significant risks.

The COVID-19 pandemic has subjected and may continue to subject our operations, financial condition and results of operations to a number of risks, including, but not limited to, those discussed below:

- *Supply chain-related risks:* As a result of disruptions or uncertainty relating to the COVID-19 pandemic, we are experiencing, and may continue to experience, increased costs, delays or limited availability related to raw materials, strain on shipping and transportation resources, and higher energy prices, which have negatively impacted, and may continue to negatively impact, our margins and operating results.
- *Customer-related risks:* We experienced, and may experience in the future, changes in the demand and volume for certain of our products, including due to consumption or stocking behavior changes related to the COVID-19 pandemic. For example, ingredients used in products sold mainly in retail outlets, such as fine fragrances or products used in retail food services, experienced a decrease in demand as these outlets closed due to COVID-19 related restrictions. We received requests for extensions in payment terms from some customers in select markets whose products experienced reduced demand. While conditions have since improved, any resurgence of COVID-19, new variants, or new government measures imposed, including new vaccine mandates, to manage the spread of the pandemic could further exacerbate this risk.

- *Operations-related risks:* Although our sites have restored operations to historical levels, there is a risk that our operations may be affected if employees are infected at high rates or if new restrictions are reintroduced. While we are following the requirements of governmental authorities and taking additional protective measures (such as mandatory site guidelines and return-to-workplace protocols) to ensure the safety of our workforce, to the extent that employees in our manufacturing or distribution centers contract COVID-19, we may need to temporarily close those facilities, which may result in reduced production hours, inability to deliver products to our customers and reduced sales. Additionally, compliance with vaccine mandates to the extent they are imposed in the jurisdictions in which we operate may lead to employee absences, resignations, or labor shortages. Any such mandates may also affect our suppliers, which could disrupt our access to raw materials and exacerbate supply-chain related risks.

Although we do not currently anticipate any impairment charges related to COVID-19, the continuing effects of a prolonged pandemic could result in increased risk to us of asset write-downs and impairments, including, but not limited to, property, plant and equipment, goodwill and other intangibles, and equity investments. Any of these events could potentially result in a material adverse impact on our business and results of operations.

The integration of the N&B Business may continue to present significant challenges, and we may not realize anticipated synergies and other benefits of the N&B Transaction.

The combination of large, diverse and independent businesses is complex, costly and time-consuming. The combination with the N&B Business may also result in material unanticipated problems, expenses, liabilities, competitive responses, employee turnover and loss of customer and other business relationships. In addition, even if the operations of the N&B Business are integrated successfully, the full benefits of the transaction may not be realized, including, among others, the synergies, cost savings or revenue growth that are expected. These benefits may not be achieved within the anticipated time frame or at all.

The difficulties of integration or realizing the full benefits of the N&B Transaction include, among others:

- the diversion of management's attention to integration matters;
- integrating operations and systems, including communications systems, administrative and information technology infrastructure and financial reporting and internal control systems, some of which may prove to be incompatible;
- conforming standards, controls, procedures and accounting and other policies, business cultures and compensation structures between the businesses;
- integrating employees and attracting and retaining key personnel, including talent;
- retaining relationships with existing or new customers and suppliers;
- integrating and managing the expanded operations of a significantly larger and more complex company;
- liabilities that are larger than expected or potential unknown liabilities, adverse consequences and unforeseen increased expenses associated with the transaction;
- restrictions until February 2023 that may limit our ability to pursue certain strategic transactions, including issuing IFF common stock for acquisitions and equity capital market transactions, or disposing of certain businesses that would otherwise increase the value of our business, if such transaction(s) could cause certain aspects of the N&B Transaction and certain DuPont historic transactions to fail to qualify as tax-free transactions;
- successfully exiting transitional services agreement entered into with DuPont in connection with the N&B Transaction without impacting the continuity or quality of such services or incurring materially increased costs; and
- our ability to negotiate terms that are as favorable as those DuPont had received, as we replace or renew contracts following the N&B Transaction and the loss of the DuPont brand recognition for the N&B Business.

The failure to meet the challenges involved in integrating the businesses and to realize the anticipated benefits of the transaction could result in a material adverse impact on our business and results of operations.

We have a substantial amount of indebtedness that could materially adversely affect our financial condition.

As of December 31, 2021, our total debt was \$11.400 billion. Despite our level of indebtedness, we expect to continue to have the ability to borrow additional debt. There may be circumstances in which required payments of principal and/or interest on our debt could adversely affect our cash flows, our operating results or our ability to return capital to our shareholders. Furthermore, our degree of leverage could adversely affect our future credit ratings. If we are unable to maintain or improve our current investment grade rating, it could adversely affect our future cost of funding, liquidity and access to capital markets. In addition, our current level of leverage could increase our vulnerability to sustained, adverse macroeconomic weakness, limit our ability to obtain further financing, and our ability to pursue certain operational and strategic opportunities, including large acquisitions. Our level of indebtedness as well as our failure to comply with covenants under our debt instruments, could adversely affect our business, results of operation and financial condition or our ability to return capital to our shareholders and the additional debt instruments may subject us to additional covenants.

We may not realize all the synergies and other benefits anticipated from the Frutarom acquisition, which could adversely affect our business.

The full benefits of the Frutarom acquisition depend on the continuing realization of cost synergies through global footprint optimization across manufacturing, the realization of procurement synergies, organizational and operational efficiencies in overhead expenses, as well as revenue growth and synergies by leveraging customer relationships across a much broader customer base and cross-selling legacy IFF and Frutarom capabilities. These benefits and the expected revenue growth may not be achieved within the anticipated time frame or at all. Further, additional unanticipated costs may be incurred as we continue to work towards achieving the full cost and revenue synergies. If the anticipated benefits from the Frutarom acquisition are not fully realized, or take longer to realize than expected, the value of our common stock, revenues, levels of expenses and results of operations may be adversely affected.

If we are unable to successfully market to our expanded and diverse customer base, our operating results and future growth may be adversely affected.

As a result of our acquisition of Frutarom and the N&B Transaction, the number of our customers significantly increased and became more diverse. Our historical customer base was primarily comprised of large and medium-sized food, beverage and consumer products companies. With the completion of the N&B Transaction, our customer base has further increased significantly and, based on 2021 sales, we had approximately 42,000 customers, approximately 59% of which are small and mid-sized companies. This substantial increase in and diversity of our customer base has required us and may continue to require us to adjust, among other things, our product development, manufacturing, distribution, marketing, customer relationship and sales strategy as well as adapt corporate, information technology, finance and administrative infrastructures to support different go-to-market models. We may experience difficulty managing the growth of a portfolio of customers that is more diverse in terms of its geographical presence as well as with respect to the types of services they require and the infrastructure required to deliver our products. If we are unable to successfully gain market share or maintain our relationships with these customers, our future growth could be adversely affected.

Failure to successfully establish and manage acquisitions, collaborations, joint ventures or partnerships, or the failure to close strategic transactions or divestments, could adversely affect our growth.

From time to time, we evaluate acquisition candidates that may strategically fit our business and/or growth objectives. If we are unable to successfully integrate and develop acquired businesses, we could fail to achieve anticipated synergies and cost savings, including any expected increase in revenues and operating results, which could have a material adverse effect on our financial results. Furthermore, even if successfully integrated, the acquisition target may fail to further the Company's business strategy as anticipated, expose the Company to increased competition or other challenges with respect to the Company's products or geographic markets, and expose the Company to additional liabilities associated with the acquired business, technology or other asset or arrangement. We may also incur asset impairment charges related to acquisitions if we fail to maintain and integrate the acquired businesses and such impairments charges would reduce our earnings.

We also evaluate and enter into collaborations, joint ventures or partnerships from time to time to enhance our research and development efforts or expand our product portfolios and technology. The process of establishing and maintaining collaborative relationships is difficult and time-consuming to negotiate, document and implement. We may not be able to successfully negotiate such arrangements or the terms of the arrangements may not be as favorable as anticipated. Furthermore, 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 and these collaborations may not lead to development or commercialization of products in the most efficient manner, or at all. In addition, from time to time, we have acquired, and we may acquire, only a majority interest in companies and provided or may provide earnouts for the former owners along with the ability, at our option, or obligation, at the former owners' option, to purchase the minority interests at a future date at an established price. These investments may have additional risks and may not be as efficient as other operations as we may have fiduciary or contractual obligations to the minority investors and may rely on former owners for the continuing operation of the acquired business. If we are unable to successfully establish and manage these collaborative relationships and majority investments it could adversely affect our future growth.

In addition, from time to time we may enter into other strategic transactions or we may sell or divest certain non-core assets as part of our portfolio optimization strategy, such as the sale of the Microbial Control business which we expect will close in the second quarter of 2022, subject to customary closing conditions. The failure to complete or potential delays in closing any such transaction could adversely affect the development of our portfolio optimization strategy and our future growth.

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

The markets in which we compete are highly competitive. We face vigorous competition from companies throughout the world, including multi-national and specialized companies active in flavors, fragrances, enzymes, pharmaceutical excipients, nutrition and specialty ingredients, as well as consumer product companies which may develop their own competing products. For instance, in the flavors industry, we 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 more 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 or partnerships among our competitors may exacerbate these risks.

As we continue to enter into adjacent markets, such as cosmetic ingredients, functional foods, specialty fine ingredients and nutrition products, we may face greater competition-related risks in these markets than with our other businesses. For example, the specialty fine ingredients market is more price sensitive than the flavors market and is characterized by relatively lower profit margins. Some fine ingredients products are less unique and more replaceable than competitors' products. There is no assurance that operating margins will remain at current levels, which could substantially impact our business, operating results and financial condition.

Competition in our business is based, among other things, 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. In particular, the discovery and development of new products, protection of our intellectual property and development and retention of key employees are critical to our ability to effectively compete in our business. Advancement in technologies have also enhanced the ability of our competitors to develop substitutable products. Increased competition by existing or future competitors, including aggressive price competition, could result in the loss of sales, reduced pricing and margin pressure and could adversely impact our sales and profitability.

Failing to identify and make capital expenditures to achieve growth opportunities, being unable to make new concepts scalable, or failing to effectively and timely reinvest in our business operations, could result in the loss of competitive position and adversely affect our financial condition or results of operations.

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 is essential to the successful delivery of our products and has become more difficult and costly in the current labor market with historically high employee resignations. Furthermore, as we continue to focus on innovation, our need for scientists and other professionals will increase and may result in increased labor costs. 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.

Competition for employees can be intense and if we are unable to successfully integrate, motivate and reward the acquired Frutarom employees, employees from the N&B Business or our current employees in our combined company, we may not be able to retain them. If we are unable to retain these employees or attract new employees in the future, our ability to effectively compete with our competitors and to grow our business could be adversely affected.

A significant portion of our sales is generated from a limited number of large multi-national customers, which are currently under competitive pressures that may affect the demand for our products and profitability.

During 2021, our 25 largest customers, a majority of which were multi-national consumer products companies, collectively accounted for 29% of our sales in the aggregate. Large multi-national customers' market share, especially in the consumer product industry, continues to be pressured by new smaller companies and specialty players that cater to or are more adept at adjusting to the latest consumer trends, including towards natural products and clean labels, changes in the retail landscape (including e-commerce and consolidation), and increased competition from private labels, which have resulted and may continue to result in decreased demand for our products by such multi-national customers and volume erosion, especially in our Nourish business. Furthermore, consolidations amongst our customers have resulted in larger and more sophisticated customers with greater buying power and additional negotiating strength. If such trends continue, our sales could be adversely impacted if we are not able to replace these sales.

In addition, large multi-national customers and, increasingly middle market customers, continue to utilize “core lists” of suppliers to improve margins and profitability in the flavors and fragrance segments. Typically, these “core list” suppliers are then given priority for new or modified products. Recently, these customers are making inclusion on their “core lists” contingent upon a supplier providing more favorable terms, including rebates, which could adversely affect our margins. We must either offer competitive cost-in-use solutions to secure and maintain inclusion on these “core lists” or seek to manage the relationship without being on the “core-list.” If we choose not to pursue “core-list” status due to profitability concerns or if we are unable to obtain “core-list” status, our ability to maintain our share of these customers’ future purchases could be adversely affected and therefore our future results of operations.

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 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 5% of our sales on research and development; however, this investment level may vary in the future if available resources to invest in research and development are limited due to our ongoing integration and restructuring efforts. Our research and development investments may only generate future revenues to the extent that we are able to develop products that meet our customers’ specifications, are at an acceptable cost and achieve acceptance by the targeted consumer market. Furthermore, there may be significant lag times from the time we incur research and development costs to the time that these research and development 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.

Natural disasters, public health crises (such as the COVID-19 pandemic), international conflicts, geopolitical events, terrorist acts, labor strikes, political crisis, accidents and other events could adversely affect our business and financial results by disrupting development, manufacturing, distribution or sale of our products.

As a company engaged in the global development, manufacture and distribution of products, we are subject to the risks inherent in such activities, including industrial accidents, environmental events, strikes and other labor disputes, product quality control issues, safety, licensing requirements and other regulatory issues, as well as natural disasters, public health crises, such as pandemics or epidemics, international conflicts, geopolitical events, terrorist acts and other external factors over which we have no control. For instance, the Russia-Ukraine conflict could adversely impact, among other things, certain of our local markets and suppliers, global and local macroeconomic conditions, foreign exchange rates and financial markets, raw material, energy and transportation costs, and cause further supply chain disruptions.

While we operate research and development, manufacturing and distribution facilities throughout the world, many of these facilities are extremely specialized and certain of our research and development or creative laboratories facilities are uniquely situated to support our research and development efforts while certain of our manufacturing facilities are the sole location where a specific ingredient or product is produced. 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.

A significant data breach or other disruption to our information technology systems could disrupt our operations, result in the loss of confidential information or personal data, and adversely impact our reputation, business or results of operations.

We rely on information technology systems, including some managed by third-party providers, to conduct business and support our business processes, including those relating to product formulas, product development, manufacturing, sales, order and invoice 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. Cybersecurity incidents, data breaches and operational disruptions are constantly evolving, becoming more sophisticated and are conducted by groups and individuals with a wide range of expertise and motives, including foreign governments, cyber terrorists, cyber criminals and malicious employees and other insiders and outsiders. We and our third-party providers are subject to risks posed by such incidents, which can take many forms, including code anomalies, “Acts of God,” data leakage, hardware or software failures, human error, cyber extortion, password theft or introduction of viruses, malware, and ransomware, including through phishing emails.

A disruption to our information technology systems could result in the loss of confidential business, customer, supplier or employee information, litigation or fines and may require substantial investigations, repairs or replacements, or impact our ability to summarize and report financial results in a timely manner, resulting in significant financial, legal, and relational costs and potentially harming our reputation and adversely impacting our operations, customer service and results of operations. As we work on integrating N&B's and Frutarom's systems with IFF's systems, these risks may be exacerbated. Additionally, a security or data breach could require us to devote significant management and financial resources to address the problems created, and, as a result of the private rights of action provided for under the EU's General Data Protection Regulation (the "GDPR"), the California Consumer Privacy Act (the "CCPA") and other laws relating to data protection and privacy in other jurisdictions, in the event of such breaches, additional private litigation against us may result. These types of adverse impacts could also occur in the event the confidentiality, integrity or availability of company, customer, supplier or employee information are compromised due to a data loss by us or a trusted third party. We or the third parties with which we share information may not discover any such incidents and loss of information for a significant period of time after the incident occurs. In addition, our remote work arrangements, as a result of COVID-19, may pose challenges for our employees and our IT systems and extended periods of remote work arrangements could introduce operational risk, including cybersecurity and IT systems management risks.

Although we have developed systems and processes that are designed to protect our data and customer data and to prevent data loss and other security breaches and expect to continue to expend additional resources to bolster these protections, these security measures cannot provide absolute security and we may be unable to detect or prevent a breach or disruption in the future. Additionally, while we have insurance coverage designed to address certain aspects of cyber risks in place, such insurance coverage may be insufficient to cover all losses or all types of claims that may arise.

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. With our acquisition of Frutarom in 2018 and the N&B Transaction, each of which also had a significant presence in emerging markets, our business in these markets has meaningfully grown. In addition to the currency and international 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.

Further, there is no assurance that our existing products, variants of our existing products or new products that we make, manufacture, distribute or sell will be accepted or be successful in any particular developing or emerging market, due to local or global competition, product price, cultural differences, consumer preferences or otherwise. 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 trade, customs and tax regimes in these markets. If we are unable to expand our business in developing and emerging markets, effectively operate, or manage the risks associated with operating in these markets, or achieve the return on capital we expect from our investments in these markets, our operating results and future growth could be adversely affected.

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 U.S., the results of which are reported in the local currency and then translated into U.S. dollars at applicable exchange rates for inclusion in our consolidated financial statements. The exchange rates between these currencies and the U.S. dollar have fluctuated and will continue to do so in the future, with the fluctuations being particularly pronounced in certain emerging markets. Changes in exchange rates between these local currencies and the U.S. dollar will affect the recorded levels of sales, profitability, assets and/or liabilities. 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.

International economic, political, legal, compliance and business factors could negatively affect our financial statements, operations and growth.

We operate on a global basis, with manufacturing and sales facilities in or supply arrangements with companies based in the U.S., Europe, Africa, the Middle East, Latin America, and Greater Asia. During 2021, approximately 72% of our combined net sales were to customers outside the U.S. 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, employment regulations, currency fluctuations or controls and sustainability of resources;
- changes in environmental, health and safety permits or regulations, such as regulations related to biodiversity or the continued implementation and evolution of the European Union's REACH regulations and similar regulations that are being evaluated and adopted in other markets, or the ban on microplastics proposed by European Commission and the burdens and costs of our compliance with such regulations which may differ significantly across jurisdictions;
- increased product labeling and ingredient prohibitions in specific markets that may impact consumer preferences, products costs and/or customer acceptance;
- the imposition of or changes in customs, tariffs, quotas, trade barriers, other trade protection measures, import or export licensing requirements, and sanctions on trade with certain countries, imposed by the U.S. or other countries, which could adversely affect our cost or ability to import raw materials or export our products to surrounding markets;
- risks and costs arising from our ability to cater to local demand and customer preferences, 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, the costs and ability to repatriate the profit that we generate in these countries;
- risks and costs associated with complying with anti-money laundering and counter-terrorism financing laws;
- risks and costs associated with political and economic instability, bribery and corruption, anti-American sentiment, and social and ethnic unrest in the countries in which we operate;
- difficulty in recruiting and retaining trained local personnel;
- natural disasters, global or local health crisis, pandemics (such as the COVID-19 pandemic), epidemics or international conflicts, including terrorist acts, political crisis, national and regional labor strikes in the countries in which we operate, which could endanger our personnel, interrupt our operations or adversely affect the demand for our products, the results of certain regions or our global supply chain; 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.

Economic uncertainty, including increased inflation, may adversely affect demand for our products which may have a negative impact on our operating results and future growth.

Many of our products are ingredients in a wide assortment of global consumer products throughout the world. Historically, demand for consumer products using our products, 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.

Changes in the global, regional or local economic conditions have, and may in the near future, adversely impact demand for consumer products at a regional or global level. Such parameters include, but are not limited to, increased inflation, unemployment and underemployment, salaries and wage rates stagnation, and low growth rates. Reduced consumer spending may cause changes in our customer orders including reduced demand for our products, or order cancellations. 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.

Recently, impacts of the ongoing COVID-19 pandemic have resulted in increased volatility and economic uncertainty, and may lead to significant negative impacts on consumer spending, demand for our products, the ability for our customers to pay or our suppliers to supply, our financial condition and the financial condition of our suppliers or customers. Even prior to COVID-19, the global economy had experienced significant recessionary pressures and declines in consumer confidence and economic growth, and if those conditions emerge again or the impact of the COVID-19 pandemic continues, our operating results and future growth may be adversely affected.

If we are unable to react in a timely and cost-effective manner to changes in consumer trends, such as increasing awareness of health and wellness 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 or cleaner labels with respect to product ingredients by consumers and regulators. Consumers, especially in developed economies such as the U.S. and Western Europe, are rapidly 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 ingredients and compounds that our customers include in their consumer product offerings and, therefore, affect the demand for our products. 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 are subject to increasing customer, consumer, shareholder and regulatory focus on sustainability, which may result in additional costs in order to meet new requirements or integrate the N&B Business and Frutarom with our sustainability practices.

Federal, state, local and foreign governments, our customers, consumers and shareholders are becoming increasingly sensitive to environmental and other sustainability issues. In response, we have committed to a sustainability strategy through which we continue to assess our combined environmental footprint following the N&B Transaction and the Frutarom acquisition, with the intent of identifying synergies, gaps and opportunities in our sustainability efforts.

As part of our assessment so far, we have been upgrading Frutarom's sustainability practices to better align them to our legacy IFF practices and we are also integrating the N&B Business' practices, both of which may require significant costs and time to implement. Our assessment may reveal additional gaps between the N&B Business or Frutarom operations on the one hand and our sustainability practices and goals on the other hand, which may require significant costs to remedy.

Despite our efforts, the increased focus on sustainability may result in new regulations and customer requirements that could affect us. These could cause us to incur additional direct costs or to make changes to our operations in order to comply with any new regulations and customer requirements. We could also lose revenue if our customers divert business from us because we have not complied with their sustainability requirements or if we are not successful in integrating N&B Business' and Frutarom's sustainability metrics. Increased shareholder activism with respect to sustainability or other governance issues or management concerns could also lead to increased costs. These potential costs, changes and loss of revenue could have a material adverse effect on our business, results of operations and financial condition.

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. Current supply-chain related issues could also lead to raw material shortages and inventory depletion, which may adversely affect our operations. See "*—Supply chain disruptions or climate-change events may adversely affect our suppliers or our procurement of raw materials, and thus may impact our business and 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, some of which are sponsored 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.

Any impairment of our tangible or intangible long-lived assets, including goodwill, 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, including goodwill and customer relationships.

As a result of our recent acquisitions, including the acquisition of Frutarom and the N&B Transaction, as of December 31, 2021, we had recorded approximately \$26.920 billion of intangible assets and goodwill, including \$4.289 billion of goodwill associated with the acquisition of Frutarom and \$11.817 billion of goodwill associated with the Merger with the N&B Business. 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.

At least annually, we assess both goodwill and indefinite-lived intangible assets for impairment. We test for impairment by comparing the estimated fair value of a reporting unit with its carrying amount. If the carrying amount of a reporting unit exceeds its estimated fair value, we record an impairment charge based on the difference of the two. Intangible assets with finite lives are also tested for impairment when events or changes in circumstances indicate the carrying value may not be recoverable. Such events and changes in circumstances could include a sustained decrease in our market capitalization, increased competition or unexpected loss of market share, increased input costs beyond projections (for example due to regulatory or industry changes), our inability to recognize the anticipated benefits of acquisitions, unexpected business disruptions (for example due to a natural disaster, public health crises, such as pandemics or epidemics or loss of a customer, supplier, or other significant business relationship), acts by governments and courts, operating results falling short of projections, or significant adverse changes in the markets in which we operate.

Fair value determinations require considerable judgment and are sensitive to changes in underlying assumptions, estimates and market factors. Estimating the fair value of reporting units requires us to make assumptions and estimates regarding our business performance, future plans, future annual net cash flows, income tax considerations, discount rates, growth rates, and based on industry, economic, regulatory conditions and other market factors. Moreover, management will make significant accounting judgments and estimates for the application of acquisition accounting under GAAP, and the underlying valuation models. IFF's business, operating results and financial condition could be materially and adversely impacted in future periods if IFF's accounting judgments and estimates related to these models prove to be inaccurate.

To the extent any of our acquisitions, including the acquisitions of Frutarom and the N&B Business, do not perform as anticipated and our underlying assumptions and estimates related to their fair value determination are not met, 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 funding obligations for our pension and postretirement plans could adversely affect our earnings and cash flows.

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.

The expected phase out of the London Interbank Office Rate ("LIBOR") could impact the interest rates paid on our variable rate indebtedness and cause our interest expense to increase.

In 2017, the United Kingdom's Financial Conduct Authority (the "FCA"), which regulates LIBOR, announced that it intends to phase out LIBOR by the end of 2021. It was unclear at that time whether or not LIBOR would cease to exist, if new methods of calculating LIBOR would be established such that it continues to exist after 2021 or if replacement conventions would be developed. In March 2021, the FCA confirmed that publication of all of the LIBOR settings for Euro, Sterling and Swiss Franc and some of the LIBOR settings for Japanese Yen and US dollars ceased in December 2021 and the remainder of the LIBOR settings for US dollars will cease in June 2023. To identify a successor rate for LIBOR, financial regulators in various countries, including the United States, the United Kingdom, the European Union and Switzerland, have formed working groups with the aim of recommending alternatives to LIBOR denominated in their local currencies. Some of the financial regulators have identified the Secured Overnight Financing Rate ("SOFR") as their preferred alternative rate for LIBOR.

SOFR is observed and backward-looking, which stands in contrast with LIBOR under the current methodology, which is an estimated forward-looking rate and relies, to some degree, on the expert judgment of submitting panel members. Given that SOFR is a secured rate backed by government securities, it will be a rate that does not take into account bank credit risk (as is the case with LIBOR). Whether or not SOFR attains market traction as a LIBOR replacement tool remains in question. Although certain financial regulators have indicated their preference for SOFR as the preferred replacement rate for LIBOR, it is unclear if other benchmarks may emerge or if other rates will be adopted. As such, the future of LIBOR is uncertain.

Even if the financial instruments transition to using alternative benchmarks like SOFR successfully, the new benchmarks are likely to differ from LIBOR, as the alternative benchmark rate may be calculated differently. Borrowings under our revolving credit and term loan facilities are at variable interest rates based on LIBOR. Although our revolving credit and term loan facilities include mechanics to facilitate the adoption by us and our lenders of an alternative benchmark rate in place of LIBOR, no assurance can be made that such alternative rate will perform in a manner similar to LIBOR and may result in interest rates that are higher or lower than those that would have resulted had LIBOR remained in effect. Further, transitioning to an alternative benchmark rate, such as SOFR, may result in us incurring expense and legal risks, as renegotiation and changes to documentation may be required in effecting the transition. Any of these occurrences could materially and adversely affect our borrowing costs, financial condition, and results of operations.

Our business may be negatively impacted as a result of the United Kingdom's departure from the European Union.

We currently manufacture goods in the United Kingdom for distribution in the European Union and vice-versa and therefore may be adversely affected as a result of the United Kingdom's departure from the European Union ("Brexit") in 2020. The impact of the withdrawal has and may continue to, among other outcomes, exacerbate the disruption of the free movement of goods, services and people between the United Kingdom and the European Union, undermine bilateral cooperation in key geographic areas and significantly disrupt trade between the United Kingdom and the European Union or other nations as the United Kingdom pursues independent trade relations. In addition, Brexit has and continues to cause legal uncertainty, which could last indefinitely, and may potentially create divergent national laws and regulations as the United Kingdom determines which European Union laws to replace or replicate. Given the lack of comparable precedent, it is unclear what the financial, trade and legal implications of the withdrawal of the United Kingdom from the European Union will be and how the withdrawal will continue to 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.

Risks Related to Legal and Regulatory Considerations

If we are unable to comply with regulatory requirements and industry standards, including those regarding product safety, quality, efficacy and environmental impact, we could incur significant costs and suffer reputational harm which could adversely affect 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 governments, non-governmental organizations, including industry or similar oversight bodies, or contractually by our customers, including requirements concerning product safety, quality and efficacy, environmental impacts (including packaging, energy and water use and waste management) and other sustainability or similar issues. Changes to regulations or the implementation of additional regulations, especially in certain highly regulated markets we are active in, such as regulatory modernization of food safety laws and evolving standards and regulations affecting pharmaceutical excipients, microbials, or in reaction to new or next-generation technologies, including advances in protein engineering, gene editing and gene mapping, or novel uses of existing technologies has required and may in the future require us to reduce or remove certain ingredients, substances or processing aids from the product portfolio and may result in significant costs or capital expenditures or require changes in business practice that could result in reduced margins or profitability.

We use a variety of strategies, methodologies and tools to minimize the likelihood of product or process non-compliance with these regulations and standards by (i) monitoring regulatory developments and current product standards, (ii) assessing relative risks in our supply chain, (iii) monitoring internal and external performance and (iv) testing raw materials and finished goods. As concerns regarding safety, quality and environmental impact become more pressing, we may see new, more restrictive regulations adopted that impact our products. For example, the European Chemicals Agency has proposed that the European Commission adopt a ban on microplastics, including those found in personal care items, detergents and cosmetics, to reduce plastics pollution. If this ban is adopted, we will be required to modify our products and/or innovate new solutions to replace microplastics in our products. If we are unable to adapt to these new regulations or standards in a cost effective and timely manner, we may lose business to competitors who are able to provide compliant products, expose ourselves to customer claims, regulatory fines, litigation or reputational damage.

Gaps in our operational processes or those of our suppliers or distributors can result in products that do not meet our quality control or industry standards or fail to comply with the relevant regulatory requirements, which in turn can result in finished consumer goods that do not comply with applicable standards and requirements. Products that are mislabeled, contaminated or damaged could result in a regulatory non-compliance event or even a product recall by the FDA or a similar foreign agency. For instance, the Company determined that certain grades of microcrystalline cellulose (Avicel® PH 101, 102, and 200 NF and Avicel® RC-591 NF) were found to be out-of-specification (collectively, “OOS Avicel® NF”). Although the Company does not expect this issue to affect the functionality of Avicel® NF grades or to pose a human health hazard, corrective actions have been implemented to improve operational and laboratory conditions.

We may also be exposed to serious adverse health claims related to undetected poor quality of raw materials, internal system failures to adequately reduce or eliminate certain hazards (such as pathogens, allergens, contaminants, pesticides, physical hazards, etc.) or products that are not in line with required or agreed specifications. Supply chain complexities, aging equipment and infrastructure, human errors, or other failures may exacerbate such risks.

Our contracts often require us to indemnify our customers for the costs associated with a product non-compliance event, including penalties, costs and settlements arising from litigation, remediation costs or loss of sales. As our offerings 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 litigation, fines, penalties, sanctions or other regulatory actions. 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 mislabeled, contaminated or damaged 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.

Defects, quality issues (including product recalls), inadequate disclosure or misuse with respect to the products and capabilities could adversely affect our business, reputation and results of operations.

Defects in, misuse of, quality issues with respect to (including products recalls) or inadequate disclosure of risks relating to our products, could lead to lost profits and other economic damage, property damage, personal injury or other liability resulting in third-party claims, criminal liability, significant costs, damage to our reputation and loss of business. Any of these factors could adversely affect our business, financial condition and our results of operations.

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, regulatory investigations and litigation, including claims related to intellectual property, product liability, environmental matters and indirect taxes. For instance, product liability claims may arise due to the fact that we supply products to the food and beverage, functional food, pharma/nutraceutical and personal care industries. Our manufacturing and other facilities may expose us to environmental claims and regulatory investigations and potential fines.

In addition, in light of our product offerings into functional food, nutraceuticals, and natural antioxidants, we may also be subject to claims of false or deceptive advertising claims relating to the efficacy, health benefits or other performance attributes of such offerings in the U.S., Europe and other foreign jurisdictions in which we offer these types of products. These claims can arise as a result of function claims, health claims, nutrient content claims and other claims that impermissibly suggest such benefits or attributes for certain foods or food components. The cost of defending these claims or our obligations for direct damages and indemnification if we were found liable could adversely affect our results of operations.

As a result of the N&B Transaction and the Frutarom acquisition, we assumed legal or environmental claims, regulatory investigations, and litigation, including product liability, patent infringement, commercial litigation and other actions, and we may become involved in additional actions in the future arising from the acquired operations. Specifically, as the N&B Business and Frutarom had a significant number of facilities located globally and a large number of customers, our exposure to legal claims, regulatory and environmental investigations and litigation may increase. This could result in an increase in our cost for defense or settlement of claims or indemnification obligations if we were to be found liable in excess of our historical experience.

In addition, we are also the subject of a putative shareholder class action lawsuit filed in August 2019 after we disclosed that preliminary results of investigations indicated that Frutarom businesses operating principally in Russia and Ukraine had made improper payments to representatives of customers.

Our insurance may not be adequate to protect us from all material expenses related to pending and future claims and our current levels of insurance may not be available in the future at commercially reasonable prices. Any of these factors could adversely affect our profitability and results of operations.

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, and expose us to civil or criminal liability, which could adversely affect our operating results and future growth.

Our business operations and properties procure, make use of, manufacture, sell, and distribute substances that are sometimes considered hazardous and are therefore 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, fines, sanctions, litigation, costly remediation measures, 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, we have completed negotiations with the Chinese government concerning the relocation of a second fragrance facility in China. 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 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.

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 or applicable sanctions laws and regulations in the jurisdictions in which we operate.

The global nature of our business, our increased size and employee count, the significance of our international revenue, our focus on emerging markets and presence in regulated industries 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 U.S. 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, Russia and Africa, that 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. For example, in August 2019, during the integration of Frutarom, we were made aware of allegations that two Frutarom businesses operating principally in Russia and Ukraine made certain improper payments, including to representatives of a number of customers. Our investigation substantiated the allegations that improper payments to representatives of customers were made and that key members of Frutarom's senior management at the time were aware of such payments. We did not uncover any evidence suggesting that such payments had any connection to the U.S. In addition, Frutarom grew through rapid acquisition and, as part of our integration efforts, we have implemented our anti-corruption and similar policies throughout a number of those acquired companies, many of which were not previously subject to these U.S. laws.

Given the international scope of our business, we also sell certain of our products to countries that are subject to U.S. and other sanctions under general authorizations regarding such products. Compliance with sanctions laws is highly technical and requires careful oversight, and it is possible that actions taken by us, our subsidiaries or our suppliers may cause us to be in breach with these laws, which could have a material adverse effect to our business. Detecting, investigating and resolving actual or alleged violations of the FCPA or other anti-bribery and anti-corruption laws and regulations is expensive, could consume significant time and attention of our senior management and could subject us to investigations and inquiries by governmental and other regulatory bodies. Any allegations of non-compliance with such laws and regulations could have a disruptive effect on our operations in such jurisdiction, 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 such laws and regulations 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, trademarks, copyrights and trade secrets to protect our intellectual property rights. We often rely on trade secrets to protect our products, manufacturing processes, extract methodologies, and other processes, 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, 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 products.

We vigilantly protect our intellectual property rights, including trade secrets. We have designed and implemented internal controls intended to restrict access to and distribution of our respective intellectual property. Despite these precautions, our intellectual property is vulnerable to unauthorized access through employee error or actions, theft and cybersecurity incidents, and other security breaches. Protecting intellectual property related to biotechnology is particularly challenging because theft is difficult to detect and biotechnology can be self-replicating. Accordingly, the impact of such theft can be significant.

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 U.S., 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 U.S. If other parties were to infringe on our intellectual property rights, or if our intellectual property rights were the subject of unauthorized access leading to competitive pressure 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, among other things, (i) being required to cease production and marketing or 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, (iii) limiting the volume, if any, of such products that we can sell or (iv) resulting in significant litigation costs and potential liability.

Changes in our tax rates, the adoption of new U.S. 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 U.S. 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. However, governmental authorities could challenge these policies more aggressively in the future and, if challenged, we may not 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, state tax authorities 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, the tax policies of certain European Union member states. One of these efforts has been led by the Organization for Economic Co-operation and Development, an international association of 34 countries including the U.S., 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 European Union member states with respect to specific multi-national corporations to determine whether such rulings comply with European Union rules on state aid, as well as more recent investigations of the tax regimes of certain European Union member states. Under European Union 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 European Union 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 European Union state aid restrictions. If the EC or tax authorities in other jurisdictions were to successfully challenge tax rulings applicable to us in any of the member states in which we are subject to taxation or our internal intercompany arrangements, we could be exposed to increased tax liabilities.

In December 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the “Tax Act”) that significantly revised the U.S. tax code effective January 1, 2018 by, among other things, lowering the corporate income tax rate from a top marginal rate of 35% to a flat 21%, limiting deductibility of interest expense and performance based incentive compensation, transitioning to a territorial system and creating new taxes associated with global operations. The Tax Act impacted our consolidated results of operations during 2021 and is expected to continue to impact our consolidated results of operations in future periods. In future periods, we expect that our effective tax rate will be impacted by the lower U.S. corporate tax rate that will initially be offset by the elimination of the deductibility of performance-based incentive compensation, and other provisions of the Tax Act that may impact us prospectively. However, the ultimate impact of the Tax Act will depend on additional regulatory or accounting guidance that may be issued with respect to the Tax Act and any operating and structural changes that we may undertake to permit us to benefit from the new, lower U.S. tax rate prospectively. This could adversely affect our results of operations.

The N&B Transaction could result in significant tax liability, and we may be obligated to indemnify DuPont for any such tax liability imposed on DuPont.

The completion of the N&B Transaction was conditioned upon the receipt by DuPont of an opinion that the transaction generally will qualify as a tax-free reorganization. The tax opinion was based upon various factual representations and assumptions, as well as certain undertakings made by DuPont, IFF and N&B. If any of those factual representations or assumptions were untrue or incomplete in any material respect, any undertaking was or is not complied with, or the facts upon which the opinion was based are materially different from the facts at the closing of the N&B Transaction, the transaction may not qualify (in whole or part) for tax-free treatment.

The N&B spin-off and certain aspects of the pre-spin-off internal reorganizations to form N&B could be taxable to DuPont if N&B or we were to engage in a “Spinco Tainting Act” (as defined in the Tax Matters Agreement, by and among DuPont, N&B and IFF, a form of which is attached to IFF’s registration statement on Form S-4 (Registration Number 333-238072)). A Spinco Tainting Act is generally any action (or inaction) within our control or under the control of N&B or their affiliates, any event involving our common stock or the common stock of N&B or any assets of N&B or its subsidiaries, or any breach by N&B or any of its subsidiaries of any factual representations, assumptions, or undertakings made by it, in each case, that would affect the non-recognition treatment of the spin-off and internal reorganizations for U.S. federal income tax purposes, as described above. Under the Tax Matters Agreement, we and N&B will be required to indemnify DuPont for any taxes resulting from a Spinco Tainting Act. If we or N&B were required to indemnify DuPont pursuant to the Tax Matters Agreement as described above, this indemnification obligation may be substantial and could have a material adverse effect on us, including with respect to its financial condition and results of operations.

If we fail to comply with data protection laws in the U.S. and abroad, we may be subject to fines, penalties and other costs.

Legal requirements relating to the collection, storage, handling, use, disclosure, transfer, and security of personal data continue to evolve, and regulatory scrutiny in this area is increasing around the world. This regulatory environment is increasingly challenging and may present material obligations and risks to our business, including significantly expanded compliance burdens, restrictions on transfer of personal data, costs and enforcement risks. For example, the European Union's GDPR, which became effective in May 2018, greatly increases the jurisdictional reach of EU law and adds a broad array of requirements related to personal data, including individual notice and opt-out preferences, restrictions on and requirements for transfer of personal data and the public disclosure of significant data breaches. Additionally, violations of the GDPR can result in fines of as much as 4% of a company's annual revenue. Other governments have enacted or are enacting similar data protection laws, including data localization laws that require data to stay within their borders. All of these evolving compliance and operational requirements, restrictions on use of personal data, as well as the uncertain interpretation and enforcement of laws, impose significant costs and regulatory risks that are likely to increase over time. Our failure to comply with these evolving regulations could expose us to fines, sanctions, penalties and other costs that could harm our reputation and adversely impact our financial results.

ITEM 1B. UNRESOLVED STAFF COMMENTS.

None.

ITEM 2. PROPERTIES.

Our principal owned and leased properties as of December 31, 2021, are as follows:

	Europe, Africa & the Middle East		North America		Greater Asia		Latin America	
	Owned	Leased	Owned	Leased	Owned	Leased	Owned	Leased
Plant	50	13	22	14	26	11	17	5
Office	2	70	2	13	2	34	—	9
Laboratory	7	16	—	11	—	13	2	2
Warehouse	—	12	—	10	3	3	3	9
Other	1	—	—	—	3	—	—	4
	<u>60</u>	<u>111</u>	<u>24</u>	<u>48</u>	<u>34</u>	<u>61</u>	<u>22</u>	<u>29</u>

Our principal executive offices are located at 521 West 57th Street, New York, New York and 200 Powder Mill Road, Wilmington, Delaware. Our principal sites include facilities which, in the opinion of its management, are suitable and adequate for their use and have sufficient capacity for its current business needs and expected near-term growth.

ITEM 3. LEGAL PROCEEDINGS.

We are subject to various claims and legal actions in the ordinary course of our business. The Company's material legal proceedings are described in Part II, Item 8 of this Form 10-K in the Notes to Consolidated Financial Statements in Note 19, "Commitments and Contingencies" under the heading "Litigation."

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 principally traded on the New York Stock Exchange under the ticker symbol "IFF".

Approximate Number of Equity Security Holders.

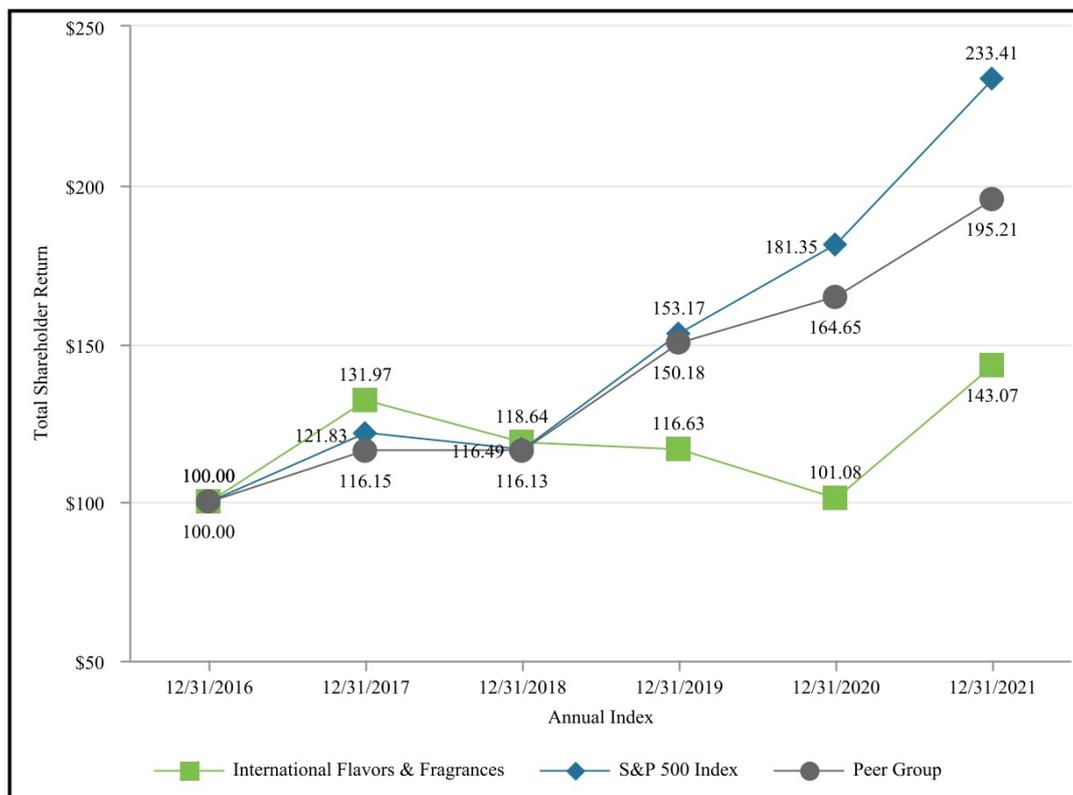
Title of Class	Number of shareholders of record as of February 21, 2022
Common stock, par value 12 1/2¢ per share	3,527

Issuer Purchases of Equity Securities.

None.

Performance Graph.

The following graph compares a shareholder’s cumulative total return for the last five fiscal years as if such amounts had been invested in: (i) our common stock; (ii) the stocks included in the S&P 500 Index; and (iii) a customized Peer Group. The graph is based on historical stock prices and measures total shareholder return, which takes into account both changes in stock price and dividends. The total return assumes that dividends were reinvested daily and is based on a \$100 investment on December 31, 2016.



SOURCE: S&P Capital IQ

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. See the table below for the list of companies included in our Peer Group.

Peer Group Companies

Campbell Soup Company	The Estée Lauder Companies Inc.	McCormick & Company, Incorporated
Church & Dwight Co., Inc.	General Mills, Inc.	Nestle SA
The Clorox Company	Givaudan SA	PepsiCo, Inc.
The Coca-Cola Company	The Hershey Company	The Procter & Gamble Company
Colgate-Palmolive Company	Hormel Foods Corporation	Symrise AG
Conagra Brands, Inc.	Kellogg Company	Unilever N.V.
Danone SA	L'Oreal SA	

ITEM 6. [RESERVED]

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

On February 1, 2021, one of our wholly owned subsidiaries merged with and into the N&B Business (the "Merger"), pursuant to a Merger Agreement with DuPont. The shares issued in the Merger represented approximately 55.4% of the common stock of IFF on a fully diluted basis, after giving effect to the Merger, as of February 1, 2021. The N&B Business is an innovation-driven and customer-focused business that provides solutions for the global food and beverage, dietary supplements, home and personal care, energy, animal nutrition and pharma markets. The transaction was made in order to strengthen IFF's customer base and market presence, with an enhanced position in the food & beverage, home & personal care and health & wellness markets. See Note 3 to the Consolidated Financial Statements for additional information related to the N&B Transaction.

As a result of the N&B Transaction, and following our 2018 acquisition of Frutarom Industries Ltd., we have expanded our global leadership positions, which now include high-value ingredients and solutions in the Food & Beverage, Home & Personal Care and Health & Wellness markets, and across key Taste, Texture, Scent, Nutrition, Enzymes, Cultures, Soy Proteins, Pharmaceutical Excipients, Biocides and Probiotics categories.

We are now organized in four segments: Nourish, Health & Biosciences, Scent, and Pharma Solutions. The Company's consolidated financial information for the year ended December 31, 2021 reflects the results of N&B effective February 1, 2021, whereas the Company's consolidated financial information for the year ended December 31, 2020 and 2019 do not include amounts related to N&B.

Our Nourish segment consists of most of our legacy Taste segment combined with N&B's Food & Beverage division and the food protection business of N&B's Health & Biosciences division. Our Nourish business spans a diversified portfolio across natural and plant-based specialty food ingredients, flavor compounds, and savory solutions and inclusions.

Our Health & Biosciences segment consists of a biotechnology-driven portfolio of enzymes, food cultures, probiotics and specialty ingredients for food, home and personal care, and health and wellness applications. Our Health & Biosciences business comprises N&B's Health & Biosciences division (except the food protection business which is part of Nourish) in combination with the Natural Product Solutions business of legacy IFF. Health & Biosciences is comprised of six business units: Health, Cultures & Food Enzymes, Home & Personal Care, Animal Nutrition, Grain Processing and Microbial Control.

Our Scent segment creates fragrance compounds, fragrance ingredients and cosmetic ingredients that are integral elements in the world's finest perfumes and best-known household and personal care products. Our Scent business consists of our legacy Scent segment as well as our Flavor Ingredients business, formerly part of our legacy Taste business. The Scent segment is comprised of three business units: Fragrance Compounds, Fragrance Ingredients and Cosmetic Actives.

Our Pharma Solutions segment produces a vast portfolio of cellulose and seaweed-based pharma excipients, used to improve the functionality and delivery of active pharmaceutical ingredients, including controlled or modified drug release formulations, and enabling the development of more effective pharmaceutical formulations. Pharma Solutions is comprised of N&B's Pharma Solutions business.

Financial Measures — Currency Neutral

Our financial results include the impact of foreign currency exchange rates. We provide currency neutral calculations in this report to remove the impact of these items. Beginning in the first quarter 2021, we elected to change the method in which we calculate currency neutral numbers to now be calculated by translating current year invoiced sale amounts at the exchange rates used for the corresponding prior year period. Previously we calculated currency neutral numbers by comparing current year results to the prior year results restated at exchange rates in effect for the current year based on the currency of the underlying transaction. We use currency neutral results in our analysis of subsidiary or segment performance. We also use currency neutral numbers when analyzing our performance against our competitors and believe the change in method better allows us to do so.

Due to the Merger with N&B, for the fiscal year 2021 we will not be presenting currency neutral impacts for the Nourish, Health & Biosciences and Pharma Solutions operating segments as the performance in these operating segments includes effects of N&B in 2021, while the 2020 period does not and thus the period's results are not comparable. We present the currency neutral impacts for the Scent operating segment as this operating segment does not have any effects of N&B.

Impact of COVID-19 Pandemic

On March 11, 2020, the World Health Organization designated COVID-19 as a global pandemic. Various policies and initiatives have been implemented around the world to reduce the global transmission of COVID-19. Although there continue to be minor operational disruptions, all of IFF's manufacturing facilities remain open and continue to manufacture products.

The COVID-19 pandemic remains a serious threat to the health of the world's population and certain countries and regions continue to suffer from outbreaks or have seen a recurrence of infections, especially with the emergence of new variants of the virus. Accordingly, the Company continues to take the threat from COVID-19 seriously. The impact that COVID-19 will have on our consolidated results of operations for the remainder of 2022 remains uncertain. Due to the length and severity of COVID-19, there is continued volatility as a result of retail and travel, consumer shopping and consumption behavior. Moreover, as a result of disruptions or uncertainty relating to the COVID-19 pandemic, we are experiencing, and may continue to experience, increased costs, delays or limited availability related to raw materials, strain on shipping and transportation resources, and higher energy prices, which have negatively impacted, and may continue to negatively impact, our margins and operating results. We will continue to evaluate the nature and extent of these potential impacts to our business, consolidated results of operations, segment results, liquidity and capital resources.

Although IFF has not experienced and does not currently anticipate any impairment charges related to COVID-19, the continuing effects of a prolonged pandemic could result in increased risk of asset write-downs and impairments. Any of these events could potentially result in a material adverse impact on IFF's business and results of operations.

For more detailed information about risks related to COVID-19, refer to Item 1A, "Risk Factors" - *The COVID-19 pandemic may materially and adversely impact our operations, financial condition, results of operations and cash flows.*

2021 Financial Performance Overview

For a reconciliation between reported and adjusted figures, please refer to the "Non-GAAP Financial Measures" section.

Sales

Sales in 2021 increased \$6.572 billion, or 129% on a reported basis, to \$11.656 billion compared to \$5.084 billion in the 2020 period. Performance was primarily driven by \$6.084 billion of incremental sales that were attributable to the inclusion of N&B, which was merged and consolidated into our results of operations effective February 1, 2021. In addition, sales performance was driven by volume increases across the Nourish, Health & Biosciences and Scent operating segments and price increases in the Nourish segment.

Our 25 largest customers accounted for approximately 29% of total sales in 2021. In 2021, no customer accounted for more than 10% of sales. A key factor for commercial success is our inclusion on strategic customers' core supplier lists, which provides opportunities to expand and win new business. We are on the core supplier lists of a large majority of our global and strategic customers.

Gross Profit

Gross profit in 2021 increased \$1.649 billion, or 79% on a reported basis, to \$3.735 billion (32.0% of sales) compared to \$2.086 billion (41.0% of sales) in the 2020 period. The increase in gross profit was primarily driven by the inclusion of N&B, along with sales volume increases in the business. The decrease in gross profit margin, as a percentage of sales, was due to higher input costs and difference in product portfolio mix of the new N&B Business compared to the historical IFF product portfolio mix.

Adjusted Operating EBITDA

Adjusted operating EBITDA in 2021 increased \$1.370 billion, or 130% on a reported basis, to \$2.425 billion (20.8% of sales) compared to \$1.055 billion (20.8% of sales) in the 2020 period. The increase in adjusted operating EBITDA was primarily driven by the inclusion of N&B, along with sales volume increases in the business.

Results of Operations

(DOLLARS IN MILLIONS EXCEPT PER SHARE AMOUNTS)	Year Ended December 31,			Change	
	2021	2020	2019	2021 vs. 2020	2020 vs. 2019
Net sales	\$ 11,656	\$ 5,084	\$ 5,140	129 %	(1) %
Cost of goods sold	7,921	2,998	3,027	164 %	(1) %
Gross profit	3,735	2,086	2,113	79 %	(1) %
Research and development (R&D) expenses	629	357	346	76 %	3 %
Selling and administrative (S&A) expenses	1,749	949	876	84 %	8 %
Restructuring and other charges	41	17	30	141 %	(43) %
Amortization of acquisition-related intangibles	732	193	193	279 %	— %
(Gains) losses on sale of fixed assets	(1)	4	3	(125) %	33 %
Operating profit	585	566	665	3 %	(15) %
Interest expense	289	132	138	119 %	(4) %
Other income, net	(58)	(7)	(30)	NMF	(77) %
Income before taxes	354	441	557	(20) %	(21) %
Provision for income taxes	75	74	97	1 %	(24) %
Net income	279	367	460	(24) %	(20) %
Net income attributable to noncontrolling interest	9	4	4	125 %	— %
Net income attributable to IFF stockholders	\$ 270	\$ 363	\$ 456	(26) %	(20) %
Net income per share — diluted	\$ 1.10	\$ 3.21	\$ 4.00	(66) %	(20) %
Gross margin	32.0 %	41.0 %	41.1 %	NMF	(10)bps
R&D as a percentage of sales	5.4 %	7.0 %	6.7 %	(160)bps	30 bps
S&A as a percentage of sales	15.0 %	18.7 %	17.0 %	NMF	170 bps
Operating margin	5.0 %	11.1 %	12.9 %	NMF	(180)bps
Effective tax rate	21.2 %	16.8 %	17.4 %	NMF	(60)bps
Segment net sales					
Nourish	\$ 6,264	\$ 2,886	\$ 2,978	117 %	(3) %
Health & Biosciences	2,329	134	129	NMF	4 %
Scent	2,254	2,064	2,033	9 %	2 %
Pharma Solutions	809	—	—	NMF	NMF
Consolidated	\$ 11,656	\$ 5,084	\$ 5,140	129 %	(1) %

NMF: Not meaningful

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

2021 IN COMPARISON TO 2020

Sales

Sales for 2021 increased \$6.572 billion, or 129% on a reported basis, to \$11.656 billion, compared to \$5.084 billion in the 2020 period. Performance was primarily driven by \$6.084 billion of incremental sales that was attributable to the inclusion of N&B, which was merged and consolidated into our results of operations effective February 1, 2021. In addition, sales performance reflected volume increases for the Nourish, Health & Biosciences and Scent operating segments and price increases in the Nourish segment.

Sales performance by segment was as follows:

	% Change in Sales - 2021 vs. 2020	
	Reported	Currency Neutral ⁽¹⁾
Nourish	117 %	NMF
Health & Biosciences	NMF	NMF
Scent	9 %	8 %
Pharma Solutions	NMF	NMF
Total	129 %	NMF

(1) Currency neutral sales growth is calculated by translating current year invoiced sale amounts at the exchange rates for the corresponding prior year period.
NMF: Not meaningful

Nourish

Nourish sales in 2021 increased \$3.378 billion, or 117% on a reported basis, to \$6.264 billion, compared to \$2.886 billion in the 2020 period. Performance in the Nourish operating segment was primarily driven by \$3.082 billion of incremental sales that was attributable to the inclusion of N&B, along with volume increases, particularly in Flavors.

Health & Biosciences

Health & Biosciences sales in 2021 was \$2.329 billion compared to \$134 million in the 2020 period. Performance in the Health & Biosciences operating segment was primarily driven by \$2.193 billion of incremental sales that was attributable to the inclusion of N&B, as the majority of this operating segment consists of the new N&B Business. In addition, sales performance reflected volume increases in the operating segment.

Scent

Scent sales in 2021 increased \$190 million, or 9% on a reported basis, to \$2.254 billion, compared to \$2.064 billion in the 2020 period. Scent sales in 2021 also increased 8% on a currency neutral basis. Sales growth in the Scent operating segment was primarily driven by volume increases in both Fragrance Compounds and Fragrance Ingredients.

Pharma Solutions

Pharma Solutions sales in 2021 was \$809 million. This was a new operating segment of the Company as a result of the Merger with N&B and did not exist in the comparable 2020 period.

Cost of Goods Sold

Cost of goods sold, as a percentage of sales, increased 9.0% in 2021 to 68.0% compared to 59.0% in 2020, primarily driven by higher input costs, volume increases in the business and impact of the difference in product portfolio mix of the new N&B Business compared to the historical IFF product portfolio mix.

Research and Development (R&D) Expenses

Overall R&D expenses, as a percentage of sales, decreased 1.6% in 2021 to 5.4% compared to 7.0% in 2020. The decrease, as a percentage of sales, in 2021 was primarily due to the impact of the Merger with N&B.

Selling and Administrative (S&A) Expenses

S&A expenses increased \$800 million to \$1.749 billion, or 15.0% as a percentage of sales, in 2021 compared to \$949 million, or 18.7% as a percentage of sales, in 2020. The increase in S&A expenses was primarily due to the impact of the Merger with N&B and the related transaction and integration costs consisting of legal, professional and consulting fees, as well as business divestiture costs consisting mainly of legal and professional fees and employee separation costs. Adjusted S&A expense increased by \$672 million to \$1.480 billion (12.7% as a percentage of sales) in 2021 compared to \$808 million (15.9% as a percentage of sales) in 2020.

Restructuring and Other Charges

Restructuring and other charges increased to \$41 million in 2021 compared to \$17 million in 2020. The increase was primarily driven by severance costs incurred in 2021 (see Note 2 for additional information).

Amortization of Acquisition-Related Intangibles

Amortization expenses increased to \$732 million in 2021 compared to \$193 million in 2020 primarily due to the intangible assets acquired as part of the Merger with N&B (see Notes 3 and 5 for additional information).

Interest Expense

Interest expense increased \$157 million to \$289 million in 2021, compared to \$132 million in 2020. This increase was primarily driven by the debt assumed in the Merger with N&B (see Note 9 for additional information). Average cost of debt was 2.9% for the 2021 period and 3.0% for the 2020 period.

Other Income, Net

Other income, net, increased approximately \$51 million to \$58 million of income in 2021 versus \$7 million of income in 2020. The increase of \$51 million includes approximately \$17 million in income to correct net income amounts related to certain defined benefit plans in prior years and \$13 million in gains from business disposal. The increase also includes the impact of foreign exchange gains and higher interest income.

Income Taxes

The effective tax rate was 21.2% in 2021 as compared to 16.8% in 2020. The year-over-year increase was largely due to an unfavorable mix of earnings, higher repatriation costs and cost of global intangible low-taxed income ("GILTI"), partially offset by tax benefits related to supply chain optimization and credits.

Excluding the \$127 million tax benefit associated with the pre-tax non-GAAP adjustments, the adjusted effective tax rate for 2021 was 20.0%. For 2020, the adjusted effective tax rate was 17.6% excluding the \$33 million tax benefit associated with the pre-tax non-GAAP adjustments. The year-over-year increase was largely due to an unfavorable mix of earnings, higher repatriation costs and cost of GILTI, partially offset by tax benefits related to supply chain optimization and credits.

Segment Adjusted Operating EBITDA Results by Business Unit

Effective in the first quarter of 2021, management elected to change the profit or loss measure of the Company's reportable segments from Segment Operating Profit to Segment Adjusted Operating EBITDA for internal reporting and performance measurement purposes. Segment Adjusted Operating EBITDA is defined as Income Before Taxes before depreciation and amortization expense, interest expense, restructuring and other charges and certain non-recurring items. Prior period amounts have been recast to reflect these changes in segment profitability measures. Our determination of reportable segments was made on the basis of our strategic priorities within each segment and corresponds to the manner in which our Chief Operating Decision Maker reviews and evaluates operating performance to make decisions about resources to be allocated to the segment. In addition to our strategic priorities, segment reporting is also based on differences in the products and services we provide. As a result, we added two new reportable segments - Health & Biosciences and Pharma Solutions. Nourish is composed of most of IFF's legacy Taste division and N&B's Food & Beverage division. The Scent and Health & Biosciences segments include a component of the legacy Taste segment.

	For the Year Ended December 31,	
	2021	2020
<i>(DOLLARS IN MILLIONS)</i>		
Segment Adjusted Operating EBITDA		
Nourish	\$ 1,172	\$ 599
Health & Biosciences	625	40
Scent	463	416
Pharma Solutions	165	—
Total	2,425	1,055
Depreciation & Amortization	(1,156)	(325)
Interest Expense	(289)	(132)
Other income, net	58	7
Frutarom Integration Related Costs	(4)	(10)
Restructuring and Other Charges	(41)	(17)
Gains (Losses) on Sale of Assets	1	(4)
Shareholder Activism Related Costs	(7)	—
Business Divestiture Costs	(42)	—
Employee Separation Costs	(29)	(3)
Frutarom Acquisition Related Costs	(2)	(1)
Compliance Review & Legal Defense Costs	—	(3)
N&B Inventory Step-Up Costs	(368)	—
N&B Transaction Related Costs	(91)	(29)
N&B Integration Related Costs	(101)	(97)
Income Before Taxes	\$ 354	\$ 441
Segment Adjusted Operating EBITDA margin:		
Nourish	18.7 %	20.8 %
Health & Biosciences	26.8 %	29.9 %
Scent	20.5 %	20.2 %
Pharma Solutions	20.4 %	— %
Consolidated	20.8 %	20.8 %

Nourish Segment Adjusted Operating EBITDA

Nourish Segment Adjusted Operating EBITDA increased \$573 million to \$1.172 billion (18.7% of segment sales) in 2021 from \$599 million (20.8% of segment sales) in the comparable 2020 period. The increase primarily reflected the inclusion of N&B, along with volume increases in the operating segment. The decrease in segment adjusted operating EBITDA margin, as a percentage of sales, was due to the difference in product portfolio mix of the new Nourish operating segment, as a result of the Merger with N&B, compared to the legacy Taste operating segment, and higher input costs.

Health & Biosciences Segment Adjusted Operating EBITDA

Health & Biosciences Segment Adjusted Operating EBITDA increased \$585 million to \$625 million (26.8% of segment sales) in 2021 from \$40 million (29.9% of segment sales) in the comparable 2020 period. The increase primarily reflected the inclusion of N&B, which comprises most of this segment.

Scent Segment Adjusted Operating EBITDA

Scent Segment Adjusted Operating EBITDA increased \$47 million to \$463 million (20.5% of segment sales) in 2021 from \$416 million (20.2% of segment sales) in the comparable 2020 period. The increase primarily reflected volume increases in the operating segment.

Pharma Solutions Segment Adjusted Operating EBITDA

Pharma Solutions Segment Adjusted Operating EBITDA was \$165 million (20.4% of segment sales) in 2021. This was a new operating segment of the Company as a result of the Merger with N&B and did not exist in the comparable 2020 period.

2020 IN COMPARISON TO 2019

For a comparison of our results of operations for the fiscal years ended December 31, 2020 and December 31, 2019, see “Part II, Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations” of our Form 10-K for the fiscal year ended December 31, 2020, filed with the SEC on February 22, 2021.

Liquidity and Capital Resources

Cash and Cash Equivalents

We had cash and cash equivalents of approximately \$711 million at December 31, 2021 compared to \$650 million at December 31, 2020 and of this balance, a portion was held outside the United States. Cash balances held in foreign jurisdictions are, in most circumstances, available to be repatriated to the United States.

In connection with the Merger with N&B, the Company’s cash balance increased by approximately \$246 million, which included the cash acquired of \$193 million and approximately \$53 million related to the Special Cash Payment made in accordance with the Merger Agreement.

Effective utilization of the cash generated by our international operations is a critical component of our strategy. We regularly repatriate cash from our non-U.S. subsidiaries to fund financial obligations in the U.S. As we repatriate these funds to the U.S. we will be required to pay income taxes in certain U.S. states and applicable foreign withholding taxes during the period when such repatriation occurs. Accordingly, as of December 31, 2021, we have a deferred tax liability of approximately \$81 million for the effect of repatriating the funds to the U.S.

Restricted Cash

At December 31, 2021 we had a balance of \$5 million (of which \$4 million is included in Current Assets and \$1 million is included in Other Assets) compared to \$10 million at December 31, 2020.

Cash Flows Provided By Operating Activities

Cash flows provided by operations in 2021 were \$1.437 billion, or 12.3% of sales, compared to \$714 million, or 14.0% of sales, in 2020 and \$699 million in 2019. The increase in cash provided by operating activities from 2020 to 2021 was primarily driven by higher cash earnings, excluding the impact of depreciation and amortization and amortization of N&B inventory step-up costs, and changes related to accounts payable, inventories and accounts receivable. The increase in cash provided by operating activities from 2019 to 2020 was primarily driven by changes related to accounts receivable, inventories, incentive compensation and accrued expenses, largely offset by lower cash earnings in 2020.

Working capital (current assets less current liabilities) totaled \$3.354 billion at year-end 2021 compared to \$1.156 billion at year-end 2020. The increase in working capital was due to the Merger with N&B.

We have various factoring agreements in the U.S. and The Netherlands under which we can factor up to approximately \$250 million in receivables with a financial institution. Additionally, we maintain factoring programs that are sponsored by certain customers. Under all of the arrangements, we sell the receivables on a non-recourse basis to unrelated financial institutions and account for the transactions as a sale of receivables. The applicable receivables are removed from our Consolidated Balance Sheets when the cash proceeds are received.

The impact on cash provided by operations from participating in these programs increased approximately \$19 million, \$43 million and \$38 million in 2021, 2020 and 2019, respectively, compared to each respective prior year period. The cost of participating in these programs was approximately \$6 million, \$4 million, and \$7 million in 2021, 2020, and 2019, respectively (see Note 1 for additional information).

Cash Flows Provided By (Used In) Investing Activities

Cash flows used in investing activities in 2021 were \$18 million compared to \$187 million and \$226 million in 2020 and 2019, respectively. The decrease in cash used in investing activities from 2020 to 2021 was primarily driven by the increase in cash provided by the Merger with N&B and higher net proceeds received from the sale of the fruit preparation business, largely offset by higher spending on property, plant and equipment in the current year. The decrease in cash used in investing activities from 2019 to 2020 was primarily driven by lower payments for acquisitions and lower spending on property, plant and equipment, partially offset by lower proceeds from disposal of assets in 2020 and cash paid on settlement of derivative instruments in 2020 versus proceeds in 2019.

Additions to property, plant and equipment were \$393 million, \$192 million and \$236 million in 2021, 2020 and 2019, respectively (net of grants and other reimbursements from government authorities). These investments largely arise from our ongoing focus to align our manufacturing facilities with customer demand, primarily in emerging markets, and new technology consistent with our strategy.

We have evaluated and re-prioritized our capital projects and expect that capital spending in 2022 will be approximately 5.0% of sales (net of potential grants and other reimbursements from government authorities).

Cash Flows Used In Financing Activities

Cash flows used in financing activities in 2021 were \$1.304 billion compared to \$512 million and \$505 million in 2020 and 2019, respectively. The increase in cash used in financing activities from 2020 to 2021 was primarily driven by higher repayments of both short-term and long-term debt and higher cash dividend payments, partially offset by proceeds from issuance of commercial paper. The increase in cash used in financing activities from 2019 to 2020 was primarily driven by higher repayments of debt and higher cash dividend payments, largely offset by cash proceeds from issuance of new long-term debt in 2020.

We paid dividends totaling \$667 million, \$323 million and \$314 million in 2021, 2020 and 2019, respectively. The cash dividend declared per share in 2021, 2020 and 2019 was \$3.12, \$3.04 and \$2.96, respectively.

Our capital allocation strategy is primarily focused on debt repayment to maintain our investment grade rating. We will also prioritize capital investment in our businesses to support the strategic long term plans. We are also committed to maintaining our history of paying a dividend to investors determined by our Board of Directors at its discretion based on various factors.

We currently have a board approved stock repurchase program with a total remaining value of \$280 million. As of May 7, 2018, we have suspended our share repurchases.

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 will be sufficient to meet our investing and financing needs. We regularly assess our capital structure, including both current and long-term debt instruments, as compared to our cash generation and investment needs in order to provide ample flexibility and to optimize our leverage ratios. We believe our existing cash balances are sufficient to meet our debt service requirements.

Transaction with Nutrition & Biosciences, Inc.

On February 1, 2021, the N&B Term Loan Facility was funded, which provided for a senior unsecured term loan credit facility in an aggregate principal amount of \$1.250 billion, comprised of a \$625 million three-year tranche (“2024 Term Loan Facility”) and a \$625 million five-year tranche (“2026 Term Loan Facility”). Following the Merger, we assumed the indebtedness incurred by N&B in the debt financings, which included (i) the 2024 Term Loan Facility and 2026 Term Loan Facility and (ii) a series of Senior Notes in the aggregate amount of \$6.250 billion with maturities ranging from 2 to 30 years. N&B’s indebtedness raised prior to the Merger was used to finance the Special Cash Payment to DuPont, which has been paid, and for the satisfaction of the related transaction fees and expenses.

Immediately after the closing of the merger with N&B on February 1, 2022, DuPont shareholders owned approximately 55.4% of the shares of IFF, and existing IFF shareholders owned approximately 44.6% of the shares of IFF.

Refer to Notes 3 and 9 for additional information.

In connection with the N&B Transaction, a wholly owned subsidiary of IFF merged with and into N&B in exchange for 141,740,461 shares of IFF common stock, par value \$0.125 per share (“IFF Common Stock”), which had been approved in the special shareholder meeting that occurred on August 27, 2020 where IFF shareholders voted to approve the issuance of shares of IFF common stock in connection with the N&B Transaction pursuant to the Merger Agreement. In connection with the N&B Transaction, DuPont received a one-time \$7.359 billion special cash payment (the “Special Cash Payment”). The shares issued in the Merger represented approximately 55.4% of the common stock of IFF on a fully diluted basis, after giving effect to the Merger, as of February 1, 2021 (see Note 3 for additional information).

Revolving Credit Facility and Term Loan Facilities

The Credit Agreements contain various covenants, limitations and events of default customary for similar facilities for similarly rated borrowers, including the requirement for us to maintain, at the end of each fiscal quarter, a ratio of net debt for borrowed money to Credit Adjusted EBITDA in respect of the previous 12-month period. On and after the Closing Date of the N&B Transaction, the Company’s maximum permitted ratio of net debt to Credit Adjusted EBITDA under the Credit Agreements is 4.75 to 1.0, stepping down to 3.50 to 1.0 over time (with a step-up if the Company consummates certain qualified acquisitions).

As of December 31, 2021, we had no outstanding borrowings under our \$2.000 billion Revolving Credit Facility. The amount that we are able to draw down under the Revolving Credit Facility is limited by financial covenants as described in more detail below. As of December 31, 2021, our borrowing capacity was approximately \$1.025 billion under the Revolving Credit Facility.

See Note 9 to the Consolidated Financial Statements for additional information on our Credit Agreements.

Debt Covenants

At December 31, 2021 and 2020 we were in compliance with all financial and other covenants, including the net debt to adjusted EBITDA ratio. At December 31, 2021 our Net Debt to Credit Adjusted EBITDA⁽¹⁾ ratio was 4.11 to 1 as defined by our Credit Agreements, which is below the maximum levels in the financial covenants in our existing outstanding credit facilities.

- (1) Credit 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 Credit Adjusted EBITDA and Net Debt used by other companies. Reconciliations of Credit Adjusted EBITDA to net income and net debt to total debt are as follows:

<u>(DOLLARS IN MILLIONS)</u>	Year Ended December 31, 2021	
Net income	\$	336
Interest expense		302
Income taxes		28
Depreciation and amortization		1,206
Specified items ⁽¹⁾⁽³⁾		682
Non-cash items ⁽²⁾⁽³⁾		53
Credit Adjusted EBITDA	\$	2,607

- (1) Specified items for the 12 months ended December 31, 2021 of \$682 million consist of Frutarom integration related costs, restructuring and other charges, shareholder activism related costs, business divestiture costs, gains on business disposal, employee separation costs, pension income adjustment, pension settlement, Frutarom acquisition related costs, N&B inventory step-up costs, N&B transaction related costs, N&B integration related costs and other N&B specified items.
- (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 gains on disposal of assets and stock-based compensation.
- (3) Specified and non-cash items may not include all eligible add-back items from the Merger with N&B, for the purposes of the Credit Adjusted EBITDA calculation, due to availability of the information.

<u>(DOLLARS IN MILLIONS)</u>	December 31, 2021	
Total debt ⁽¹⁾	\$	11,418
Adjustments:		
Cash and cash equivalents		(711)
Net debt	\$	10,707

- (1) Total debt used for the calculation of Net debt consists of short-term debt, long-term debt, short-term finance lease obligations and long-term finance lease obligations.

Senior Notes

As of December 31, 2021, we had \$9.721 billion aggregate principal amount outstanding in senior unsecured notes, with \$1.471 billion principal amount denominated in EUR and \$8.250 billion principal amount denominated in USD, which includes the N&B Senior Notes assumed as a result of the Merger. The notes bear interest ranging from 0.69% per year to 5.12% per year, with maturities from September 15, 2022 to December 1, 2050. See Note 9 to the Consolidated Financial Statements for additional information.

Tangible Equity Units - Senior Unsecured Amortizing Notes

On September 14, 2021, the Company notified holders of the tangible equity units ("TEUs") that the final settlement rate in respect of each of the prepaid stock purchase contracts ("SPCs") was 0.330911 shares of IFF's common stock. On September 15, 2021, 5,460,031 shares of IFF's common stock were issued in settlement of the SPCs. See Note 8 for further information on the TEUs.

Other Contingencies

See Note 19 to the Consolidated Financial Statements for information related to Other Contingencies.

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 2021 and 2020, we spent approximately \$64 million and \$7 million on capital projects and approximately \$78 million and \$29 million in operating expenses and governmental charges, respectively, 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

The Company believes its balances of cash and cash equivalents, which totaled approximately \$711 million as of December 31, 2021, along with cash generated by ongoing operations and continued access to debt markets, will be sufficient to satisfy its cash requirements and capital return program over the next 12 months and beyond. The Company's material cash requirements include the following contractual and other obligations.

Borrowings and Interest on Borrowings

As of December 31, 2021, the Company had outstanding floating and fixed rate notes with varying maturities for an aggregate principal amount of approximately \$10.971 billion (collectively the "Notes"), with \$300 million payable within 12 months. Future interest payments associated with the Notes total approximately \$4.259 billion, with \$253 million payable within 12 months. See Note 9 to the Consolidated Financial Statements for a further discussion of our various borrowing facilities.

The Company also issues unsecured short-term promissory notes ("Commercial Paper") pursuant to a commercial paper program. As of December 31, 2021, the Company had \$324 million of Commercial Paper outstanding, all of which is payable within 12 months.

Leases

The Company has lease arrangements for certain corporate offices, manufacturing facilities, research and development facilities, and certain transportation and office equipment. As of December 31, 2021, the Company had fixed lease payment obligations of approximately \$937 million, with \$134 million payable within 12 months. See Note 7 to the Consolidated Financial Statements for a further discussion of our various lease arrangements.

Pension and Other Postretirement Obligations

As of December 31, 2021, the Company had pension funding obligations of approximately \$811 million, with \$74 million payable within 12 months. See Note 15 to the Consolidated Financial Statements for a further discussion of our retirement plans.

As of December 31, 2021, the Company had postretirement obligations of approximately \$37 million, with \$4 million payable within 12 months.

Purchase Commitments

The Company has various purchase commitments that include agreements for raw material procurement and contractual capital expenditures. As of December 31, 2021, the Company had purchase commitment obligations of approximately \$299 million, with \$169 million payable within 12 months.

U.S. Tax Reform Toll-Charge

The Company has obligations related to a U.S. tax reform "toll-charge" that is payable in installments over 8 years beginning in 2018. As of December 31, 2021, there are four installments and the Company had toll-charge obligations of approximately \$39 million, with \$5 million payable within 12 months.

The information above does not include approximately \$130 million of the total unrecognized tax benefits for uncertain tax positions, \$36 million of associated accrued interest and \$81 million associated with the deferred tax liability on deemed repatriation. 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:

Business Combinations. From time to time we enter into strategic acquisitions in an effort to better service existing customers and to attain new customers. When we acquire a controlling financial interest in an entity or group of assets that are determined to meet the definition of a business, we apply the acquisition method described in ASC Topic 805, Business Combinations. In accordance with GAAP, the results of the acquisitions we have completed are reflected in our financial statements from the date of acquisition forward.

We allocate the purchase consideration paid to acquire the business to the assets acquired and liabilities assumed based on estimated fair values at the acquisition date, with the excess of purchase price over the estimated fair value of the net assets acquired recorded as goodwill. If during the measurement period (a period not to exceed twelve months from the acquisition date) we receive additional information that existed as of the acquisition date but at the time of the original allocation described above was unknown to us, we make the appropriate adjustments to the purchase price allocation in the reporting period in which the amounts are determined.

Significant judgment is required to estimate the intangibles and fair value of fixed assets and in assigning their respective useful lives. Accordingly, we typically engage third-party valuation specialists, who work under the direction of management, to assist in valuing significant tangible and intangible assets acquired.

The fair value estimates are based on available historical information, future expectations and assumptions deemed reasonable by management, but are inherently uncertain.

We typically use an income method to estimate the fair value of intangible assets, which is based on forecasts of the expected future cash flows attributable to the respective assets. Significant estimates and assumptions inherent in the valuations reflect a consideration of other marketplace participants, and include the amount and timing of future cash flows (including expected growth rates, discount rates and profitability), royalty rates used in the relief of royalty method, customer attrition rates, product obsolescence factors, a brand’s relative market position and the discount rate applied to the cash flows. Unanticipated market or macroeconomic events and circumstances may occur, which could affect the accuracy or validity of the estimates and assumptions.

Determining the useful life of an intangible asset also requires significant judgment. All of our acquired intangible assets (e.g., trademarks, product formulas, non-compete agreements and customer relationships) are expected to have finite useful lives. Our estimates of the useful lives of finite-lived intangible assets are based on a number of factors including competitive environment, market share, brand history, operating plans and the macroeconomic environment of the regions in which the brands are sold.

The costs of finite-lived intangible assets are amortized through expense over their estimated lives. The value of residual goodwill is not amortized, but is tested at least annually for impairment as described in the following note. For acquired intangible assets, the remaining useful life of the trade names and trademarks, product formulas, and customer relationships was estimated at the point at which substantially all of the present value of cumulative cash flows have been earned.

The periodic assessment of potential impairment of goodwill. As of December 31, 2021, we have goodwill of \$16.414 billion. We test goodwill for impairment at the reporting unit level as of November 30 every year or more frequently if events or changes in circumstances indicate the asset might be impaired. A reporting unit is an operating segment or one level below an operating segment (referred to as a component) to which goodwill is assigned when initially recorded.

We identify our reporting units by assessing whether the components of our operating segments constitute businesses for which discrete financial information is available and management of each operating segment regularly reviews the operating results of those components. We have identified seven reporting units under the Nourish, Health & Biosciences, Scent and Pharma Solutions segments: (1) Nourish, (2) Fragrance Compounds, (3) Fragrance Ingredients, (4) Cosmetic Actives, (5) Health & Biosciences, (6) Microbial Control and (7) Pharma Solutions.

For the annual impairment test as of November 30, 2021, we utilized Step 0 of the guidance in ASC Topic 350, Intangibles – Goodwill and Other, which allows for the assessment of qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. If, based on a review of qualitative factors, it is more likely than not that the fair value of a reporting unit is less than its carrying value, a quantitative impairment test is performed by comparing the fair value of a reporting unit with its carrying amount. Based on a review of qualitative factors, we determined that for four of the reporting units, a quantitative (Step 1) impairment analysis was not necessary to determine if the carrying values of the reporting unit exceeded their fair values. For the other three reporting units (Nourish, Health & Biosciences and Pharma Solutions), we determined that a Step 1 test was necessary.

We assessed the fair value of the reporting units primarily using an income approach. Under the income approach, we determined the fair value by using a discounted cash flow method at a rate of return that reflects the relative risk of the projected future cash flows of each reporting unit, as well as a terminal value. We use the most current actual and forecasted operating data available. Key estimates and assumptions used in these valuations include revenue growth rates and profit margins based on our internal forecasts and historical operating trends, and our specific weighted-average cost of capital used to discount future cash flows.

In performing the quantitative test, we determined that the fair value of the three reporting units exceeded their carrying values and, taken together with the results of the qualitative test, we determined that there was no impairment of goodwill at any of our seven reporting units in 2021. Based on the quantitative impairment test performed at November 30, 2021, we determined that the excess of fair values over their respective carrying values were 62%, 44% and 29% for the Nourish, Health & Biosciences and Pharma Solutions reporting units, respectively.

If current long-term projections for these reporting units are not realized or materially decrease, we may be required to write-off all or a portion of the goodwill. Such charge could have a material effect on the Consolidated Statements of Operations and Balance Sheets.

The periodic assessment of potential impairment of long-lived assets. We review 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.

New Accounting Standards

See Note 1 to the Consolidated Financial Statements for a discussion of recent accounting pronouncements.

Non-GAAP Financial Measures

We use non-GAAP financial measures in this Form 10-K, including: (i) currency neutral metrics, (ii) adjusted gross profit, (iii) adjusted selling and administrative expenses (adjusted S&A), (iv) adjusted operating EBITDA and adjusted operating EBITDA margin, (v) adjusted effective tax rate, (vi) adjusted net income and (vii) adjusted diluted EPS. We also provide the non-GAAP measure net debt 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. Our non-GAAP financial measures are defined below.

These non-GAAP financial measures are intended 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. These non-GAAP measures should not be considered in isolation or as substitutes for analysis of the Company's results under GAAP and may not be comparable to other companies' calculation of such metrics.

Adjusted gross profit excludes employee separation costs, Frutarom acquisition related costs, N&B inventory step-up costs and N&B integration related costs.

Adjusted selling and administrative expenses excludes Frutarom integration related costs, restructuring and other charges, shareholder activism related costs, business divestiture costs, employee separation costs, Frutarom acquisition related costs, compliance review & legal defense costs, N&B transaction related costs and N&B integration related costs.

Adjusted operating EBITDA and adjusted operating EBITDA margin exclude depreciation and amortization expense, interest expense, other income (expense), net, restructuring and other charges and certain non-recurring items such as Frutarom integration related costs, (gains) losses on sale of assets, shareholder activism related costs, business divestiture costs, employee separation costs, Frutarom acquisition related costs, compliance review & legal defense costs, N&B inventory step-up costs, N&B transaction related costs and N&B integration related costs.

Adjusted effective tax rate excludes Frutarom integration related costs, restructuring and other charges, (gains) losses on sale of assets, shareholder activism related costs, business divestiture costs, gains on business disposal, employee separation costs, pension income adjustment, pension settlement, Frutarom acquisition related costs, compliance review & legal defense costs, N&B inventory step-up costs, N&B transaction related costs and N&B integration related costs.

Net Debt to Credit Adjusted EBITDA is the leverage ratio used in our credit agreements and defined as Net Debt divided by Credit Adjusted EBITDA. However, as Credit Adjusted EBITDA for these purposes was calculated in accordance with the provisions of the credit agreements, it may differ from the calculation used for adjusted operating EBITDA.

A. Reconciliation of Non-GAAP Metrics

Reconciliation of Gross Profit

<i>(DOLLARS IN MILLIONS)</i>	Year Ended December 31,	
	2021	2020
Reported (GAAP)	\$ 3,735	\$ 2,086
Employee Separation Costs (d)	1	—
Frutarom Acquisition Related Costs (g)	—	1
N&B Inventory Step-Up Costs	368	—
N&B Integration Related Costs (j)	4	—
Adjusted (Non-GAAP)	\$ 4,108	\$ 2,087

Reconciliation of Selling and Administrative Expenses

<i>(DOLLARS IN MILLIONS)</i>	Year Ended December 31,	
	2021	2020
Reported (GAAP)	\$ 1,749	\$ 949
Frutarom Integration Related Costs (a)	(2)	(8)
Restructuring and Other Charges	(1)	—
Shareholder Activism Related Costs (b)	(7)	—
Business Divestiture Costs (c)	(42)	—
Employee Separation Costs (d)	(27)	(3)
Frutarom Acquisition Related Costs (g)	(2)	(1)
Compliance Review & Legal Defense Costs (h)	—	(3)
N&B Transaction Related Costs (i)	(91)	(29)
N&B Integration Related Costs (j)	(97)	(97)
Adjusted (Non-GAAP)	\$ 1,480	\$ 808

Reconciliation of Net Income and EPS

Year Ended December 31,

	2021				2020			
	Income before taxes	Taxes on income (l)	Net Income Attributable to IFF (m)	Diluted EPS	Income before taxes	Taxes on income (l)	Net Income Attributable to IFF (m)	Diluted EPS (n)
<i>(DOLLARS IN MILLIONS)</i>								
Reported (GAAP)	\$ 354	\$ 75	\$ 270	\$ 1.10	\$ 441	\$ 74	\$ 363	\$ 3.21
Frutarom Integration Related Costs (a)	4	—	4	0.01	10	2	8	0.07
Restructuring and Other Charges	41	9	32	0.13	17	4	13	0.12
(Gains) Losses on Sale of Assets	(1)	—	(1)	—	4	1	3	0.03
Shareholder Activism Related Costs (b)	7	2	5	0.02	—	—	—	—
Business Divestiture Costs (c)	42	10	32	0.12	—	—	—	—
Gains on Business Disposal	(13)	(14)	1	0.01	—	—	—	—
Employee Separation Costs (d)	29	2	27	0.11	3	—	3	0.02
Pension Income Adjustment (e)	(17)	(4)	(13)	(0.05)	—	—	—	—
Pension Settlement (f)	2	—	2	0.01	4	1	3	0.03
Frutarom Acquisition Related Costs (g)	2	—	2	0.01	1	—	1	0.01
Compliance Review & Legal Defense Costs (h)	—	—	—	—	3	—	3	0.02
N&B Inventory Step-Up Costs	368	79	289	1.19	—	—	—	—
N&B Transaction Related Costs (i)	91	19	72	0.29	29	2	27	0.23
N&B Integration Related Costs (j)	101	24	77	0.32	97	23	74	0.65
Redemption value adjustment to EPS (k)	—	—	—	0.01	—	—	—	(0.02)
Adjusted (Non-GAAP)	\$ 1,010	\$ 202	\$ 799	\$ 3.28	\$ 609	\$ 107	\$ 498	\$ 4.38

- (a) Represents costs related to the integration of the Frutarom acquisition. For 2021, costs primarily related to performance stock awards. For 2020, costs primarily related to advisory services, retention bonuses and performance stock awards.
- (b) Represents shareholder activist related costs, primarily professional fees.
- (c) Represents costs related to the Company's sales and planned sales of businesses, primarily legal and professional fees.
- (d) Represents costs related to severance, including accelerated stock compensation expense, for certain employees and executives who have been separated or will separate from the Company.
- (e) Represents catch-up of net pension income from prior periods that had been excluded from their respective periods.
- (f) Represents pension settlement charges incurred in one of the Company's UK pension plans.
- (g) Represents transaction-related costs and expenses related to the acquisition of Frutarom. For 2021, amount primarily includes earn-out payments, net of adjustments. For 2020, amount primarily includes earn-out payments, net of adjustments, amortization for inventory "step-up" costs and transaction costs primarily related to the 2019 Acquisition Activity.
- (h) Costs related to reviewing the nature of inappropriate payments and review of compliance in certain other countries. In addition, includes legal costs for related shareholder lawsuits.
- (i) Represents transaction costs and expenses related to the transaction with N&B, primarily legal and professional fees.
- (j) Represents costs primarily related to advisory services for the integration of the transaction with N&B, primarily consulting fees.
- (k) Represents the adjustment to EPS related to the excess of the redemption value of certain redeemable noncontrolling interests over their existing carrying value.
- (l) The income tax effects of non-GAAP adjustments are calculated based on the applicable statutory tax rate for the relevant jurisdiction, except for those items which are non-taxable or subject to valuation allowances for which the tax expense (benefit) was calculated at 0%. The tax benefit for amortization is calculated in a similar manner as the tax effects of the non-GAAP adjustments.
- (m) For 2021 and 2020, net income is reduced by income attributable to noncontrolling interest of \$9 million and \$4 million, respectively.
- (n) The sum of these items does not foot due to rounding.

Cautionary Statement Under the Private Securities Litigation Reform Act of 1995

Statements in this Form 10-K, 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) the impacts of COVID-19 and our plans to respond to its implications; (ii) the expected impact of global supply chain challenges; (iii) expectations regarding sales and profit for the fiscal year 2022, including the impact of foreign exchange, pricing actions, raw materials, and sourcing, logistics and manufacturing costs; (iii) expectations of the impact of inflationary pressures and the pricing actions to offset exposure to such impacts; (iv) the impact of high input costs, including raw materials, transportation and energy; (v) our ability to drive cost discipline measures and the ability to recover margin to pre-inflation levels; (vi) the divestiture of our Microbial Control business and the progress of our portfolio optimization strategy, through non-core business divestitures; (vii) our combination with N&B, including the expected benefits and synergies of the N&B Transaction and future opportunities for the combined company; (viii) the success of our integration efforts and ability to deliver on our synergy commitments as well as future opportunities for the combined company; (ix) our ability to achieve the anticipated benefits of the Frutarom acquisition, including \$145 million of expected synergies; (x) the growth potential of the markets in which we operate, including the emerging markets, (xi) expected capital expenditures in 2022; (xii) the expected costs and benefits of our ongoing optimization of our manufacturing operations, including the expected number of closings; (xiii) expected cash flow and availability of capital resources to fund our operations and meet our debt service requirements; (xiv) our ability to innovate and execute on specific consumer trends and demands; and (xv) our ability to continue to generate value for, and return cash to, our shareholders. 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 risks, uncertainties and other factors include, among others, the following:

- inflationary trends in the price of our input costs, such as raw materials, transportation and energy;
- supply chain disruptions, geopolitical developments or climate-change related events that may affect our suppliers or procurement of raw materials;
- disruption in the development, manufacture, distribution or sale of our products from COVID-19 and other public health crises;
- risks related to the integration of N&B and the Frutarom business, including whether we will realize the benefits anticipated from the acquisitions in the expected time frame;
- our ability to successfully establish and manage acquisitions, collaborations, joint ventures or partnerships, or the failure to close strategic transactions or divestments;
- our ability to successfully market to our expanded and diverse customer base;
- our substantial amount of indebtedness and its impact on our liquidity and ability to return capital to its shareholders;
- our ability to effectively compete in our market and develop and introduce new products that meet customers’ needs;
- our ability to retain key employees;
- changes in demand from large multi-national customers due to increased competition and our ability to maintain “core list” status with customers;
- our ability to successfully develop innovative and cost-effective products that allow customers to achieve their own profitability expectations;
- disruption in the development, manufacture, distribution or sale of our products from natural disasters, public health crises, international conflicts, terrorist acts, labor strikes, political crisis, accidents and similar events;
- volatility and increases in the price of raw materials, energy and transportation;
- the impact of a significant data breach or other disruption in our information technology systems, and our ability to comply with data protection laws in the U.S. and abroad;
- our ability to comply with, and the costs associated with compliance with, regulatory requirements and industry standards, including regarding product safety, quality, efficacy and environmental impact;
- our ability to meet increasing customer, consumer, shareholder and regulatory focus on sustainability;
- defect, quality issues (including product recalls), inadequate disclosure or misuse with respect to the products and capabilities;

- our ability to react in a timely and cost-effective manner to changes in consumer preferences and demands, including increased awareness of health and wellness;
- 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;
- economic, regulatory and political risks associated with our international operations;
- the impact of global economic uncertainty on demand for consumer products;
- our ability to comply with, and the costs associated with compliance with, U.S. and foreign environmental protection laws;
- our ability to successfully manage our working capital and inventory balances;
- the impact of the failure to comply with U.S. or foreign anti-corruption and anti-bribery laws and regulations, including the U.S. Foreign Corrupt Practices Act;
- any impairment on our tangible or intangible long-lived assets, including goodwill associated with the acquisition of Frutarom;
- our ability to protect our intellectual property rights;
- the impact of the outcome of legal claims, regulatory investigations and litigation;
- changes in market conditions or governmental regulations relating to our pension and postretirement obligations;
- the impact of changes in federal, state, local and international tax legislation or policies, including the Tax Cuts and Jobs Act, with respect to transfer pricing and state aid, and adverse results of tax audits, assessments, or disputes;
- the impact of the United Kingdom's departure from the European Union;
- the impact of the phase out of the London Interbank Offered Rate (LIBOR) on interest expense; and
- risks associated with our CEO transition, including the impact of employee hiring and retention.

The foregoing list of important factors does not include all such factors, nor necessarily present them in order of importance. In addition, you should consult other disclosures made by the Company (such as in our other filings with the SEC or in company press releases) for other factors that may cause actual results to differ materially from those projected by the Company. Please refer to Part I. Item 1A., Risk Factors, of this Form 10-K for additional information regarding factors that could affect our 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, Russia 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, 2021, our 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, 2021, our foreign currency exposures pertaining to derivative contracts exist with the Euro. 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 our foreign currency forward contracts would increase by approximately less than \$1 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. We have entered into certain cross currency swap agreements in order to mitigate a portion of our net European investments from foreign currency risk. As of December 31, 2021, these swaps were in a net liability position with an aggregate fair value of \$5 million. 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 our cross currency swaps would change by approximately \$32 million.

At December 31, 2021, the fair value of our EUR fixed rate debt was \$1.545 billion. Based on a hypothetical decrease or increase of 10% in foreign exchange rates, the estimated fair value of our EUR fixed rate debt would change by approximately \$160 million.

At December 31, 2021, the fair value of our USD fixed rate debt was \$8.603 billion. Based on a hypothetical decrease or increase of 10% in interest rates, the estimated fair value of our US fixed rate debt would change by approximately \$860 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 49.

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 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 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 31, 2021. 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 31, 2021, 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 31, 2021 as stated in their report which is included herein.

ITEM 9B. OTHER INFORMATION.

None.

ITEM 9C. DISCLOSURES REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS.

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 2022 Proxy Statement and is incorporated by reference herein. The information relating to Section 16(a) beneficial ownership reporting compliance that appears in the IFF 2022 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 Conduct (the "Code of Conduct") that applies to all of our employees, including our chief executive officer and our chief financial officer. We have also adopted a Code of Conduct for Directors and a Code of Conduct for Executive Officers (together with the Code of Conduct, the "Codes"). The Codes are available through the Investors — Governance link on our website at <https://ir.iff.com/governance>.

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, principal financial officer or 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 2022 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 2022 Proxy Statement and such information is incorporated by reference herein.

ITEM 11. EXECUTIVE COMPENSATION.

The items required by Part III, Item 11 are incorporated herein by reference from the IFF 2022 Proxy Statement to be filed on or before April 29, 2022.

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

The items required by Part III, Item 12 are incorporated herein by reference from the IFF 2022 Proxy Statement to be filed on or before April 29, 2022.

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

The items required by Part III, Item 13 are incorporated herein by reference from the IFF 2022 Proxy Statement to be filed on or before April 29, 2022.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

The items required by Part III, Item 14 are incorporated herein by reference from the IFF 2022 Proxy Statement to be filed on or before April 29, 2022.

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 Form 10-K:

Report of Independent Registered Public Accounting Firm (PCAOB ID: 238)	50
Consolidated Statements of Income and Comprehensive Income for the years ended December 31, 2021, 2020 and 2019	53
Consolidated Balance Sheets as of December 31, 2021 and 2020	54
Consolidated Statements of Cash Flows for the years ended December 31, 2021, 2020 and 2019	55
Consolidated Statements of Shareholders' Equity for the years ended December 31, 2021, 2020 and 2019	56
Notes to Consolidated Financial Statements	57

(a)(3) EXHIBITS	109
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(a)(2) FINANCIAL STATEMENT SCHEDULES

Schedule II — Valuation and Qualifying Accounts and Reserves for the years ended December 31, 2021, 2020 and 2019	S-1
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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.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of International Flavors & Fragrances Inc. and its subsidiaries (the “Company”) as of December 31, 2021 and January 1, 2021, and the related consolidated statements of income and comprehensive income (loss), of shareholders' equity and of cash flows for each of the three years in the period ended December 31, 2021, including the related notes and financial statement schedule listed in the index appearing under Item 15(a)(2) (collectively referred to as the “consolidated financial statements”). We also have audited the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and January 1, 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control - Integrated Framework (2013) issued by the COSO.

Change in Accounting Principle

As discussed in Note 1 to the consolidated financial statements, the Company changed the manner in which it accounts for leases in 2019.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, 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 the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. 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.

Definition and Limitations of Internal Control over Financial Reporting

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.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that (i) relate to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Merger with Nutrition & Biosciences, Inc. - Valuation of the Customer Relationships Intangible Assets

As described in Note 3 to the consolidated financial statements, on February 1, 2021, the Company completed the merger with Nutrition & Biosciences, Inc. (“N&B”) for total purchase consideration of \$15.942 billion. The acquisition resulted in \$6.734 billion of customer relationships intangible assets being recorded. The fair value of the intangible assets is generally determined using an income method (specifically, for customer relationships, the multi-period excess earnings method), which is based on forecasts of the expected future cash flows attributable to the respective assets. Significant estimates and assumptions inherent in the valuations reflect a consideration of other market participants, and include the amount and timing of future cash flows (including revenue growth rates, gross margins, and operating expenses), customer attrition rates, a brand’s relative market position and the discount rates applied to the cash flows.

The principal considerations for our determination that performing procedures relating to the valuation of the customer relationships intangible assets acquired in connection with the merger with N&B is a critical audit matter are (i) the significant judgment by management when determining the fair value of the customer relationships intangible assets acquired; (ii) a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating management’s significant assumptions related to revenue growth rates, gross margins, customer attrition rates, and the discount rates; and (iii) the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the acquisition accounting, including controls over management’s valuation of the customer relationships intangible assets. These procedures also included, among others (i) reading the merger agreement; (ii) testing management’s process for determining the fair value of the customer relationships intangible assets acquired; (iii) evaluating the appropriateness of the multi-period excess earnings method; (iv) testing the completeness and accuracy of the underlying data used in the multi-period excess earnings method; and (v) evaluating the reasonableness of the significant assumptions used by management related to revenue growth rates, gross margins, customer attrition rates, and the discount rates. Evaluating management’s significant assumptions related to revenue growth rates and gross margins involved evaluating whether the significant assumptions used by management were reasonable considering (i) the current and past performance of N&B; (ii) the consistency with external market and industry data; and (iii) whether these significant assumptions were consistent with evidence obtained in other areas of the audit. Professionals with specialized skill and knowledge were used to assist in evaluating (i) the appropriateness of the multi-period excess earnings method and (ii) the reasonableness of the significant assumptions related to customer attrition rates and the discount rates.

Goodwill Impairment Assessment - Pharma Solutions Reporting Unit

As described in Notes 1 and 5 to the consolidated financial statements, the Company’s goodwill balance was \$16.414 billion as of December 31, 2021, and the goodwill related to the Pharma Solutions reporting unit was \$1.282 billion. Management tests goodwill for impairment at the reporting unit level as of November 30 every year or more frequently if events or changes in circumstances indicate the asset might be impaired. If a reporting unit’s carrying amount exceeds its fair value, the Company will record an impairment charge based on that difference. Management assessed the fair value of the reporting units primarily using an income approach. Under the income approach, management determines the fair value by using a discounted cash flow method at a rate of return that reflects the relative risk of the projected future cash flows of each reporting unit, as well as a terminal value. Key estimates and assumptions used in these valuations include revenue growth rates and gross margins based on internal forecasts and historical operating trends of the Company, and discount rates.

The principal considerations for our determination that performing procedures relating to the goodwill impairment assessment of the Pharma Solutions reporting unit is a critical audit matter are (i) the significant judgment by management when determining the fair value of the Pharma Solutions reporting unit; (ii) a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating management’s significant assumptions related to revenue growth rates and gross margins; and (iii) the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's goodwill impairment assessment, including controls over management's valuation of the Pharma Solutions reporting unit. These procedures also included, among others (i) testing management's process for determining the fair value of the Pharma Solutions reporting unit; (ii) evaluating the appropriateness of the discounted cash flow method; (iii) testing the completeness and accuracy of the underlying data used in the discounted cash flow method; and (iv) evaluating the reasonableness of the significant assumptions used by management related to revenue growth rates and gross margins. Evaluating management's significant assumptions related to revenue growth rates and gross margins involved evaluating whether the significant assumptions used by management were reasonable considering (i) the current and past performance of the Pharma Solutions reporting unit; (ii) the consistency with external market and industry data; and (iii) whether these significant assumptions were consistent with evidence obtained in other areas of the audit. Professionals with specialized skill and knowledge were used to assist in evaluating the appropriateness of the discounted cash flow method.

/s/ PricewaterhouseCoopers LLP

New York, New York

February 28, 2022

We have served as the Company's auditor since 1957.

INTERNATIONAL FLAVORS & FRAGRANCES INC.
CONSOLIDATED STATEMENTS OF INCOME AND COMPREHENSIVE INCOME (LOSS)

<i>(DOLLARS IN MILLIONS EXCEPT PER SHARE AMOUNTS)</i>	Year Ended December 31,		
	2021	2020	2019
Net sales	\$ 11,656	\$ 5,084	\$ 5,140
Cost of goods sold	7,921	2,998	3,027
Gross profit	3,735	2,086	2,113
Research and development expenses	629	357	346
Selling and administrative expenses	1,749	949	876
Restructuring and other charges	41	17	30
Amortization of acquisition-related intangibles	732	193	193
(Gains) losses on sale of fixed assets	(1)	4	3
Operating profit	585	566	665
Interest expense	289	132	138
Other income, net	(58)	(7)	(30)
Income before taxes	354	441	557
Provision for income taxes	75	74	97
Net income	279	367	460
Net income attributable to noncontrolling interests	9	4	4
Net income attributable to IFF stockholders	270	363	456
Other comprehensive income (loss):			
Foreign currency translation adjustments	(848)	88	24
Gains (losses) on derivatives qualifying as hedges	8	(9)	(3)
Pension and postretirement liability adjustment	115	(60)	(36)
Other comprehensive income (loss)	(725)	19	(15)
Comprehensive income (loss) attributable to IFF stockholders	\$ (455)	\$ 382	\$ 441
Net income per share — basic	\$ 1.11	\$ 3.25	\$ 4.05
Net income per share — diluted	\$ 1.10	\$ 3.21	\$ 4.00
Average number of shares outstanding - basic	243	112	112
Average number of shares outstanding - diluted	243	114	113

See Notes to Consolidated Financial Statements

**INTERNATIONAL FLAVORS & FRAGRANCES INC.
CONSOLIDATED BALANCE SHEETS**

<i>(DOLLARS IN MILLIONS)</i>	December 31,	
	2021	2020
ASSETS		
Current Assets:		
Cash and cash equivalents	\$ 711	\$ 650
Restricted cash	4	7
Receivables:		
Trade	1,952	950
Allowance for doubtful accounts	(46)	(21)
Inventories	2,516	1,132
Assets held for sale	1,122	—
Prepaid expenses and other current assets	728	342
Total Current Assets	6,987	3,060
Property, plant and equipment, net	4,368	1,458
Goodwill	16,414	5,593
Other intangible assets, net	10,506	2,727
Operating lease right-of-use assets	767	299
Other assets	616	418
Total Assets	\$ 39,658	\$ 13,555
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current Liabilities:		
Bank borrowings, overdrafts and current portion of long-term debt	\$ 308	\$ 634
Commercial paper	324	—
Accounts payable	1,532	556
Accrued payroll and bonus	335	133
Dividends payable	201	82
Liabilities held for sale	101	—
Other current liabilities	832	499
Total Current Liabilities	3,633	1,904
Other Liabilities:		
Long-term debt	10,768	3,779
Retirement liabilities	385	326
Deferred income taxes	2,518	593
Operating lease liabilities	670	265
Other liabilities	462	268
Total Other Liabilities	14,803	5,231
Commitments and Contingencies (Note 19)		
Redeemable noncontrolling interests	105	98
Shareholders' Equity:		
Common stock 12 1/2¢ par value; 500,000,000 shares authorized; 275,726,629 and 128,526,137 shares issued as of December 31, 2021 and December 31, 2020, respectively; and 254,573,984 and 106,937,990 shares outstanding as of December 31, 2021 and December 31, 2020, respectively	35	16
Capital in excess of par value	19,826	3,853
Retained earnings	3,641	4,156
Accumulated other comprehensive loss:		
Cumulative translation adjustments	(1,133)	(285)
Accumulated gains (losses) on derivatives qualifying as hedges	1	(7)
Pension and postretirement liability adjustment	(291)	(406)
Treasury stock, at cost (21,152,645 and 21,588,147 shares as of December 31, 2021 and December 31, 2020, respectively)	(997)	(1,017)
Total Shareholders' Equity	21,082	6,310
Noncontrolling interest	35	12
Total Shareholders' Equity including Noncontrolling interest	21,117	6,322
Total Liabilities and Shareholders' Equity	\$ 39,658	\$ 13,555

See Notes to Consolidated Financial Statements

**INTERNATIONAL FLAVORS & FRAGRANCES INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS**

<i>(DOLLARS IN MILLIONS)</i>	Year Ended December 31,		
	2021	2020	2019
Cash flows from operating activities:			
Net income	\$ 279	\$ 367	\$ 460
Adjustments to reconcile to net cash provided by operating activities:			
Depreciation and amortization	1,156	325	323
Deferred income taxes	(236)	(68)	(59)
(Gains) losses on sale of assets	(1)	4	2
Stock-based compensation	54	36	34
Pension contributions	(37)	(24)	(24)
Amortization of inventory step-up	368	—	—
Changes in assets and liabilities, net of acquisitions:			
Trade receivables	(169)	(61)	60
Inventories	(363)	18	(62)
Accounts payable	419	28	55
Accruals for incentive compensation	96	44	(22)
Other current payables and accrued expenses	4	57	5
Other assets/liabilities, net	(133)	(12)	(73)
Net cash provided by operating activities	1,437	714	699
Cash flows from investing activities:			
Cash paid for acquisitions, net of cash received	—	—	(49)
Additions to property, plant and equipment	(393)	(192)	(236)
Additions to intangible assets	(4)	—	(6)
Proceeds from disposal of assets	18	17	42
Proceeds from unwinding of cross currency swap derivative instruments	—	—	26
Cash provided by the Merger with N&B	246	—	—
Proceeds received from sale of business	115	—	—
Contingent consideration paid	—	—	(5)
Maturity of net investment hedges	—	(14)	—
Proceeds from life insurance contracts	—	2	2
Net cash used in investing activities	(18)	(187)	(226)
Cash flows from financing activities:			
Cash dividends paid to shareholders	(667)	(323)	(314)
Dividends paid to redeemable noncontrolling interest	(2)	—	—
Decrease in revolving credit facility and short term borrowing	(105)	—	(1)
Proceeds from issuance of commercial paper	324	—	—
Deferred financing costs	(3)	(3)	—
Repayments of long-term debt	(828)	(347)	(155)
Purchases of redeemable noncontrolling interest	—	(22)	—
Proceeds from issuance of long-term debt	3	200	—
Contingent consideration paid	(14)	(9)	(24)
Proceeds from issuance of stock in connection with stock options	9	—	—
Employee withholding taxes paid	(21)	(8)	(11)
Net cash used in financing activities	(1,304)	(512)	(505)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(59)	21	7
Net change in cash, cash equivalents and restricted cash	56	36	(25)
Cash, cash equivalents and restricted cash at beginning of year	660	624	649
Cash, cash equivalents and restricted cash at end of year	\$ 716	\$ 660	\$ 624
Supplemental Disclosures:			
Interest paid, net of amounts capitalized	\$ 310	\$ 128	\$ 134
Income taxes paid	289	133	126
Accrued capital expenditures	117	41	39

See Notes to Consolidated Financial Statements

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

<i>(DOLLARS IN MILLIONS)</i>	Common stock		Capital in excess of par value	Retained earnings	Accumulated other comprehensive (loss) income	Treasury stock		Non-controlling interest	Total
	Shares	Cost				Shares	Cost		
Balance at December 31, 2018	128,526,137	\$ 16	\$ 3,794	\$ 3,956	\$ (702)	(21,906,935)	\$ (1,031)	\$ 10	\$ 6,043
Net income				456				4	460
Adoption of ASU 2016-02				23					23
Adoption of ASU 2017-12				(1)	1				—
Cumulative translation adjustment					23				23
Losses on derivatives qualifying as hedges; net of tax (\$1)					(3)				(3)
Pension liability and postretirement adjustment; net of tax (\$8)					(36)				(36)
Cash dividends declared (\$2.96 per share)				(316)					(316)
Stock options/SSARs			7			14,346	1		8
Vested restricted stock units and awards			(10)			153,751	7		(3)
Stock-based compensation			34						34
Redeemable NCI			(2)						(2)
Dividends on noncontrolling interest and other								(2)	(2)
Balance at December 31, 2019	128,526,137	\$ 16	\$ 3,823	\$ 4,118	\$ (717)	(21,738,838)	\$ (1,023)	\$ 12	\$ 6,229
Net income				363				1	364
Cumulative translation adjustment					88				88
Losses on derivatives qualifying as hedges; net of tax \$1					(9)				(9)
Pension liability and postretirement adjustment; net of tax (\$9)					(60)				(60)
Cash dividends declared (\$3.04 per share)				(325)					(325)
Stock options/SSARs						57,652	3		3
Vested restricted stock units and awards			(8)			93,039	3		(5)
Stock-based compensation			36						36
Redeemable NCI			2						2
Dividends on noncontrolling interest and other								(1)	(1)
Balance at December 31, 2020	128,526,137	\$ 16	\$ 3,853	\$ 4,156	\$ (698)	(21,588,147)	\$ (1,017)	\$ 12	\$ 6,322
Net income				270				3	273
Cumulative translation adjustment					(848)				(848)
Gain on derivatives qualifying as hedges; net of tax (\$1)					8				8
Pension liability and postretirement adjustment; net of tax (\$4)					115				115
Cash dividends declared (\$3.12 per share)				(785)					(785)
Stock options/SSARs			4			159,222	7		11
Impact of N&B Merger	141,740,461	18	15,936					22	15,976
Conversion of tangible equity units	5,460,031	1	(1)						—
Vested restricted stock units and awards			(18)			276,280	13		(5)
Stock-based compensation			54						54
Redeemable NCI			(2)						(2)
Dividends on noncontrolling interest and other								(2)	(2)
Balance at December 31, 2021	275,726,629	\$ 35	\$ 19,826	\$ 3,641	\$ (1,423)	(21,152,645)	\$ (997)	\$ 35	\$ 21,117

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 food, beverage, health & biosciences, scent and pharma solutions and complementary adjacent products, including cosmetic active and natural health ingredients, which are used 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, sweeteners, dietary supplements, food protection, infant and elderly nutrition, functional food, and pharmaceutical excipients and oral care products.

Basis of Presentation

On February 1, 2021 (the “Closing Date”), the Company completed the combination (the “Merger”) of IFF and DuPont de Nemours, Inc (“DuPont”) nutrition and biosciences business (the “N&B Business”), which had been transferred to Nutrition and Biosciences, Inc., a Delaware corporation and wholly owned subsidiary of DuPont (“N&B”) in a Reverse Morris Trust transaction. See Note 3 for additional information. As a result, the Company’s Consolidated Financial Statements for the period ended December 31, 2021 reflect the results of N&B from the Closing Date, whereas the Company’s Consolidated Financial Statements for the periods ended December 31, 2020 and 2019 do not.

In the current year, the Company has changed its presentation from thousands to millions and, as a result, any necessary rounding adjustments have been made to prior year disclosed amounts.

Certain reclassifications have been made to the prior periods’ financial information in order to conform to the current period’s presentation.

Fiscal Year End

Effective 2021, the Company changed its fiscal year end from a 52/53-week fiscal year ending on the Friday closest to the last day of the quarter, to a calendar year of the twelve-month period from January 1 to December 31. The Company elected to change its fiscal year end in connection with the Merger with N&B to align the Company’s fiscal year with N&B’s. The 2021 fiscal year was a 52 week period, the 2020 fiscal year was a 52 week period and the 2019 fiscal year was a 53 week period. The impact of the additional week in 2019 on revenue and net income was not material. For ease of presentation, December 31 is used consistently throughout the financial statements and notes to represent the period-end date. For the 2021, 2020 and 2019 fiscal years, the actual closing dates were December 31, January 1, and January 3, respectively.

Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles (“U.S. GAAP”) requires management to make estimates and judgments that affect the amounts reported in the Consolidated Financial Statements and accompanying notes. The inputs into our judgments and estimates take into account the current economic implications of the novel coronavirus (“COVID-19”) on our critical and significant accounting estimates, including estimates associated with future cash flows that are used in assessing the risk of impairment of certain long-lived assets. Actual results could differ from those 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 interests are included as a separate component of Shareholders’ Equity.

Revenue Recognition

The Company recognizes revenue from contracts with customers when the contract or purchase order has received approval and commitment from both parties, has the rights of the parties and payment terms (which can vary by customer) identified, has commercial substance, and collectability of consideration is probable. In addition, the control of the promised goods is transferred to the customers in an amount that reflects the consideration it expects to be entitled to in exchange for those goods. Sales, value added, and other taxes the Company collects are excluded from revenues. The Company receives payment in accordance with standard customer terms.

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 Sheets. The Company considers shipping and handling activities undertaken after the customer has obtained control of the related goods as a fulfillment activity. Net sales include shipping and handling charges billed to customers. Cost of goods sold includes all costs incurred in connection with shipping and handling.

Contract Assets and Liabilities

With respect to a small number of contracts for the sale of compounds, the Company has an “enforceable right to payment for performance to date” and as the products do not have an alternative use, the Company recognizes revenue for these contracts over time and records a contract asset using the output method. The output method recognizes revenue on the basis of direct measurements of the value to the customer of the goods or services transferred to date relative to the remaining goods or services promised under the contract.

As of December 31, 2021 and 2020, the Company's gross accounts receivable was \$1.952 billion and \$950 million, respectively. The Company's contract assets and contract liabilities as of December 31, 2021 and 2020 were not material.

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 products, technical product support and compliance with governmental regulation. All research and development costs are expensed as incurred.

Cash and Cash Equivalents

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

Restricted Cash

Restricted cash is comprised of cash or cash equivalents which has been placed into an account that is restricted for a specific use and from which the Company cannot withdraw the cash on demand.

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported in the Company's statement of cash flows periods ended December 31, 2021, 2020 and 2019 to the amounts reported in the Company's balance sheet as at December 31, 2021, 2020 and 2019.

<i>(DOLLARS IN MILLIONS)</i>	<u>December 31, 2021</u>	<u>December 31, 2020</u>	<u>December 31, 2019</u>
Current assets			
Cash and cash equivalents	\$ 711	\$ 650	\$ 607
Restricted cash	4	7	17
Noncurrent assets			
Restricted cash included in Other assets	1	3	—
Cash, cash equivalents and restricted cash	<u>\$ 716</u>	<u>\$ 660</u>	<u>\$ 624</u>

Accounts Receivable

The Company has certain factoring agreements in the U.S. and The Netherlands under which it can factor up to approximately \$250 million of its trade receivables. The factoring agreements supplement the Company's existing factoring programs that are sponsored by certain customers. Under all of the arrangements, the Company sells the trade receivables on a non-recourse basis to unrelated financial institutions and accounts for the transactions as sales of receivables. The applicable receivables are removed from the Company's Consolidated Balance Sheets when the cash proceeds are received by the Company.

The impact on cash provided by operations from participating in these programs was an increase of approximately \$19 million, \$43 million and \$38 million in 2021, 2020 and 2019, respectively, compared to each respective prior year period. The cost of participating in these programs was approximately \$6 million, \$4 million, and \$7 million in 2021, 2020, and 2019, respectively and is included as a component of interest expense.

Inventories

Inventories are stated at the lower of cost (on a weighted-average basis) or net realizable value. The Company's inventories consisted of the following:

<i>(DOLLARS IN MILLIONS)</i>	December 31,	
	2021	2020
Raw materials	\$ 854	\$ 566
Work in process	287	38
Finished goods	1,375	528
Total	\$ 2,516	\$ 1,132

Leases

During the year ended December 31, 2019, the Company adopted ASU No. 2016-02, "Leases (Topic 842)," which requires most leases to be recognized on the balance sheet. The Company adopted the standard using the modified retrospective approach with an effective date of December 29, 2018, the beginning of its 2019 fiscal year. Prior year financial statements were not recast. The Company elected various transition provisions available for expired or existing contracts, which allows the Company to carryforward historical assessments of (1) whether contracts are or contain leases, (2) lease classification and (3) initial direct costs.

The Company determines if an arrangement is a lease at contract inception. A lease exists when a contract conveys to the customer the right to control the use of identified property, plant, or equipment for a period of time in exchange for consideration. The definition of a lease embodies two conditions: (1) there is an identified asset in the contract that is land or a depreciable asset (i.e., property, plant, and equipment), and (2) the customer has the right to control the use of the identified asset.

When the Company determines the arrangement is a lease, or contains a lease, at inception, it then determines whether the lease is an operating lease or a finance lease at the commencement date.

The Company leases property and equipment, principally under operating leases. In accordance with ASU 2016-02, the Company records a right of use asset and related obligation at the present value of lease payments and, over the term of the lease, depreciates the right of use asset and accretes the obligation to future value. Some of the leases include rental escalation clauses, renewal options and/or termination options that are factored into the determination of lease payments when appropriate. The Company has elected not to separate non-lease components from lease components for all classes of leased assets.

When available, the Company uses the rate implicit in the lease to discount lease payments to present value, however, most of the Company's leases do not provide a readily determinable implicit rate and the Company calculates the applicable incremental borrowing rate to discount the lease payments based on the term of the lease at lease commencement. The incremental borrowing rate is determined based on the Company's credit rating, currency and lease terms.

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, 1 to 50 years; machinery and equipment, 1 to 40 years; information technology hardware and software, 1 to 23 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, 10 to 27 years; patents, 11 to 15 years; trade names, 4 to 28 years; and technological know-how, 5 to 28 years.

The Company reviews long-lived assets for impairment when events or changes in business conditions indicate that their 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.

The Company tests goodwill for impairment at the reporting unit level as of November 30 every year or more frequently if events or changes in circumstances indicate the asset might be impaired. A reporting unit is an operating segment or one level below an operating segment (referred to as a component) to which goodwill is assigned when initially recorded.

The Company identifies their reporting units by assessing whether the components of their reporting segments constitute businesses for which discrete financial information is available and management of each reporting unit regularly reviews the operating results of those components. The Company has identified seven reporting units under the Nourish, Health & Biosciences, Scent and Pharma Solutions segments: (1) Nourish, (2) Fragrance Compounds, (3) Fragrance Ingredients, (4) Cosmetic Actives, (5) Health & Biosciences, (6) Microbial Control and (7) Pharma Solutions. These reporting units were determined based on the level at which the performance is measured and reviewed by segment management. In cases where the components of an operating segment have similar economic characteristics, they are aggregated into a single reporting unit.

When testing goodwill for impairment, the Company has the option of first performing a qualitative assessment to determine whether it is more likely than not that the fair value of a reporting unit is less than the carrying amount. If the Company elects to bypass the qualitative assessment for any reporting units, or if a qualitative assessment indicates it is more likely than not that the estimated carrying value of a reporting unit exceeds its fair value, the Company performs a quantitative goodwill impairment test.

Under the quantitative goodwill impairment test, if a reporting unit's carrying amount exceeds its fair value, the Company will record an impairment charge based on that difference, and the impairment charge will be limited to the amount of goodwill allocated to that reporting unit.

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.

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 Sheets 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 seven 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.

Net Income Per Share

Under the two-class method, earnings are adjusted by accretion of amounts to redeemable noncontrolling interests recorded at redemption value. The adjustments represent in-substance dividend distributions to the noncontrolling interest holders as the holders have a contractual right to receive a specified amount upon redemption. As a result, earnings are adjusted to reflect this in-substance distribution that is different from other common shareholders. In addition, the Company has unvested share based payment awards with a right to receive nonforfeitable dividends and thus are considered participating securities which are required to be included in the computation of basic and diluted earnings per share.

Basic earnings (loss) per share represents the amount of earnings for the period available to each share of common stock outstanding during the period. Basic earnings (loss) per share includes the effect of issuing shares of common stock assuming (i) the prepaid stock purchase contracts ("SPCs") are converted into the minimum number of shares of common stock under the if-converted method, and (ii) an adjustment to earnings (loss) to reflect adjustments made to record the redeemable value of redeemable noncontrolling interests. Diluted earnings (loss) per share also includes the effect of issuing shares of common stock, assuming (i) stock options and warrants are exercised, (ii) restricted stock units are fully vested under the treasury stock method, and (iii) the incremental effect of the prepaid SPCs converted into the maximum number of shares of common stock under the if-converted method.

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.

Financing Costs

Costs incurred in the issuance of debt are deferred and amortized as part of interest expense over the stated life of the applicable debt instrument. Unamortized deferred financing costs relating to debt are presented as a reduction in the amount of debt outstanding on the Consolidated Balance Sheets. Unamortized deferred financing costs relating to the revolving credit facility are recorded in Other assets on the Consolidated Balance Sheets.

Redeemable Noncontrolling Interests

Noncontrolling interests in subsidiaries that are redeemable for cash or other assets outside of the Company's control are classified as mezzanine equity, outside of equity and liabilities, at the greater of the carrying value or the redemption value. The increases or decreases in the estimated redemption amount are recorded with corresponding adjustments against Capital in excess of par value and are reflected in the computation of earnings per share using the two-class method.

Recent Accounting Pronouncements

In November 2021, the FASB issued Accounting Standards Update ("ASU") 2021-10, "Government Assistance (Topic 832): Disclosures by Business Entities about Government Assistance." The ASU requires annual disclosures about transactions with a government that are accounted for by applying a grant or contribution accounting model by analogy. This guidance is effective for all entities for annual periods beginning after December 15, 2021 and early adoption is permitted. The Company is currently evaluating the impact of this guidance, but does not expect this guidance to have a material impact on its Consolidated Financial Statements.

In October 2021, the FASB issued Accounting Standards Update ("ASU") 2021-08, "Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers." The ASU is intended to provide specific guidance on how to recognize and measure acquired contract assets and liabilities from revenue contracts in a business combination. An acquirer needs to recognize and measure contract assets and contract liabilities acquired in a business combination in accordance with Topic 606, Revenue from Contracts with Customers. At the acquisition date, an acquirer should account for the related revenue contracts in accordance with Topic 606 as if it had originated the contracts. To achieve this, an acquirer may assess how the acquiree applied Topic 606 to determine what to record for the acquired revenue contracts. This guidance is effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years, and early adoption is permitted, including adoption in an interim period. The Company is currently evaluating the impact of this guidance, but does not expect this guidance to have a material impact on its Consolidated Financial Statements.

In March 2020, the FASB issued Accounting Standards Update ("ASU") 2020-04, "Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting." The ASU is intended to simplify various aspects related to the cessation of reference rates in certain financial markets that would otherwise create modification accounting or changes in estimate. This guidance is effective for the period from March 12, 2020 to December 31, 2022. In January 2021, the FASB issued the subsequent amendment Accounting Standards Update ("ASU") 2021-01, "Reference Rate Reform (Topic 848): Scope" to the initial guidance. Alternative reference rates that are more observable or transaction based have been identified and are being transitioned to in numerous jurisdictions globally, such as a receive-variable-rate, pay-variable-rate cross currency interest rate swap. This guidance is effective immediately for all entities, but does not apply to any contract modifications or new hedging relationships entered into after December 31, 2022. This guidance was adopted and does not have a material impact on the Company's Consolidated Financial Statements.

In October 2020, the FASB issued Accounting Standards Updates ("ASU") 2020-09, "Debt (Topic 470): Amendments to SEC Paragraphs Pursuant to SEC Release No. 33-10762" and 2020-10, "Codification Improvements." ASU 2020-09 is intended to amend and supersede various SEC paragraphs pursuant to the issuance of SEC Release No. 33-10762 and is effective on January 4, 2021. ASU 2020-10 is intended to improve the consistency of the FASB Accounting Standards Codification ("Codification") and clarify guidance by including all disclosure guidance in the appropriate Disclosure Section of the Codification to help reduce the likelihood that disclosure requirements would be missed. ASU 2020-10 is effective for fiscal years beginning after December 15, 2020, and early adoption is permitted for any annual or interim period within those fiscal years. The Company has determined that neither guidance will have an impact on its Consolidated Financial Statements and will have a minimal impact on its disclosures.

In December 2019, the FASB issued ASU 2019-12, "Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes", and intended to simplify various aspects related to accounting for income taxes. This guidance is effective for fiscal years beginning after December 15, 2020, and for interim periods within those fiscal years, with early adoption permitted. This guidance was adopted on January 2, 2021 and does not have a material impact on the Company's Consolidated Financial Statements.

In August 2018, the FASB issued ASU 2018-14, "Compensation - Retirement Benefits - Defined Benefit Plans (Subtopic 715-20)", which modifies the disclosure requirements on company-sponsored defined benefit plans. The ASU is effective for fiscal years beginning after December 15, 2020 on a retrospective basis to all periods presented. The Company has determined that this guidance will not have an impact on its Consolidated Financial Statements and will have a minimal impact on its disclosures.

In June 2016, the FASB issued ASU 2016-13, "Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments", with subsequent amendments, which requires issuers to measure expected credit losses for financial assets based on historical experience, current conditions and reasonable and supportable forecasts. As such, an entity will use forward-looking information to estimate credit losses. The Company adopted the guidance effective the first day of its 2020 fiscal year and performed an evaluation of the applicable criteria, including the aging of its trade receivables, recent write-off history and other factors related to future macroeconomic conditions. As a result of the evaluation, the Company determined that no adjustment was required to the level of its allowances for bad debts or to the carrying value of any other financial asset. The Company is exposed to credit losses primarily through its sales of products. To determine the appropriate allowance for expected credit losses, the Company considers certain credit quality indicators, such as aging, collection history, and creditworthiness of debtors. Regional and Global Credit committees review and approve specific customer allowance reserves. The allowance for expected credit losses is primarily based on two factors: i) the aging of the different categories of trade receivables, and ii) a specific reserve for accounts identified as uncollectable. The Company also considers current and future economic conditions in the determination of the allowance. At December 31, 2021, the Company reported \$1.906 billion of trade receivables, net of allowances of \$46 million. Based on the aging analysis as of December 31, 2021, approximately 91% of our accounts receivable were current based on the payment terms of the invoice. Receivables that are past due by over 365 days account for approximately 1% of our accounts receivable.

The following is a rollforward of the Company's allowances for bad debts for the year of 2021:

<i>(DOLLARS IN MILLIONS)</i>	Allowance for Bad Debts	
Balance at December 31, 2020	\$	21
Bad debt expense		6
Write-offs		(1)
Other adjustments ⁽¹⁾		20
Balance at December 31, 2021	\$	46

(1) The adjustment to allowances for bad debts was a result of purchase price allocation related to the Merger with N&B.

NOTE 2. RESTRUCTURING AND OTHER CHARGES

Restructuring and other charges primarily consist of separation costs for employees including severance, outplacement and other benefit ("Severance") costs as well as costs related to plant closures, principally related to fixed assets write-downs ("Fixed asset write-down") and all other related restructuring ("Other") costs. All restructuring and other charges, net expenses are separately stated on the Consolidated Statements of Income and Comprehensive Income (Loss).

Frutarom Integration Initiative

In connection with the acquisition of Frutarom, the Company has been executing an integration plan that, among other initiatives, seeks to optimize its manufacturing network (the "Frutarom Integration Initiative"). As part of the Frutarom Integration Initiative, the Company now expects to close approximately 30 manufacturing sites with most of the closures targeted to occur by the end of 2022. Between 2019 and 2020, the Company completed the closure of 21 sites. During 2021, the Company completed the closure of one site. Since the inception of the initiative through 2021, the Company has expensed \$37 million. Total costs for the program are expected to be approximately \$42 million including cash and non-cash charges through 2022.

2019 Severance Program

During 2019, the Company incurred severance charges related to approximately 190 headcount reductions, excluding those previously mentioned under the Frutarom Integration Initiative. The headcount reductions primarily related to the Scent business unit with additional amounts related to headcount reductions in all business units associated with the establishment of a new shared service center in Europe. Since the inception of the program, the Company has expensed approximately \$20 million. As of December 31, 2021, the program is largely complete.

2017 Productivity Program

In connection with 2017 Productivity Program, the Company recorded \$24 million of charges related to personnel costs and lease termination costs since the program's inception. As of December 31, 2021, the program is completed.

Other Restructuring Charges

Between 2020 and 2021, the Company incurred charges of approximately \$4 million, primarily related to the severance costs in connection with the closure of a facility in Germany.

N&B Merger Restructuring Liability

For 2021, the Company incurred approximately \$30 million of charges primarily related to severance for approximately 200 headcount reductions that have occurred in 2021.

Changes in Restructuring Liability

Movements in severance-related accruals during 2019, 2020 and 2021 are as follows:

<i>(DOLLARS IN MILLIONS)</i>	<u>Balance at January 1, 2019</u>	<u>Additional Charges (Reversals), Net</u>	<u>Non-Cash Charges</u>	<u>Cash Payments</u>	<u>Balance at December 31, 2019</u>
2017 Productivity Program					
Severance	\$ 4	\$ (2)	\$ —	\$ (1)	\$ 1
Other ⁽¹⁾	1	—	—	(1)	—
Frutarom Integration Initiative					
Severance	—	6	—	(2)	4
Fixed asset write down	—	1	(1)	—	—
Other ⁽¹⁾	—	4	—	(1)	3
2019 Severance Program					
Severance	—	21	—	(8)	13
Total restructuring	\$ 5	\$ 30	\$ (1)	\$ (13)	\$ 21

<i>(DOLLARS IN MILLIONS)</i>	<u>Balance at January 1, 2020</u>	<u>Additional Charges (Reversals), Net</u>	<u>Non-Cash Charges</u>	<u>Cash Payments</u>	<u>Balance at December 31, 2020</u>
2017 Productivity Program					
Severance	\$ 1	\$ (1)	\$ —	\$ —	\$ —
Frutarom Integration Initiative					
Severance	4	2	—	(3)	3
Fixed asset write down	—	12	(12)	—	—
Other ⁽¹⁾	3	2	—	(2)	3
2019 Severance Program					
Severance	13	(1)	—	(6)	6
Other Restructuring Charges					
Severance	—	3	—	(1)	2
Total restructuring	\$ 21	\$ 17	\$ (12)	\$ (12)	\$ 14

<i>(DOLLARS IN MILLIONS)</i>	<u>Balance at January 1, 2021</u>	<u>Additional Charges (Reversals), Net</u>	<u>Non-Cash Charges</u>	<u>Cash Payments</u>	<u>Balance at December 31, 2021</u>
Frutarom Integration Initiative					
Severance	\$ 3	\$ 5	\$ —	\$ (3)	\$ 5
Fixed asset write down	—	5	(5)	—	—
Other ⁽¹⁾	3	—	—	—	3
2019 Severance Program					
Severance	6	—	—	(1)	5
Other Restructuring Charges					
Severance	2	—	—	(1)	1
Other ⁽²⁾	—	1	—	(1)	—
N&B Merger Restructuring Liability					
Severance	—	27	—	(12)	15
Other ⁽³⁾	—	3	(3)	—	—
Total restructuring	\$ 14	\$ 41	\$ (8)	\$ (18)	\$ 29

(1) Includes supplier contract termination costs, consulting and advisory fees.

- (2) Includes charges related to legal settlement costs.
(3) Includes lease impairment charges incurred from the Merger with N&B.

Charges by Segment

The following table summarizes the total amount of costs incurred in connection with these restructuring programs by segment:

<i>(DOLLARS IN MILLIONS)</i>	December 31,		
	2021	2020	2019
Nourish	\$ 32	\$ 10	\$ 17
Health & Biosciences	5	—	1
Scent	3	7	12
Pharma Solutions	1	—	—
Total Restructuring and other charges	<u>\$ 41</u>	<u>\$ 17</u>	<u>\$ 30</u>

NOTE 3. ACQUISITIONS

Transaction with Nutrition & Biosciences, Inc.

On February 1, 2021, IFF completed the Merger with N&B. Pursuant to the transaction related agreements, DuPont transferred its N&B Business to N&B, a wholly-owned subsidiary of DuPont, and N&B merged with and into a wholly owned subsidiary of IFF in exchange for 141,740,461 shares of IFF common stock, par value \$0.125 per share (“IFF Common Stock”).

The Company completed its Merger with N&B in a Reverse Morris Trust transaction (the “Transactions”), pursuant to which the Company acquired the N&B Business of DuPont. In the Transactions, among other steps (i) DuPont transferred the N&B Business to N&B (the “Separation”); (ii) N&B made a cash distribution to DuPont of approximately \$7.359 billion, subject to certain adjustments (the “Special Cash Payments”); (iii) DuPont distributed to its stockholders all of the issued and outstanding shares of N&B common stock by way of an exchange offer (the “Distribution”), and; (iv) N&B merged with and into a wholly owned subsidiary of IFF. As a result of the Merger, the existing shares of N&B common stock were automatically converted into the right to receive a number of shares of IFF Common Stock. Immediately after the Merger, holders of DuPont’s common stock that received shares of N&B common stock in the Distribution owned approximately 55.4% of the outstanding shares of IFF Common Stock on a fully diluted basis and existing holders of IFF Common Stock owned approximately 44.6% of the outstanding shares of IFF on a fully diluted basis.

The Merger was accounted for using the purchase method of accounting in accordance with ASC Topic 805, Business Combinations, with IFF identified as the acquirer. As a result of the Merger, N&B’s assets, liabilities and the operating results of N&B were included in the Company’s financial statements from the Closing Date. N&B contributed net sales of approximately \$6.084 billion and net income of approximately \$11 million for the year ended December 31, 2021, which includes the effects of purchase accounting adjustments, primarily related to changes in amortization of intangible assets, depreciation of property, plant and equipment and amortization of stepped up inventory.

Prior to the Distribution, N&B incurred new indebtedness in the form of term loans and senior notes in an aggregate principal amount of \$7.500 billion to pay the Special Cash Payments made to DuPont stockholders. See Note 9 for additional information regarding the new term loans and senior notes incurred by N&B and subsequently assumed by IFF.

Purchase Price

The following table summarizes the aggregate purchase price consideration paid to acquire N&B (in millions, except share and per share data):

<i>(DOLLARS IN MILLIONS)</i>		
Fair value of common stock issued to DuPont stockholders ⁽¹⁾	\$	15,929
Fair value attributable to pre-merger service for replacement equity awards ⁽²⁾		25
Pension funding adjustment ⁽³⁾		(12)
Total purchase consideration	<u>\$</u>	<u>15,942</u>

- (1) The fair value of common stock issued to DuPont stockholders represents 141,740,461 shares of the Company’s common stock determined based on the number of fully diluted shares of IFF common stock, immediately prior to the Closing Date, multiplied by the quotient of 55.4%/44.6% and IFF common stock closing share price of \$112.38 on the New York Stock Exchange on the Closing Date.

- (2) At the time of the Transactions, each outstanding stock option, cash-settled stock appreciation right (“SAR”), restricted stock unit (“RSU”) award, and restricted stock award (“RSA”) with respect to DuPont common stock held by employees of N&B were canceled and converted into similar classes of equity awards of IFF’s Class A Common Stock. Further, each outstanding Performance Share Unit (“PSU”) award with respect to DuPont common stock held by employees of N&B were canceled and converted into IFF’s RSU awards. The conversion was based on the ratio of the volume-weighted average per share closing price of DuPont stock on the twenty trading days prior to the Closing Date and IFF’s stock on the twenty trading days following the Closing Date. The fair value of replacement equity-based awards attributable to pre-Merger service was recorded as part of the consideration transferred in the Merger (see Note 13 for additional information).
- (3) The Merger related agreements provided that if the net pension balance of N&B as of the Closing Date differs from \$220 million, such differential amount will be settled in cash. The Company has estimated the amount that it will receive and, accordingly, made an adjustment of \$12 million to the total purchase consideration.

Purchase Price Allocation

The Merger with N&B was accounted for under the acquisition method under which the Company allocated the purchase consideration to the tangible net assets and identifiable assets acquired based on estimated fair values at the Closing Date, and recorded the excess of consideration over the fair values of net assets acquired as goodwill. The purchase price allocation was finalized as of the end of 2021 when the Company finalized the valuation of the acquired property, plant and equipment, goodwill, intangible assets (trade names, customer relationships, IPR&D, and technological know-how), inventory and leases, in addition to ensuring all other assets and liabilities and contingencies have been identified and recorded. Further, the assessment of certain contingencies including loss contracts and environmental liabilities, pension and postretirement benefit obligations and taxes has been completed. Additionally, in connection with finalizing the purchase price allocation, the Company finalized the projected combined future tax rate to be applied to the valuation of assets and recorded the applicable adjustments to the values of goodwill and intangible assets.

The following table summarizes the fair values of the assets acquired and liabilities assumed as of February 1, 2021, presenting both the preliminary and final purchase price allocations:

<i>(DOLLARS IN MILLIONS)</i>	Preliminary Estimated Fair Value as Reported in the First Quarter of 2021	Measurement Period Adjustments (1)(2)	As Reported in the Fourth Quarter of 2021
Cash and cash equivalents	\$ 207	\$ (14)	\$ 193
Receivables	962	(9)	953
Inventory	1,615	(25)	1,590
Prepaid expenses and other current assets	342	32	374
Property, plant and equipment	3,242	(176)	3,066
Deferred income taxes	75	8	83
Intangible assets	9,176	47	9,223
Other assets	702	116	818
Accounts payable and accrued liabilities	(1,028)	(51)	(1,079)
Accrued payroll and employee benefits	(163)	15	(148)
Deferred tax liabilities ⁽³⁾	(2,369)	(26)	(2,395)
Long-term debt	(7,636)	—	(7,636)
Other long-term liabilities	(907)	12	(895)
Total identifiable net assets assumed	4,218	(71)	4,147
Non-controlling interest	(26)	4	(22)
Goodwill ⁽⁴⁾	11,762	55	11,817
Purchase price	\$ 15,954	\$ (12)	\$ 15,942

- (1) The preliminary fair value purchase price allocation of the assets and liabilities acquired in the N&B Merger as reported in the first quarter of 2021 were updated during the nine months ended December 31, 2021 to reflect updated fair values for intangible assets, property, plant and equipment, equity method investments and inventory. In addition, the carrying amounts of certain assets and liabilities were updated based on additional analysis of acquired assets and liabilities that existed at the Closing Date.
- (2) During the fourth quarter of 2021, the Company recorded an adjustment to reflect the receipt of approximately \$53 million in cash from DuPont as a result of finalization of adjustments to the Special Cash Payment paid to DuPont by N&B, prior to the close of the Transactions.
- (3) The change to deferred tax liabilities was primarily a result of the finalization of the jurisdictional allocation of the tangible and intangible assets. All measurement period adjustments were offset against goodwill.

(4) The cumulative impact of the adjustments during the nine months ended December 31, 2021 resulted in a \$55 million increase to goodwill.

Acquired inventory is comprised of finished goods, work in process and raw materials. The fair value of finished goods was calculated as the estimated selling price, adjusted for costs of the selling effort and a reasonable profit allowance relating to the selling effort. The fair value of work in process inventory was primarily calculated as the estimated selling price, adjusted for estimated costs to complete the manufacturing, estimated costs of the selling effort, as well as a reasonable profit margin on the remaining manufacturing and selling effort. The fair value of raw materials and supplies was determined based on replacement cost which approximates historical carrying value. The fair value step-up has been amortized to "Cost of goods sold" in the Consolidated Statements of Income and Comprehensive Income (Loss) as the inventory was sold.

The fair value of property, plant and equipment was primarily calculated using the cost approach, which determines the replacement costs for the assets and adjusts it for their age and condition. The fair value of the land assets was determined via the sales comparison approach.

The long-term debt assumed is comprised of a Term Loan Facility and Notes. The fair value of the Notes was determined on the basis of unadjusted quoted prices on an over-the-counter market. The fair value of the long-term debt assumed as part of the Term Loan Facility is based on the total indebtedness at the time of closing the Merger. See Note 9 for additional information regarding the new term loans and senior notes incurred by N&B and subsequently assumed by IFF.

The Company has recognized \$11.817 billion of goodwill to date in connection with the N&B Merger, which is in part attributable to expected synergies generated by the integration of N&B including cross-selling benefits as well as cost synergies. Substantially all of the goodwill is not deductible for income tax purposes. Goodwill of \$2.900 billion, \$6.712 billion, \$876 million and \$1.329 billion has been allocated to the Nourish, Health & Biosciences, Scent and Pharma Solutions segments, respectively.

The fair value and useful lives of the identifiable intangible assets assumed as of February 1, 2021 are as follows:

<i>(DOLLARS IN MILLIONS)</i>	Amounts	Useful Lives
Indefinite lived intangible assets		
In-process research and development	\$	13 Indefinite
Finite lived intangible assets		
Trade names		261 4 to 22 years
Customer relationships		6,734 11 to 27 years
Technological know-how		2,194 5 to 18 years
Other		21 2 years
Total finite lived intangible assets		9,210
Total	\$	9,223

The fair value of intangible assets is generally determined using an income method (specifically, for customer relationships, the multi-period excess earnings method), which is based on forecasts of the expected future cash flows attributable to the respective assets. Significant estimates and assumptions inherent in the valuations reflect a consideration of other market participants, and include the amount and timing of future cash flows (including revenue growth rates, gross margins and operating expenses), royalty rates used in the relief from royalty method, customer attrition rates, product obsolescence factors, a brand's relative market position and the discount rates applied to the cash flows. Unanticipated market or macroeconomic events and circumstances may occur, which could affect the accuracy or validity of the estimates and assumptions. Determining the useful life of an intangible asset also requires significant judgment. Trade names, customer relationships and technological know-hows are expected to have finite lives. The costs of finite-lived intangible assets are amortized through expense over their estimated lives.

Lease liabilities, included in "Other current liabilities" and "Operating lease liabilities" in the Consolidated Balance Sheets, at the Closing Date, are remeasured at the present value of the future minimum lease payments over the remaining lease term and the incremental borrowing rate of the Company as if the acquired leases were new leases as of the Closing Date. Right-of-use assets included in "Operating lease right-of-use assets" in the Consolidated Balance Sheets as of the Closing Date, are equal to the amount of the lease liability at the Closing Date, adjusted for any fair value adjustments for off-market leases. The Company reviewed the acquired leases and applied a \$15 million adjustment to reflect off-market leases. The remaining lease term is based on the remaining term at the Closing Date plus any renewal or extension options that the Company is reasonably certain will be exercised.

Net defined benefit plan liabilities were recognized based on appropriate actuarial assumptions and asset valuations as of the Closing Date and, accordingly, liabilities of approximately \$221 million were recorded.

The Company accrued approximately \$75 million related to certain product liability and legal contingencies for which it was determined that a liability existed at the Closing Date. Of this amount, approximately \$61 million was related to the finding of certain grades of microcrystalline cellulose (Avicel® PH 101, 102, and 200 NF and Avicel® RC-591 NF) being out-of-specification. See Note 19 for additional information.

The deferred income tax assets and liabilities include the expected future federal, state and foreign tax consequences associated with temporary differences between the fair values of the assets acquired and liabilities assumed and the respective tax bases. Tax rates utilized in calculating deferred income taxes generally represent the enacted statutory tax rates at the effective date of the Merger in the jurisdictions in which legal title of the underlying asset or liability resides. See Note 10 for additional information related to income taxes.

The Company incurred transaction-related costs of approximately \$91 million, \$29 million and \$21 million in 2021, 2020 and 2019, respectively. The transaction-related costs primarily consisted of merger and acquisition advisory, legal and professional fees in 2021 and legal and professional fees in 2020 and 2019.

Pro Forma Financial Information

The following unaudited pro forma financial information presents the combined results of operations of IFF and N&B as if the Merger had been completed as of the prior fiscal year, or January 1, 2020. The unaudited pro forma financial information is presented for informational purposes and is not indicative of the results of operations that would have been achieved if the Merger and related borrowings had taken place on January 1, 2020, nor are they indicative of future results. The unaudited pro forma financial information for the year ended December 31, 2021 includes IFF results, including the post-Merger results of N&B, since February 1, 2021, and pre-Merger results of N&B for the period January 1, 2021 through January 31, 2021.

The unaudited pro forma results for the year ended December 31, 2021 and 2020 were as follows:

<i>(DOLLARS IN MILLIONS)</i>	Year Ended December 31,	
	2021	2020
Unaudited pro forma net sales	\$ 12,163	\$ 11,143
Unaudited pro forma net income attributable to the Company	687	192

The unaudited pro forma results for all periods include adjustments made to account for certain costs and transactions that would have been incurred had the Merger been completed as of January 1, 2020, including amortization charges for acquired intangibles assets, adjustments for transaction costs, adjustments for depreciation expense for property, plant and equipment, inventory step-up and adjustments to interest expense. These adjustments are net of any applicable tax impact and were included to arrive at the pro forma results above.

NOTE 4. PROPERTY, PLANT AND EQUIPMENT, NET

Property, plant and equipment consisted of the following amounts:

<i>(DOLLARS IN MILLIONS)</i>	December 31,	
	2021	2020
<i>Asset Type</i>		
Land	\$ 223	\$ 84
Buildings and improvements	1,764	932
Machinery and equipment	3,442	1,525
Information technology	271	251
Construction in process	461	136
Total Property, Plant and Equipment	6,161	2,928
Accumulated depreciation	(1,793)	(1,470)
Total Property, Plant and Equipment, Net	\$ 4,368	\$ 1,458

Depreciation expense was \$424 million, \$132 million and \$130 million for the years ended December 31, 2021, 2020 and 2019, respectively.

NOTE 5. GOODWILL AND OTHER INTANGIBLE ASSETS, NET

Goodwill

In the first quarter of 2021, in connection to the Merger, the Company reorganized its reporting structure. In connection with this reorganization, goodwill was reassigned among reporting units using a relative fair value approach based on the fair value of the elements transferred and the fair value of the elements remaining within the original reporting units. The Company tested goodwill for impairment on a pre-reorganization basis and determined there was no impairment for the affected reporting units. In connection with the reorganization, \$985 million of goodwill previously included in the legacy Taste segment, now the Nourish segment, was moved to the Scent and Health & Biosciences segments amounting to \$257 million and \$728 million, respectively.

Movements in goodwill attributable to each reportable segment during the years ended December 31, 2020 and 2021 were as follows:

<i>(DOLLARS IN MILLIONS)</i>	Nourish	Health & Biosciences	Scent	Pharma Solutions	Total
Balance at December 31, 2019	\$ 4,873	\$ —	\$ 624	\$ —	\$ 5,497
Measurement period adjustment ⁽¹⁾	(15)	—	—	—	(15)
Foreign exchange	86	—	25	—	111
Reallocation	(85)	—	85	—	—
Balance at December 31, 2020	4,859	—	734	—	5,593
Acquisitions ⁽²⁾	2,900	6,712	876	1,329	11,817
Transferred to assets held for sale	—	(536)	—	—	(536)
Reduction from business divestiture	(27)	—	—	—	(27)
Foreign exchange	(192)	(155)	(39)	(47)	(433)
Reallocation	(985)	728	257	—	—
Balance at December 31, 2021	\$ 6,555	\$ 6,749	\$ 1,828	\$ 1,282	\$ 16,414

(1) Measurement period adjustments relate to the 2019 Acquisition Activity.

(2) Acquisitions relate to the Merger with N&B. See Note 3 for additional information.

Annual Goodwill Impairment Test

For the annual impairment test as of November 30, 2021, the Company utilized Step 0 of the guidance in ASC Topic 350, Intangibles – Goodwill and Other, which allows for the assessment of qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. If, based on a review of qualitative factors, it is more likely than not that the fair value of a reporting unit is less than its carrying value, a quantitative impairment test is performed by comparing the fair value of a reporting unit with its carrying amount. Based on a review of qualitative factors, the Company determined that for four of the reporting units, a quantitative (Step 1) impairment analysis was not necessary to determine if the carrying values of the reporting unit exceeded their fair values. For the other three reporting units (Nourish, Health & Biosciences and Pharma Solutions), the Company determined that a Step 1 test was necessary.

The Company assessed the fair value of the reporting units primarily using an income approach. Under the income approach, the Company determines the fair value by using a discounted cash flow method at a rate of return that reflects the relative risk of the projected future cash flows of each reporting unit, as well as a terminal value. The Company uses the most current actual and forecasted operating data available. Key estimates and assumptions used in these valuations include revenue growth rates and gross margins based on internal forecasts and historical operating trends of the Company, and discount rates.

In performing the quantitative impairment test, the Company determined that the fair value of the three reporting units exceeded their carrying values and, taken together with the results of the qualitative test, we determined that there was no impairment of goodwill at any of the Company's seven reporting units in 2021. Based on the quantitative impairment test performed at November 30, 2021, the Company determined that the excess of fair values over their respective carrying values were 62%, 44% and 29% for the Nourish, Health & Biosciences and Pharma Solutions reporting units, respectively.

If current long-term projections for these reporting units are not realized or materially decrease, the Company may be required to write-off all or a portion of the goodwill. Such charge could have a material effect on the Consolidated Statements of Operations and Balance Sheets.

Other Intangible Assets

Other intangible assets, net consisted of the following amounts:

<i>(DOLLARS IN MILLIONS)</i>	December 31,	
	2021	2020
Asset Type		
Customer relationships	\$ 8,935	\$ 2,728
Technological know-how	2,494	479
Trade names & patents	411	187
Other	50	38
Total carrying value	11,890	3,432
Accumulated Amortization		
Customer relationships	(887)	(470)
Technological know-how	(388)	(168)
Trade names & patents	(68)	(38)
Other	(41)	(29)
Total accumulated amortization	(1,384)	(705)
Other intangible assets, net	\$ 10,506	\$ 2,727

Amortization expense, which includes the amortization of all intangible assets, was \$732 million for the year ended December 31, 2021 and \$193 million for both the years ended December 31, 2020 and 2019. Amortization expense for the next five years and thereafter, based on valuations and determinations of useful lives, is expected to be as follows:

<i>(DOLLARS IN MILLIONS)</i>	December 31,				
	2022	2023	2024	2025	2026
Estimated future intangible amortization expense	\$ 758	\$ 749	\$ 748	\$ 746	\$ 743

NOTE 6. OTHER CURRENT ASSETS AND LIABILITIES, AND OTHER ASSETS

Prepaid expenses and other current assets consisted of the following amounts:

<i>(DOLLARS IN MILLIONS)</i>	December 31,	
	2021	2020
Value-added tax receivable	\$ 178	\$ 93
Income tax receivable	131	100
Prepaid expenses	288	100
Other	131	49
Total	\$ 728	\$ 342

Other assets consisted of the following amounts:

<i>(DOLLARS IN MILLIONS)</i>	December 31,	
	2021	2020
Finance lease right-of-use assets	\$ 21	\$ 8
Deferred income taxes	82	197
Overfunded pension plans	136	101
Cash surrender value of life insurance contracts	52	49
Equity method investments	86	5
Other ⁽¹⁾	239	58
Total	\$ 616	\$ 418

(1) Includes land usage rights in China and long term deposits.

Other current liabilities consisted of the following amounts:

<i>(DOLLARS IN MILLIONS)</i>	December 31,	
	2021	2020
Rebates and incentives payable	\$ 113	\$ 64
Value-added tax payable	50	20
Interest payable	48	29
Current pension and other postretirement benefit obligation	11	13
Accrued insurance (including workers' compensation)	10	11
Earn outs payable	—	14
Restructuring and other charges	29	14
Current operating lease obligation	109	41
Current financing lease obligation	5	3
Accrued income taxes	94	42
Other accounts payable and accrued expenses payable	270	160
Other	93	88
Total	<u>\$ 832</u>	<u>\$ 499</u>

NOTE 7. LEASES

The Company has leases for corporate offices, manufacturing facilities, research and development facilities, and certain transportation and office equipment, the majority of which are operating leases. The Company's leases have remaining lease terms of up to 40 years, some of which include options to extend the leases for up to 5 years.

The components of lease expense were as follows:

<i>(DOLLARS IN MILLIONS)</i>	December 31,	
	2021	2020
Operating lease cost	\$ 168	\$ 62
Financing lease cost	7	4

Supplemental cash flow information related to leases was as follows:

<i>(DOLLARS IN MILLIONS)</i>	December 31,	
	2021	2020
Cash paid for amounts included in the measurement of lease liabilities		
Operating cash flow for operating leases	\$ 129	\$ 52
Financing cash flow for finance leases	6	4
Right-of-use assets obtained in exchange for lease obligations		
Operating leases	88	63
Finance leases	15	6

Supplemental balance sheet information related to leases was as follows:

<i>(DOLLARS IN MILLIONS)</i>	December 31,	
	2021	2020
Operating Leases		
Operating lease right-of-use assets	\$ 767	\$ 299
Current operating lease obligations ⁽²⁾	109	41
Operating lease liabilities	670	265
Total operating lease liabilities	\$ 779	\$ 306
Financing Leases		
Financing lease right-of-use assets ⁽¹⁾	\$ 21	\$ 8
Current financing lease obligations ⁽²⁾	5	3
Financing lease liabilities ⁽³⁾	15	4
Total financing lease liabilities	\$ 20	\$ 7

- (1) Presented in Other assets in the Consolidated Balance Sheets.
(2) Presented in Other current liabilities in the Consolidated Balance Sheets.
(3) Presented in Other liabilities in the Consolidated Balance Sheets.

Weighted average remaining lease term and discount rate were as follows:

	December 31,	
	2021	2020
Weighted average remaining lease term in years		
Operating leases	11.1	10.5
Finance leases	4.3	2.9
Weighted average discount rate		
Operating leases	2.73 %	3.82 %
Finance leases	1.85 %	1.81 %

Maturities of lease liabilities as of December 31, 2021 were as follows:

<i>(DOLLARS IN MILLIONS)</i>	Operating Leases	Financing Leases	Total
2022	\$ 127	\$ 7	\$ 134
2023	97	5	102
2024	82	3	85
2025	78	2	80
2026	73	2	75
Thereafter	459	2	461
Total undiscounted liabilities	916	21	937
Less: Imputed interest	(137)	(1)	(138)
Total lease liabilities	\$ 779	\$ 20	\$ 799

Right-of-use assets and lease liabilities acquired from N&B were remeasured at the present value of the future minimum lease payments over the remaining lease term utilizing an updated incremental borrowing rate of the Company as if the acquired leases were new leases as of the Closing Date. Right-of-use assets were further adjusted for any off-market terms of the lease. The remaining lease term is based on the remaining term at the Closing Date plus any renewal or extension options that the Company is reasonably certain will be exercised. Additionally, the Company has elected short-term lease treatment for those acquired lease contracts which, at the Closing Date, have a remaining lease term of 12 months or less. For the leases acquired through the Transactions, the Company will retain the previous lease classification. This resulted in an increase in both right-of-use assets and operating lease liabilities of approximately \$525 million and \$523 million, respectively, as of the Closing Date.

NOTE 8. TANGIBLE EQUITY UNITS

On September 17, 2018, the Company issued and sold 16,500,000, 6.00% tangible equity units (“TEUs”) at \$50 per unit and received proceeds of approximately \$800 million, net of discounts and issuance costs of approximately \$25 million. Each TEU is comprised of: (i) a prepaid SPC to be settled by delivery of a specified number of shares of the Company’s common stock, and (ii) a senior amortizing note (“Amortizing Note”), with an initial principal amount of \$8.45 and a final installment payment date of September 15, 2021. The Company paid equal quarterly cash installments of \$0.75 per Amortizing Note on March 15, June 15, September 15, and December 15 of each year, with the exception of the first installment payment of \$0.7333 per Amortizing Note which was due on December 15, 2018. In the aggregate, the annual quarterly cash installments will be equivalent to 6.00% per year. Each installment payment constitutes a payment of interest and a partial repayment of principal, computed at an annual rate of 3.79%. Each TEU may be separated by a holder into its constituent SPC and Amortizing Note after the initial issuance date of the TEUs, and the separate components may be combined to create a TEU after the initial issuance date, in accordance with the terms of the SPC. The TEUs were listed on the New York Stock Exchange under the symbol “IFFT”.

The proceeds from the issuance of the TEUs were allocated to equity and debt based on the relative fair value of the respective components of each TEU as follows:

<i>(DOLLARS IN MILLIONS, EXCEPT FAIR VALUE PER TEU)</i>	SPC		Amortizing Note		Total	
Fair Value per TEU	\$	42	\$	8	\$	50
Gross Proceeds	\$	686	\$	139	\$	825
Less: Issuance costs		21		4		25
Net Proceeds	\$	665	\$	135	\$	800

The net proceeds of the SPCs were recorded as additional paid in capital, net of issuance costs. The net proceeds of the Amortizing Notes were recorded as debt, with deferred financing costs recorded as a reduction of the carrying amount of the debt in the Company’s Consolidated Balance Sheets. Deferred financing costs related to the Amortizing Notes are amortized through the maturity date using the effective interest rate method.

On September 14, 2021, the Company notified holders of the TEUs that the final settlement rate in respect of each SPC was 0.330911 shares of IFF’s common stock. On September 15, 2021, 5,460,031 shares of IFF’s common stock were issued in settlement of the SPCs. The SPC conversion factor was based on the 20 day volume-weighted average price (“VWAP”) per share of the Company’s common stock as follows:

VWAP of IFF Common Stock	Common Stock Issued
Equal to or greater than \$159.54	0.3134 shares (minimum settlement rate)
Less than \$159.54, but greater than \$130.25	\$50 divided by VWAP
Less than or equal to \$130.25	0.3839 shares (maximum settlement rate)

NOTE 9. DEBT

Debt consisted of the following at December 31:

<i>(DOLLARS IN MILLIONS)</i>	Effective Interest Rate	2021	2020
2021 Euro Notes ⁽¹⁾	0.82 %	\$ —	\$ 368
2022 Notes ⁽³⁾	0.69 %	300	—
2023 Notes ⁽¹⁾	3.30 %	300	299
2024 Euro Notes ⁽¹⁾	1.88 %	565	614
2025 Notes ⁽³⁾	1.22 %	1,001	—
2026 Euro Notes ⁽¹⁾	1.93 %	900	978
2027 Notes ⁽³⁾	1.56 %	1,218	—
2028 Notes ⁽¹⁾	4.57 %	397	397
2030 Notes ⁽³⁾	2.21 %	1,511	—
2040 Notes ⁽³⁾	3.04 %	775	—
2047 Notes ⁽¹⁾	4.44 %	494	494
2048 Notes ⁽¹⁾	5.12 %	786	786
2050 Notes ⁽³⁾	3.21 %	1,572	—
2018 Term Loan Facility ⁽¹⁾	3.65 %	—	240
2022 Term Loan Facility ⁽¹⁾	1.73 %	—	199
2024 Term Loan Facility ⁽³⁾	1.43 %	625	—
2026 Term Loan Facility ⁽³⁾	1.82 %	625	—
Amortizing Notes ⁽¹⁾	6.09 %	—	36
Commercial Paper ⁽⁴⁾	— %	324	—
Bank overdrafts and other		7	2
Total debt		\$ 11,400	\$ 4,413
Less: Short term borrowings ⁽²⁾		(632)	(634)
Total Long-term debt		\$ 10,768	\$ 3,779

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

(2) Includes bank borrowings, overdrafts, current portion of long-term debt and commercial paper.

(3) Assumed by the Company as part of the N&B Merger and recorded at fair value.

(4) The effective interest rate of commercial paper issuances fluctuate as short-term interest rates and demand fluctuate, and deferred debt issuance costs are immaterial.

Additionally, the effective interest rate of commercial paper is not meaningful as issuances do not materially differ from short-term interest rates. Proceeds from the issuance of commercial paper include \$75 million of proceeds with original maturities greater than three months.

Term Loan Facility and Senior Notes assumed as part of the N&B Merger

Following the Merger, the Company assumed the indebtedness incurred by N&B in the debt financings completed prior to the Distribution. This indebtedness includes (i) a Term Loan Facility of \$1.250 billion pursuant to the term loan credit agreement (the "N&B Term Loan Facility") and (ii) a series of Senior Notes in the aggregate amount of \$6.250 billion with maturities ranging from 2 to 30 years as further described below. N&B's indebtedness raised prior to the Merger was used to finance the Special Cash Payment to DuPont, which has been paid, and for the satisfaction of the related transaction fees and expenses. See Note 3 for additional information.

N&B Term Loan Facility

The N&B Term Loan Facility was funded on February 1, 2021, and provides for a senior unsecured term loan credit facility in an aggregate principal amount of \$1.250 billion, comprised of a \$625 million three-year tranche ("2024 Term Loan Facility") and a \$625 million five-year tranche ("2026 Term Loan Facility"). Interest for each tranche equals, at the Company's option, a per annum rate equal to either (x) an adjusted LIBOR rate plus an applicable margin varying from 0.750% to 2.000% for the three-year tranche and from 1.125% to 2.375% for the five-year tranche or (y) a base rate plus an applicable margin varying from 0.000% to 1.000% for the three-year tranche and from 0.125% to 1.375% for the five-year tranche, in each case depending on the class of IFF's non-credit-enhanced, senior unsecured long-term debt credit rating.

The 2024 Term Loan Facility and 2026 Term Loan Facility are subject to customary affirmative and negative covenants and events of default after the Closing Date of the Merger. The 2024 Term Loan Facility and 2026 Term Loan Facility are also subject to a financial covenant requiring maintenance of a maximum consolidated leverage ratio of 4.75x until and including the end of the third full fiscal quarter after the Closing Date of the Merger, stepping down to 4.50x until and including the end of the sixth full fiscal quarter after the Closing Date of the Merger, stepping down further to 3.75x until and including the end of the ninth full fiscal quarter after the Closing Date of the Merger and stepping down further to 3.50x thereafter, with a step-up in connection with certain qualifying acquisitions. The Company was in compliance with all covenants as of December 31, 2021.

N&B Senior Notes

On September 16, 2020, N&B issued \$6.250 billion in aggregate principal amount of senior unsecured notes consisting of: (i) \$300 million senior unsecured notes maturing on September 15, 2022 (the “2022 Notes”), bearing interest at a rate of 0.697% per year, payable semi-annually on March 15 and September 15 of each year, beginning March 15, 2021; (ii) \$1.000 billion senior unsecured notes maturing on October 1, 2025 (the “2025 Notes”), bearing interest at a rate of 1.230% per year, payable semi-annually on April 1 and October 1 of each year, beginning April 1, 2021; (iii) \$1.200 billion senior unsecured notes maturing on October 15, 2027 (the “2027 Notes”), bearing interest at a rate of 1.832% per year, payable semi-annually on April 15 and October 15 of each year, beginning April 15, 2021; (iv) \$1.500 billion senior unsecured notes maturing on November 1, 2030 (the “2030 Notes”), bearing interest at a rate of 2.300% per year, payable semi-annually on May 1 and November 1 of each year, beginning May 1, 2021; (v) \$750 million senior unsecured notes maturing on November 15, 2040 (the “2040 Notes”), bearing interest at a rate of 3.268% per year, payable semi-annually on May 15 and November 15 of each year, beginning May 15, 2021, and; (vi) \$1.500 billion senior unsecured notes maturing on December 1, 2050 (the “2050 Notes”), bearing interest at a rate of 3.468% per year, payable semi-annually on June 1 and December 1 of each year, beginning June 1, 2021.

Interest on each series of notes began accruing from September 16, 2020 payable semi-annually in arrears as described above. Interest is computed on the basis of a 360-day year comprised of twelve 30-day months.

Revolving Credit Facility

On July 28, 2021, the Company and certain of its subsidiaries entered into the Third Amended and Restated Credit Agreement which amended and restated the Company’s Revolving Credit Facility (previously and more recently amended and restated as of August 25, 2020) among the Company, certain of its subsidiaries, the banks, financial institutions and other institutional lenders party thereto, and Citibank, N.A. as administrative agent.

The interest rate on the Revolving Credit Facility is, at the applicable borrower's option, a per annum rate equal to either (x) an eurocurrency rate plus an applicable margin varying from 1.000% to 1.625% or (y) a base rate plus an applicable margin varying from 0.000% to 0.625%, in each case depending on the public debt ratings for non-credit enhanced long-term senior unsecured debt issued by the Company.

The Revolving Credit Facility is available for general corporate purposes of each borrower and its subsidiaries. The obligations under the Revolving Credit Facility are unsecured and the Company has guaranteed the obligations of each other borrower under the Revolving Credit Facility. The Company pays a commitment fee on the aggregate unused commitments; such fee is not material. The Revolving Credit Agreement contains various covenants, limitations and events of default customary for similar facilities for similarly rated borrowers, including a maximum permitted ratio of Net Debt to Consolidated EBITDA of 4.75x as of December 31, 2021, with step-downs to 3.50x over time (with a step-up if the Company consummates certain qualifying acquisitions).

In connection with the Revolving Credit Facility, the Company incurred \$1 million of debt issuance costs. As of December 31, 2021, the Company was in compliance with all covenants under this Revolving Credit Facility. As of December 31, 2021, total availability under the Revolving Credit Facility was \$2.000 billion, with no outstanding borrowings. Under the amended terms of the Revolver Credit Agreement, the Revolving Credit Facility increased from \$1.000 billion to \$2.000 billion, maturing on July 28, 2026. At the option of the Company, the facility may be increased to \$2.500 billion subject to certain conditions. As the Revolving 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.

2018 Senior Unsecured Notes

On September 25, 2018 the Company issued €300 million aggregate principal amount of senior unsecured notes that matured on September 25, 2021 (the “2021 Euro Notes”). The 2021 Notes bore interest at a rate of 0.5% per year, payable annually on September 25 of each year, beginning September 25, 2019. Total proceeds from the issuance of the 2021 Notes, net of underwriting discounts and offering costs, were €298 million (\$350 million in USD). During the third quarter of 2021, the Company repaid the 2021 Euro Notes in a payment of €300 million. The repayment on the 2021 Euro Notes was funded primarily from the Company's existing cash balances, with the remainder coming from the issuance of \$800 million of commercial paper.

On September 25, 2018, the Company issued €800 million aggregate principal amount of senior unsecured notes that mature on September 25, 2026 (the "2026 Euro Notes"). The 2026 Notes bear interest at a rate of 1.8% per year, payable annually on September 25 of each year, beginning September 25, 2019. Total proceeds from the issuance of the 2026 Notes, net of underwriting discounts and offering costs, were €794 million (\$932 million in USD).

On September 26, 2018, the Company issued \$400 million aggregate principal amount of senior unsecured notes that mature on September 26, 2028 (the "2028 Notes"). The 2028 Notes bear interest at a rate of 4.45% per year, payable semi-annually on March 26 and September 26 of each year, beginning March 26, 2019. Total proceeds from the issuance of the 2028 Notes, net of underwriting discounts and offering costs, were \$397 million.

On September 26, 2018, the Company issued \$800 million aggregate principal amount of senior unsecured notes that mature on September 26, 2048 (the "2048 Notes" and collectively with the 2021 Euro Notes, 2026 Euro Notes, 2020 Notes, 2028 Notes, the "2018 Senior Unsecured Notes"). The 2048 Notes bear interest at a rate of 5.0% per year, payable semi-annually on March 26 and September 26 of each year, beginning March 26, 2019. Total proceeds from the issuance of the 2048 Notes, net of underwriting discounts and offering costs, were \$787 million.

As discussed in Note 16, the 2021 Euro Notes and 2026 Euro Notes have been designated as a hedge of the Company's net investment in certain subsidiaries.

2023 Notes

On April 4, 2013, the Company issued \$300 million face amount of 3.20% Senior Notes ("2023 Notes") due 2023 at a discount of less than \$1 million. The Company received proceeds related to the issuance of these 2023 Notes of \$298 million which was net of the less than \$1 million discount and a \$2 million underwriting discount (recorded as deferred financing costs). In addition, the Company incurred \$1 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 2023 Notes. The 2023 Notes 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 2023 Notes mature on May 1, 2023.

2024 Euro Notes

On March 14, 2016, the Company issued €500 million face amount of 1.75% Senior Notes ("2024 Euro Notes") due 2024 at a discount of €1 million. The Company received proceeds related to the issuance of these 2024 Euro Notes of €496 million which was net of the €1 million discount and €3 million underwriting discount (recorded as deferred financing costs). In addition, the Company incurred \$1 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 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 2024 Euro Notes 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 2024 Euro Notes will mature on March 14, 2024.

As discussed in Note 16, the 2024 Euro Notes have been designated as a hedge of the Company's net investment in certain subsidiaries.

2047 Notes

On May 18, 2017, the Company issued \$500 million face amount of 4.375% Senior Notes ("2047 Notes") due 2047 at a discount of \$2 million. The Company received proceeds related to the issuance of these 2047 Notes of \$494 million which was net of the \$2 million discount and \$4 million in underwriting fees (recorded as deferred financing costs). In addition, the Company incurred \$1 million in legal and professional costs associated with the issuance and such costs were recorded as deferred financing costs. In connection with the debt issuance, the Company entered into pre-issuance hedging transactions that were settled upon issuance of the debt and resulted in a loss of approximately \$5 million. The discount, deferred financing costs and pre-issuance hedge loss are being amortized as interest expense over the 30 year term of the debt. The 2047 Notes bear interest at a rate of 4.375% per annum, with interest payable semi-annually on June 1 and December 1 of each year, commencing on December 1, 2017. The 2047 Notes will mature on June 1, 2047.

2018 Term Loan Facility

On June 6, 2018, the Company entered into a Term Loan Credit Agreement (as amended on July 13, 2018, January 17, 2020 and August 25, 2020, the "2018 Term Loan Credit Agreement") with Morgan Stanley Senior Funding, Inc., as the administrative agent, and the lenders party thereto, pursuant to which the lenders thereunder committed to provide, a senior unsecured term loan facility in an original aggregate principal amount of up to \$350 million (the "2018 Term Loan Facility"), which matured on October 1, 2021. In 2019, the Company made payments of \$110 million on the 2018 Term Loan Facility, and during the third quarter of 2021, the Company repaid the remainder of the 2018 Term Loan Facility in two payments of \$120 million each. The repayments on the 2018 Term Loan Facility were funded primarily from the Company's existing cash balances, with the remainder coming from the issuance of \$800 million of commercial paper.

2022 Term Loan Facility

On May 15, 2020, the Company entered into a Term Loan Agreement (as amended on August 25, 2020, the "2022 Term Loan Agreement") with China Construction Bank Corporation, New York Branch, as administrative agent, and the lenders party thereto, pursuant to which the lenders thereunder have committed to provide a senior unsecured two year term loan facility in an aggregate principal amount of up to \$200 million (the "2022 Term Loan Facility"). The loans under the 2022 Term Loan Agreement bore interest, at the Company's option, at a per annum rate equal to either (x) an adjusted LIBOR rate plus an applicable margin varying from 1.225% to 2.475% or (y) a base rate plus an applicable margin varying from 0.225% to 1.475%, in each case depending on the public debt ratings for non-credit enhanced long-term senior unsecured debt issued by the Company. The Company could voluntarily prepay the term loans without premium or penalty, with the balance payable on the second anniversary of the funding date. There is no required amortization under the 2022 Term Loan Agreement.

During the fourth quarter of 2021, the Company elected to voluntarily prepay the outstanding balance of the 2022 Term Loan Facility.

Commercial Paper

During 2021, the Company had gross issuances of \$800 million and repayments of \$476 million under the commercial paper program. The commercial paper issued had original maturities of less than 120 days. There were no commercial paper issuances in 2020.

The Commercial Paper Program is backed by the borrowing capacity available under the Revolving Credit Facility. The effective interest rate of commercial paper issuances does not materially differ from short-term interest rates, which fluctuate due to market conditions and as a result may impact our interest expense.

Redemption Provisions

The 2023 Notes, 2024 Euro Notes, 2026 Euro Notes, 2028 Notes, 2047 Notes, and 2048 Notes (collectively, the "Notes") share the same redemption provisions. Upon 30 days' notice to holders of the Notes, the Company may redeem the Notes 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 Notes. However, no make-whole premium will be paid for redemptions of each note on or after the following date:

Note	Redemption Date
2023 Notes	February 1, 2023
2024 Euro Notes	December 14, 2023
2026 Euro Notes	June 25, 2026
2028 Notes	June 26, 2028
2047 Notes	December 1, 2046
2048 Notes	March 26, 2048

The indenture of the Notes 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 Notes below investment grade rating by both Moody's Investors Services, Inc., Standard & Poor's Ratings Services and Fitch Ratings Inc. 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 Notes, plus accrued and unpaid interest to the date of repurchase.

The 2022 Notes, 2025 Notes, 2027 Notes, 2030 Notes, 2040 Notes, and 2050 Notes (collectively, the "N&B Senior Notes"), assumed as a result of the Merger, may be redeemed by the issuer at any time at the greater of 100% or the discounted present value of the remaining scheduled payments of principal and interest from the redemption date to the maturity date at Treasury Rate (as defined in the applicable indenture) plus (i) 10 basis points in the case of the 2022 Notes, (ii) 15 basis points in the case of the 2025 Notes, (iii) 25 basis points in the case of the 2027 Notes, (iv) 25 basis points in the case of the 2030 Notes, (v) 30 basis points in the case of the 2040 Notes and (vi) 30 basis points in the case of the 2050 Notes. The redemption dates of each of the N&B Senior Notes are provided in the table below:

Notes	Redemption Date
2022 Notes	September 15, 2022
2025 Notes	September 1, 2025
2027 Notes	August 15, 2027
2030 Notes	August 1, 2030
2040 Notes	May 15, 2040
2050 Notes	June 1, 2050

On or after the applicable redemption dates, each series of the N&B Senior Notes may be redeemed by the issuer at a redemption price equal to 100% of the principal amount of the N&B Senior Notes to be redeemed, plus accrued and unpaid interest on the notes to be redeemed to, but excluding, the redemption date.

Outstanding Borrowings

The following table shows the contractual maturities of the Company's long-term debt as of December 31, 2021.

	Payments Due by Period				
	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
<i>(DOLLARS IN MILLIONS)</i>					
Total Outstanding Borrowings	\$ 10,971	\$ 300	\$ 1,491	\$ 2,530	\$ 6,650

NOTE 10. INCOME TAXES

Earnings before income taxes consisted of the following:

	December 31,		
	2021	2020	2019
<i>(DOLLARS IN MILLIONS)</i>			
U.S. loss before taxes	\$ (493)	\$ (142)	\$ (110)
Foreign income before taxes	847	583	667
Total income before taxes	\$ 354	\$ 441	\$ 557

The income tax provision consisted of the following:

	December 31,		
	2021	2020	2019
<i>(DOLLARS IN MILLIONS)</i>			
Current tax provision			
Federal	\$ (5)	\$ (9)	\$ 10
State and local	13	1	—
Foreign	303	150	146
Total current tax provision	311	142	156
Deferred tax provision			
Federal	(121)	(8)	(41)
State and local	(34)	(2)	8
Foreign	(81)	(58)	(26)
Total deferred tax benefit	(236)	(68)	(59)
Total provision for income taxes	\$ 75	\$ 74	\$ 97

Effective Tax Rate Reconciliation

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

	December 31,		
	2021	2020	2019
Statutory tax rate	21.0 %	21.0 %	21.0 %
Difference in effective tax rate on foreign earnings and remittances ⁽¹⁾	8.0	(6.9)	(6.8)
Tax benefit from supply chain optimization	(5.8)	(5.0)	(1.0)
Unrecognized tax benefit, net of reversals	0.7	5.7	3.4
Tax impact on gains on business disposal	4.0	—	—
Deferred taxes on deemed repatriation	2.7	(0.2)	0.8
Global intangible low-taxed income	4.1	5.3	—
Foreign-derived intangible income	(1.6)	(0.3)	(0.3)
U.S. foreign tax credit - general limitation	(3.1)	(1.9)	(1.2)
Research and development credit	(1.4)	(1.0)	(0.9)
Acquisition costs	2.4	1.0	0.5
Establishment (release) of valuation allowance on state deferred	(3.0)	(0.4)	1.7
State and local taxes	(4.8)	(0.6)	(0.8)
Other, net	(2.0)	0.1	1.0
Effective tax rate	<u>21.2 %</u>	<u>16.8 %</u>	<u>17.4 %</u>

(1) For 2021, the rate includes rate change impacts related to the Netherlands and United Kingdom.

The effective tax rate reflects the impact of an unfavorable mix of earnings, higher repatriation costs and the cost of global intangible low-taxed income ("GILTI"), partially offset by tax benefits related to supply chain optimization and credits.

On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act") that significantly revised the U.S. tax code effective January 1, 2018. The Tax Act created significant international tax provisions, including GILTI. The Company has elected to treat GILTI as a current period cost if and when incurred. This tax position resulted in a net \$15 million income tax expense for the year ended December 31, 2021, which includes a provision to return adjustment.

The U.S. consolidated group has historically generated taxable income after the inclusion of foreign dividends which has allowed the Company to realize its federal deferred tax assets. Foreign dividends are subject to a 100% dividends received deduction under the Tax Act and do not serve as a source of federal taxable income. However, as of December 31, 2021 the U.S. consolidated group is in a cumulative income position, and is expected to continue to be in a cumulative income position primarily due to the inclusion of GILTI and expects to realize tax benefits for the reversal of temporary differences, including the significant deferred tax liabilities associated with the Merger with N&B.

Further, as of December 31, 2021 the Company has maintained a valuation allowance of approximately \$2 million on certain state tax attributes based on a state taxable income forecast. The main inputs into the forecast are the 2021 taxable income projections. Changes in the performance of the North American business, the Company's transfer pricing policies and adjustments to the Company's U.S. tax profile could impact the estimate.

Deferred Taxes

The deferred tax assets and liabilities consisted of the following amounts:

<i>(DOLLARS IN MILLIONS)</i>	December 31,	
	2021	2020
Employee and retiree benefits	\$ 148	\$ 108
Credit and net operating loss carryforwards	312	271
Intangible assets	—	10
Amortizable research and development expenses	42	30
Gain on foreign currency translation	—	46
Interest limitation	43	51
Inventory	32	14
Lease obligations	189	53
Other, net	79	23
Gross deferred tax assets	845	606
Property, plant and equipment, net	(265)	(60)
Intangible assets	(2,486)	(586)
Right-of-use assets	(187)	(53)
Loss on foreign currency translation	(30)	—
Deferred taxes on deemed repatriation	(81)	(46)
Gross deferred tax liabilities	(3,049)	(745)
Valuation allowance	(232)	(257)
Total net deferred tax liabilities	\$ (2,436)	\$ (396)

Net operating loss carryforwards were approximately \$272 million and \$246 million at December 31, 2021 and 2020, respectively. If unused, approximately \$105 million will expire between 2022 and 2041. The remainder, totaling approximately \$167 million, may be carried forward indefinitely. Tax credit carryforwards were approximately \$40 million and \$28 million at December 31, 2021 and 2020, respectively. If unused, the \$40 million will expire between 2022 and 2041.

Of the \$312 million deferred tax asset for net operating loss carryforwards and credits at December 31, 2021, the Company considers it unlikely that a portion of the tax benefit will be realized. Accordingly, a valuation allowance of approximately \$230 million on net operating loss carryforwards and \$2 million of tax credits has been established against these deferred tax assets.

Uncertain Tax Positions

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

<i>(DOLLARS IN MILLIONS)</i>	December 31,		
	2021	2020	2019
Balance of unrecognized tax benefits at beginning of year	\$ 99	\$ 75	\$ 51
Gross amount of increases in unrecognized tax benefits as a result of positions taken during a prior year ⁽¹⁾	42	11	20
Gross amount of decreases in unrecognized tax benefits as a result of positions taken during a prior year	(3)	—	(2)
Gross amount of increases in unrecognized tax benefits as a result of positions taken during the current year	5	24	13
The amounts of decreases in unrecognized benefits relating to settlements with taxing authorities	(1)	(2)	(3)
Reduction in unrecognized tax benefits due to the lapse of applicable statute of limitation	(12)	(9)	(4)
Balance of unrecognized tax benefits at end of year	\$ 130	\$ 99	\$ 75

(1) For 2021, the amount includes positions related to N&B opening balance sheet amounts.

At December 31, 2021, 2020 and 2019, there were approximately \$130 million, \$98 million and \$74 million, respectively, of unrecognized tax benefits recorded to Other liabilities and less than \$1 million recorded to Other current liabilities for 2021 and approximately \$1 million recorded to Other current liabilities for both 2020 and 2019. If these unrecognized tax benefits were recognized, all the benefits and related interest and penalties would be recorded as a benefit to income tax expense.

For the year ended December 31, 2021, the Company increased its liabilities for interest and penalties by approximately \$19 million, net, increased its liabilities for interest and penalties by approximately \$3 million, net for the year ended 2020, and increased its liabilities for interest and penalties by approximately \$11 million, net for the year ended 2019. At December 31, 2021, 2020 and 2019, the Company had accrued approximately \$36 million, \$17 million and \$14 million, respectively, of interest and penalties classified as Other liabilities, and less than \$1 million to Other current liabilities for December 31, 2021 and 2020. No such liabilities were accrued for the year ended December 31, 2019.

As of December 31, 2021, the Company's aggregate provision for unrecognized tax benefits, including interest and penalties, was approximately \$166 million, associated with various tax positions principally asserted in foreign jurisdictions, none of which were individually material.

Other

Tax benefits credited to Shareholders' equity were de minimis for the years ended December 31, 2021, 2020 and 2019 associated with stock option exercises and PRSU dividends.

The Company regularly repatriates earnings from non-U.S. subsidiaries. As the Company repatriates these funds to the U.S. they will be required to pay income taxes in certain U.S. states and applicable foreign withholding taxes during the period when such repatriation occurs. Accordingly, as of December 31, 2021, the Company had a deferred tax liability of approximately \$81 million for the effect of repatriating the funds to the U.S., attributable to various non-U.S. subsidiaries. There is no deferred tax liability associated with non-U.S. subsidiaries where we intend to indefinitely reinvest the earnings to fund local operations and/or capital projects.

The Company has ongoing income tax audits and legal proceedings which are at various stages of administrative or judicial review, 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 19.

The Company also has several other tax audits in process and has open tax years with various taxing jurisdictions that range primarily from 2011 to 2020. 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. NET INCOME PER SHARE

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

<i>(AMOUNTS IN MILLIONS EXCEPT PER SHARE AMOUNTS)</i>	December 31,		
	2021	2020	2019
Net Income			
Net income attributable to IFF stockholders	\$ 270	\$ 363	\$ 456
Adjustment related to (increase) decrease in redemption value of redeemable noncontrolling interests in excess of earnings allocated	(2)	2	(2)
Net income available to IFF stockholders	<u>\$ 268</u>	<u>\$ 365</u>	<u>\$ 454</u>
Shares			
Weighted average common shares outstanding (basic) ⁽¹⁾	243	112	112
Adjustment for assumed dilution ⁽²⁾ :			
Stock options and restricted stock awards	—	1	—
SPC portion of the TEUs	—	1	1
Weighted average shares assuming dilution (diluted)	<u>243</u>	<u>114</u>	<u>113</u>
Net Income per Share			
Net income per share - basic ⁽³⁾⁽⁴⁾	\$ 1.11	\$ 3.25	\$ 4.05
Net income per share - dilutive ⁽⁴⁾⁽⁵⁾	1.10	3.21	4.00

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- (1) On September 15, 2021, additional shares of IFF's common stock were issued in settlement of the SPC portion of the TEUs. For the years ended December 31, 2020 and 2019, the TEUs were assumed to be outstanding at the minimum settlement amount for basic earnings per share ("EPS"). See below for additional information.
 - (2) Effect of dilutive securities includes dilution under stock plans and incremental impact of TEUs. See below for additional information.
 - (3) For the year ended December 31, 2021, the basic net income per share cannot be recalculated based on the information presented in the table above due to the effects of rounding and change in presentation from thousands to millions between 2020 and 2021, respectively.
 - (4) For the year ended December 31, 2020, the basic and diluted net income per share cannot be recalculated based on the information presented in the table above due to the effects of rounding and change in presentation from thousands to millions between 2020 and 2021, respectively.
 - (5) For the year ended December 31, 2019, the diluted net income per share cannot be recalculated based on the information presented in the table above due to the effects of rounding and change in presentation from thousands to millions between 2020 and 2021, respectively.

As of the effective time of the Merger, each issued and outstanding share of common stock of N&B (except for shares of common stock of N&B held by N&B as treasury stock or by DuPont, which were canceled and ceased to exist and no consideration was delivered in exchange therefor) was converted into the right to receive one share of common stock of IFF. The Merger was completed in exchange for 141,740,461 shares of IFF common stock, par value \$0.125 per share (or cash payment in lieu of fractional shares), which had been approved in the special shareholder meeting that occurred on August 27, 2020 where IFF shareholders voted to approve the issuance of shares of IFF common stock in connection with the N&B Transaction, pursuant to the Merger Agreement. The shares issued in the Merger represented approximately 55.4% of the common stock of IFF on a fully diluted basis, after giving effect to the Merger, as of February 1, 2021.

As discussed in Note 8, the Company issued 16,500,000 TEUs, consisting of a prepaid SPC and a senior amortizing note, for net proceeds of approximately \$800 million on September 17, 2018. On September 14, 2021, the Company notified holders of the TEUs that the final settlement rate in respect of each SPC was 0.330911 shares of IFF's common stock. On September 15, 2021, 5,460,031 shares of IFF's common stock were issued in settlement of the SPCs. The SPC conversion factor is based on the VWAP per share of the Company's common stock. For purposes of calculating basic net income per share, the settlement rate of 0.330911 shares per SPC, the final settlement rate, was used on December 31, 2021 and 0.313400 shares per SPC was used on both December 31, 2020 and 2019. For purposes of calculating diluted earnings per share, the settlement rate of 0.330911 shares per SPC, the final settlement rate, was used on December 31, 2021 and 0.383900 shares per SPC was used on both December 31, 2020 and 2019.

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 as of December 31, 2021, less than \$0.04 per share as of December 31, 2020 and less than \$0.01 per share as of December 31, 2019, and for each year the number of PRS and PRSUs outstanding as of December 31, 2021, 2020 and 2019 was immaterial. Net income allocated to such PRS and PRSUs during 2021, 2020 and 2019 was not material.

There were no stock options or stock-settled appreciation rights ("SSARs") excluded from the computation of diluted net income per share at December 31, 2021, 2020 and 2019.

NOTE 12. SHAREHOLDERS' EQUITY

Dividends

Cash dividends declared per share were \$3.12, \$3.04 and \$2.96 for the years ended December 31, 2021, 2020 and 2019, respectively. The Consolidated Balance Sheets reflect \$201 million of dividends payable at December 31, 2021. This amount relates to a cash dividend of \$0.79 per share declared in December 2021 and paid in January 2022. Dividends declared, but not paid as of December 31, 2020 and December 31, 2019 were \$82 million (\$0.77 per share) and \$80 million (\$0.75 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 \$56 million available under the amended repurchase program as of October 31, 2017, the Board of Directors re-approved on November 1, 2017 a \$250 million share repurchase authorization and extension for a total value of \$300 million available under the program, which expires on November 1, 2022.

Based on the total remaining amount of \$280 million available under the repurchase program, 1,856,397 shares, or 0.8% of shares outstanding (based on the market price and weighted average shares outstanding as of December 31, 2021) could be repurchased under the program as of December 31, 2021.

As of May 7, 2018, the Company has suspended its share repurchases.

NOTE 13. 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 three 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 Statements of Income and Comprehensive Income (Loss) was as follows:

<i>(DOLLARS IN MILLIONS)</i>	December 31,		
	2021	2020	2019
Equity-based awards	\$ 54	\$ 36	\$ 34
Liability-based awards	8	4	4
Total stock-based compensation	62	40	38
Less tax benefit	(13)	(8)	(7)
Total stock-based compensation, net of tax	<u>\$ 49</u>	<u>\$ 32</u>	<u>\$ 31</u>

The shareholders of the Company approved the Company’s 2021 Stock Award and Incentive Plan (the “2021 Plan”) on May 5, 2021. The 2021 Plan replaced the Company’s 2015 Stock Award and Incentive Plan (the “2015 Plan”) and 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 2010 Plan for the sole purpose of funding deferrals under the IFF Share Fund).

Under the 2021 Plan, a total of 2,290,000 shares are authorized for issuance. At December 31, 2021, 1,601,749 shares were subject to outstanding awards and 2,631,269 shares remained available for future awards under all of the Company’s equity award plans, including the 2015 Plan and 2010 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.

With regard to the 2019-2021 cycle, the LTIP awards are earned based upon the achievement of: (i) the Company’s performance ranking of Total Shareholder Return as a percentile of the S&P 500 (“Relative TSR”) (representing one-half of the award value), and (ii) the Company’s achievement of a defined Leverage Ratio (representing one-half of the award value). For the 2020-2022 cycle, the LTIP awards are earned based on the achievement of: (i) an annual Leverage Ratio for 2020 (representing one-sixth of the award value), (ii) a 2-year cumulative Leverage Ratio for 2021-2022 (representing one-third of the award value), and (iii) Relative TSR targets (representing one-half of the award value). For the 2021-2023 cycle, the LTIP awards are earned based on the achievement of: (i) 3-year cumulative Leverage Ratio for 2021-2023 (representing one-half of the awards value), and (iii) Relative TSR targets (representing one-half of the award value).

The Leverage Ratio measures Net debt as compared to a measure profitability. 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 (Leverage Ratio targets for the applicable cycle) is recognized on a straight-line basis over the vesting period based on the probable outcome of the performance condition.

The 2017-2019 cycle concluded at the end of 2019 and an aggregate 14,579 shares of common stock were issued in March 2020. The 2018-2020 cycle concluded at the end of 2020 and an aggregate 7,484 shares of common stock were issued in March 2021. The 2019-2021 cycle concluded at the end of 2021 and no shares of common stock will be issued in March 2022.

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.

Transaction with Nutrition and Biosciences, Inc.

In connection with the Merger, N&B employees’ outstanding (unvested and/or vested and unexercised) equity awards were converted into equity awards denominated in shares of the Company’s common stock based on a defined exchange ratio. N&B employees’ equity awards were converted into 335,347 IFF stock options, 258,572 IFF RSU awards and 5,816 IFF SAR awards.

For converted RSU awards, the fair value of the equity award is based on the Closing Date market price of IFF stock. For converted stock options and SAR awards, the exercise price per share of the converted award is equal to the exercise price per share of the N&B award immediately prior to the Merger divided by the exchange ratio. The fair value of the IFF stock options and SAR awards that the Company issued in connection with the Merger was estimated using the Black Scholes model.

The converted awards were generally issued with the same terms and conditions as were applicable prior to the Transaction. At the Closing Date, approximately \$25 million of the fair value of the replacement awards granted to N&B employees was attributable to pre-combination service and was included in the purchase price. As of December 31, 2021, post-combination expense of approximately \$3 million is expected to be recognized related to the replacement awards over the remaining post-combination service period, approximately up to three years.

SSARs and Options

SSARs are a contractual right to receive the value, in shares of Company stock, of the appreciation in our stock price from the grant date to the date the SSARs are exercised by the participant. SSARs granted become exercisable on the third anniversary of the grant date and have a maximum term of seven years. SSARs do not require a financial investment by the SSARs grantee. Stock options require the participant to pay the exercise price at the time they exercise their stock options. No stock options were granted in 2021, 2020 or 2019.

SSARs and options activity was as follows:

<i>(SHARE AMOUNTS IN THOUSANDS)</i>	Shares Subject to SSARs/Options	Weighted Average Exercise Price	SSARs/ Options Exercisable
December 31, 2020	42	\$ 135.01	1
Granted	3	144.67	
Exercised	(90)	110.28	
Canceled	(9)	101.19	
Assumed	341		
December 31, 2021	287	\$ 107.48	235
Expected to Vest at December 31, 2021	44	\$ 95.94	

The weighted average exercise price of SSARs and options exercisable at December 31, 2021, 2020 and 2019 were \$109.77, \$118.10 and \$118.10, respectively.

SSARs and options outstanding at December 31, 2021 was as follows:

<u>Price Range</u>	Number Outstanding (in thousands)	Weighted Average Remaining Contractual Life (in years)	Weighted Average Exercise Price	Aggregate Intrinsic Value (in millions)
Over \$65	287	5.04	\$ 107.48	\$ 12

SSARs and options exercisable as of December 31, 2021 was as follows:

<u>Price Range</u>	Number Exercisable (in thousands)	Weighted Average Remaining Contractual Life (in years)	Weighted Average Exercise Price	Aggregate Intrinsic Value (in millions)
Over \$65	235	4.65	\$ 109.77	\$ 10

The total intrinsic value of options/SSARs exercised during 2021 was approximately \$3 million and was not material for 2020 and 2019.

As of December 31, 2021, the total unrecognized compensation cost related to non-vested SSARs granted was less than \$1 million; such cost is expected to be recognized over a period of approximately two years.

Restricted Stock Units

The Company has granted RSUs to eligible employees and members of the Board of Directors. Such RSUs are subject to forfeiture if certain conditions are not met. RSUs principally vest 100% at the end of three 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:

<i>(SHARE AMOUNTS IN THOUSANDS)</i>	Number of Shares	Weighted Average Grant Date Fair Value Per Share
December 31, 2020	525	\$ 126.62
Granted	344	136.71
Vested	(314)	119.99
Forfeited	(37) -37000	128.79
Assumed	259	
December 31, 2021	<u>777</u>	<u>\$ 126.20</u>

The total fair value of RSUs that vested during the year ended December 31, 2021 was \$44 million.

As of December 31, 2021, there was \$42 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 approximately two 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 following table summarizes the Company's PRSU activity for the years ended December 31, 2021, 2020 and 2019:

<i>(DOLLARS IN MILLIONS)</i>	Issued Shares	Aggregate Purchase Price	Covered Shares
2021	61,870	\$ 9	30,935
2020	66,160	\$ 9	33,080
2019	61,991	\$ 9	30,996

PRSU activity was as follows:

<i>(SHARE AMOUNTS IN THOUSANDS)</i>	Number of Shares	Weighted Average Grant Date Fair Value Per Share
December 31, 2020	193	\$ 136.37
Granted	62	144.67
Vested	(95)	138.41
Forfeited	(5)	141.81
December 31, 2021	<u>155</u>	<u>\$ 138.36</u>

The total fair value of PRSUs that vested during the year ended December 31, 2021 was \$13 million.

As of December 31, 2021, there was \$5 million of total unrecognized compensation cost related to non-vested PRSUs granted under the equity incentive plans; such cost is expected to be recognized over a weighted average period of approximately two 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:

<i>(SHARE AMOUNTS IN THOUSANDS)</i>	Cash RSUs	Weighted Average Fair Value Per Share
December 31, 2020	111	\$ 108.84
Granted	51	150.65
Vested	(37)	141.58
Forfeited	(9)	140.43
December 31, 2021	116	\$ 150.65

The total fair value of Cash RSUs that vested during the year ended December 31, 2021 was \$5 million.

As of December 31, 2021, there was \$8 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 approximately two years. The aggregate compensation cost will be adjusted based on changes in the Company's stock price.

NOTE 14. SEGMENT INFORMATION

During the first quarter of 2021, the Company completed its Merger with N&B. Following the Merger, the Company reorganized its reportable segments and is now organized into four reportable operating segments: Nourish, Health & Biosciences ("H&B"), Scent and Pharma Solutions. These segments align with the internal structure to manage these businesses. The Company's Chief Operating Decision Maker regularly reviews financial information to allocate resources and assess performance utilizing these reorganized segments. Therefore, beginning in the first quarter of 2021, the Company reported its financial performance based on its new segments. The Company recast certain prior period amounts to conform to the way the Company is internally managed and how the Company monitors segment performance during the current fiscal year. Prior to the realignment, the Company operated and managed its business as two operating and reportable segments: Taste and Scent.

Nourish combines the majority of IFF's legacy Taste segment and N&B's Food & Beverage segment. It is comprised of three business units, Ingredients, Flavors and Food Designs, with a diversified portfolio across natural and plant-based specialty food ingredients, flavor compounds, and savory solutions and inclusions, respectively. Ingredients provide texturizing solutions to the food industry, food protection solutions used in food and beverage products, specialty soy and pea protein with value-added formulations, emulsifiers and sweeteners. Flavors provide a range of flavor compounds and natural taste solutions that are ultimately used by IFF's customers in savory products, beverages, sweets, and dairy products. Flavors also provide value-added spices and seasoning ingredients for meat, food service, convenience, alternative protein and culinary products. Food Designs provide savory solution products such as spices, sauces, marinades and mixtures. Additionally, Food Designs provide inclusion products that help with taste and texture by, among other things, combining flavorings with fruit, vegetables, and other natural ingredients for a wide range of food products, such as health snacks, baked goods, cereals, pastries, ice cream and other dairy products.

Health & Biosciences is comprised of six business units, Health, Cultures & Food Enzymes, Home & Personal Care, Animal Nutrition, Grain Processing and Microbial Control, with a biotechnology-driven portfolio of products that serve the health and wellness, food, consumer and industrial markets. Products within this portfolio range from enzymes, food cultures, probiotics and specialty ingredients for non-food applications. Health provides ingredients for dietary supplements, food and beverage, specialized nutrition and pharma. Cultures & Food Enzymes provide products that aim to serve the global demand for healthy, natural, clean label and fermented food for fresh dairy, cheese, bakery and brewing products. This is accomplished by providing IFF's customers with products that allow for extended shelf life and stability, which help to improve customers' products and performance. The business unit's enzyme solution also allows IFF's customers to provide low sugar, high fiber and lactose-free dairy products. Home & Personal Care produces enzymes for detergents, cleaning and textile processing products in the laundry, dishwashing, textiles and industrials and personal care markets that help to enhance product and process performances. Animal Nutrition produces enzymes that help to improve the product and process performance of animal feed products, which aim to lessen environmental impact by reducing farm waste. Grain Processing produces enzymes for biofuel production and carbohydrate processing. Microbial Control produces biocides for controlling microbial populations for oil and gas production, home and personal care and industrial preservation markets.

Scent 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 fragrance 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.

Pharma Solutions is comprised of N&B's historical Pharma Solutions business. The Pharma Solutions business produces a vast portfolio including cellulosics and seaweed-based pharma excipients, used to improve the functionality and delivery of active pharmaceutical ingredients, including controlled or modified drug release formulations, and enabling the development of more effective pharmaceutical finished dosage formats. Pharma Solutions excipients are used in prescription and over-the-counter pharmaceuticals and dietary supplements. Pharma Solutions products also serve a variety of other specialty and industrial end-uses including coatings, inks, electronics, agriculture, and consumer products.

Effective in the first quarter of 2021, management elected to change the profit or loss measure of the Company's reportable segments from Segment Operating Profit to Segment Adjusted Operating EBITDA for internal reporting and performance measurement purposes. This change was made to enhance the transparency and visibility of the underlying operating performance of each segment. The Company's Chief Operating Decision Maker evaluates the performance of these reportable operating segments based on Segment Adjusted Operating EBITDA, which is defined as Income Before Taxes before depreciation and amortization expense, interest expense, restructuring and other charges and certain non-recurring items. Prior period amounts have been recast to reflect these changes in segment profitability measures.

Reportable segment information is as follows:

<i>(DOLLARS IN MILLIONS)</i>	December 31,		
	2021	2020	2019
Net sales			
Nourish	\$ 6,264	\$ 2,886	\$ 2,978
Health & Biosciences	2,329	134	129
Scent	2,254	2,064	2,033
Pharma Solutions	809	—	—
Consolidated	<u>\$ 11,656</u>	<u>\$ 5,084</u>	<u>\$ 5,140</u>
		December 31,	
<i>(DOLLARS IN MILLIONS)</i>		2021	2020
Segment assets			
Nourish		\$ 17,449	\$ 8,534
Health & Biosciences		14,774	1,375
Scent		4,078	3,646
Pharma Solutions		3,357	—
Consolidated		<u>\$ 39,658</u>	<u>\$ 13,555</u>

	December 31,		
	2021	2020	2019
<i>(DOLLARS IN MILLIONS)</i>			
Segment Adjusted Operating EBITDA:			
Nourish	\$ 1,172	\$ 599	\$ 658
Health & Biosciences	625	40	33
Scent	463	416	425
Pharma Solutions	165	—	—
Total	2,425	1,055	1,116
Depreciation & Amortization	(1,156)	(325)	(323)
Interest Expense	(289)	(132)	(138)
Other income, net	58	7	30
Operational Improvement Initiatives (a)	—	—	(2)
Frutarom Integration Related Costs (b)	(4)	(10)	(55)
Restructuring and Other Charges	(41)	(17)	(30)
Gains (Losses) on Sale of Assets	1	(4)	(3)
Shareholder Activism Related Costs (c)	(7)	—	—
Business Divestiture Costs (d)	(42)	—	—
Employee Separation Costs (e)	(29)	(3)	—
Frutarom Acquisition Related Costs (f)	(2)	(1)	(6)
Compliance Review & Legal Defense Costs (g)	—	(3)	(11)
N&B Inventory Step-Up Costs	(368)	—	—
N&B Transaction Related Costs (h)	(91)	(29)	(21)
N&B Integration Related Costs (i)	(101)	(97)	—
Income Before Taxes	<u>\$ 354</u>	<u>\$ 441</u>	<u>\$ 557</u>

(a) Represents accelerated depreciation related to plant relocations in India and China.

(b) Represents costs related to the integration of the Frutarom acquisition. For 2021, costs primarily related to performance stock awards. For 2020, costs primarily related to advisory services, retention bonuses and performance stock awards. For 2019, costs primarily related to advisory services.

(c) Represents shareholder activist related costs, primarily professional fees.

(d) Represents costs related to the Company's sales and planned sales of businesses, primarily legal and professional fees.

(e) Represents costs related to severance, including accelerated stock compensation expense, for certain employees and executives who have been separated or will separate from the Company.

(f) Represents transaction-related costs and expenses related to the acquisition of Frutarom. For 2021, amount primarily includes earn-out payments, net of adjustments. For 2020, amount primarily includes earn-out payments, net of adjustments, amortization for inventory "step-up" costs and transaction costs primarily related to the 2019 Acquisition Activity. For 2019, amount primarily includes amortization for inventory "step-up" costs and transaction costs.

(g) Costs related to reviewing the nature of inappropriate payments and review of compliance in certain other countries. In addition, includes legal costs for related shareholder lawsuits.

(h) Represents transaction costs and expenses related to the transaction with N&B, primarily legal and professional fees.

(i) Represents costs primarily related to advisory services for the integration of the transaction with N&B, primarily consulting fees.

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 no customers that accounted for greater than 10% of consolidated net sales in 2021, 2020 and 2019.

Long-lived assets, net, by country, consisted as follows:

<i>(DOLLARS IN MILLIONS)</i>	December 31,	
	2021	2020
United States	\$ 2,041	\$ 572
China	259	172
Denmark	251	—
Finland	196	—
France	188	28
Germany	156	7
Other	1,277	679
Consolidated	<u>\$ 4,368</u>	<u>\$ 1,458</u>

Segment capital expenditures and depreciation and amortization consisted as follows:

<i>(DOLLARS IN MILLIONS)</i>	Capital Expenditures			Depreciation and Amortization		
	2021	2020	2019	2021	2020	2019
Nourish	\$ 183	\$ 98	\$ 126	\$ 594	\$ 211	\$ 210
Health & Biosciences	139	7	8	353	36	34
Scent	41	87	102	84	78	79
Pharma Solutions	30	—	—	125	—	—
Consolidated	<u>\$ 393</u>	<u>\$ 192</u>	<u>\$ 236</u>	<u>\$ 1,156</u>	<u>\$ 325</u>	<u>\$ 323</u>

Net sales are attributed to individual regions based upon the destination of product delivery and are as follows:

<i>(DOLLARS IN MILLIONS)</i>	Net Sales by Geographic Area		
	2021	2020	2019
Europe, Africa and Middle East	\$ 4,093	\$ 1,987	\$ 2,082
Greater Asia	2,728	1,162	1,163
North America	3,499	1,228	1,170
Latin America	1,336	707	725
Consolidated	<u>\$ 11,656</u>	<u>\$ 5,084</u>	<u>\$ 5,140</u>

<i>(DOLLARS IN MILLIONS)</i>	Net Sales by Geographic Area		
	2021	2020	2019
Net sales related to the U.S.	\$ 3,211	\$ 1,093	\$ 1,053
Net sales attributed to all foreign countries	8,445	3,991	4,087

No non-U.S. country had net sales greater than 7% of total consolidated net sales for 2021 and net sales greater than 6% of total consolidated net sales for 2020 and 2019.

NOTE 15. EMPLOYEE BENEFITS

The Company has pension and/or other retirement benefit plans covering approximately one-fifth 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 as of December 31, 2007). Pension benefits are generally based on years of service and 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.

In connection with the Merger with N&B, the Company assumed responsibility for approximately 20 additional defined benefit plans and recognized liabilities in the aggregate amount of \$221 million.

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 of 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, 2021 and December 31, 2020, the Consolidated Balance Sheets reflect liabilities of approximately \$64 million and \$59 million, respectively, related to the DCP in Other liabilities and approximately \$26 million and \$29 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 \$52 million and \$49 million at December 31, 2021 and 2020, respectively, and are recorded in Other assets in the Consolidated Balance Sheets.

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

<i>(DOLLARS IN MILLIONS)</i>	U.S. Plans			Non-U.S. Plans		
	2021	2020	2019	2021	2020	2019
Components of net periodic benefit cost						
Service cost for benefits earned ⁽¹⁾	\$ 1	\$ 1	\$ 1	\$ 41	\$ 24	\$ 19
Interest cost on projected benefit obligation ⁽²⁾	71	17	22	10	13	18
Expected return on plan assets ⁽²⁾	(106)	(28)	(28)	(55)	(46)	(43)
Net amortization of deferrals ⁽²⁾	29	8	6	19	15	11
Settlements and curtailments ⁽²⁾	—	—	—	(10)	5	—
Net periodic benefit cost	(5)	(2)	1	5	11	5
Defined contribution and other retirement plans	36	13	9	33	7	9
Total expense	\$ 31	\$ 11	\$ 10	\$ 38	\$ 18	\$ 14
Changes in plan assets and benefit obligations recognized in OCI						
Net actuarial (gain) loss	\$ 12	\$ (1)		\$ (135)	\$ 70	
Recognized actuarial loss	(9)	(8)		(10)	(20)	
Prior service cost	—	—		(2)	—	
Recognized prior service (cost) credit	—	—		1	—	
Currency translation adjustment	—	—		(16)	28	
Total (gain) loss recognized in OCI (before tax effects)	\$ 3	\$ (9)		\$ (162)	\$ 78	

(1) Included as a component of Operating Profit.

(2) Included as a component of Other Income (Expense), net.

	Postretirement Benefits		
	2021	2020	2019
<i>(DOLLARS IN MILLIONS)</i>			
Components of net periodic benefit cost			
Service cost for benefits earned	\$ 1	\$ 1	\$ 1
Interest cost on projected benefit obligation	7	2	2
Net amortization and deferrals	(20)	(5)	(5)
Total credit	\$ (12)	\$ (2)	\$ (2)
Changes in plan assets and benefit obligations recognized in OCI			
Net actuarial loss	\$ (3)	\$ 5	
Recognized actuarial loss	(2)	(1)	
Recognized prior service credit	6	6	
Total recognized in OCI (before tax effects)	\$ 1	\$ 10	

The amounts of service cost, interest cost, expected return and net amortization and deferrals have been updated to reflect the correction of certain prior period amounts. The aggregate amount of the correction was approximately \$17 million for the year ended December 31, 2021.

The weighted-average actuarial assumptions used to determine expense at December 31 of each year are:

	U.S. Plans			Non-U.S. Plans		
	2021	2020	2019	2021	2020	2019
Discount rate	2.51 %	3.26 %	4.31 %	0.85 %	1.49 %	2.22 %
Expected return on plan assets	3.80 %	5.60 %	5.60 %	4.21 %	4.62 %	4.87 %
Rate of compensation increase	3.25 %	3.25 %	3.25 %	2.56 %	2.46 %	1.93 %

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

<i>(DOLLARS IN MILLIONS)</i>	U.S. Plans		Non-U.S. Plans		Postretirement Benefits	
	2021	2020	2021	2020	2021	2020
Benefit obligation at beginning of year	\$ 682	\$ 621	\$ 1,294	\$ 1,099	\$ 69	\$ 64
Service cost for benefits earned	1	1	42	24	1	1
Interest cost on projected benefit obligation	12	17	10	13	1	2
Actuarial (gain) loss	(5)	77	(146)	109	(4)	5
Plan amendments	—	—	(2)	—	—	—
Adjustments for expense/tax contained in service cost	—	—	(2)	(1)	—	—
Plan participants' contributions	—	—	4	3	—	—
Benefits paid	(37)	(34)	(34)	(28)	(4)	(3)
Curtailments / settlements	—	—	(39)	(11)	—	—
Translation adjustments	—	—	(93)	86	—	—
Acquisitions/Transferred Liabilities	—	—	465	—	3	—
Other	9	—	2	—	—	—
Benefit obligation at end of year	\$ 662	\$ 682	\$ 1,501	\$ 1,294	\$ 66	\$ 69
Fair value of plan assets at beginning of year	\$ 678	\$ 602	\$ 1,145	\$ 1,005		
Actual return on plan assets	3	106	25	84		
Employer contributions	5	4	32	20		
Participants' contributions	—	—	4	3		
Benefits paid	(37)	(34)	(34)	(28)		
Settlements	—	—	(24)	(11)		
Translation adjustments	—	—	(74)	70		
Acquisitions/Transferred Assets	—	—	247	—		
Other	—	—	(1)	2		
Fair value of plan assets at end of year	\$ 649	\$ 678	\$ 1,320	\$ 1,145		
Funded status at end of year	\$ (13)	\$ (4)	\$ (181)	\$ (149)		

The amounts recognized in the balance sheet are detailed in the following table:

<i>(DOLLARS IN MILLIONS)</i>	U.S. Plans		Non-U.S. Plans	
	2021	2020	2021	2020
Other assets	\$ 53	\$ 54	\$ 83	\$ 47
Other current liabilities	(5)	(4)	(2)	(1)
Retirement liabilities	(61)	(54)	(262)	(195)
Net amount recognized	\$ (13)	\$ (4)	\$ (181)	\$ (149)

The amounts recognized in AOCI are detailed in the following table:

<i>(DOLLARS IN MILLIONS)</i>	U.S. Plans		Non-U.S. Plans		Postretirement Benefits	
	2021	2020	2021	2020	2021	2020
Net actuarial loss	\$ 137	\$ 134	\$ 291	\$ 454	\$ 14	\$ 19
Prior service cost (credit)	—	—	(3)	(2)	(15)	(21)
Total AOCI (before tax effects)	\$ 137	\$ 134	\$ 288	\$ 452	\$ (1)	\$ (2)

	U.S. Plans		Non-U.S. Plans	
	2021	2020	2021	2020
<i>(DOLLARS IN MILLIONS)</i>				
Accumulated Benefit Obligation — end of year	\$ 654	\$ 680	\$ 1,410	\$ 1,243
Information for Pension Plans with an ABO in excess of Plan Assets:				
Projected benefit obligation	\$ 63	\$ 60	\$ 944	\$ 813
Accumulated benefit obligation	62	60	330	762
Fair value of plan assets	—	2	840	617
Weighted-average assumptions used to determine obligations at December 31				
Discount rate	2.86 %	2.51 %	1.43 %	0.85 %
Rate of compensation increase	3.25 %	3.25 %	2.72 %	2.55 %

	U.S. Plans		Non-U.S. Plans		Postretirement Benefits
<i>(DOLLARS IN MILLIONS)</i>					
Estimated Future Benefit Payments					
2022	\$	38	\$	36	\$ 4
2023		38		36	3
2024		39		39	4
2025		39		40	4
2026		39		42	4
2027 - 2031		189		236	18
Contributions					
Required Company Contributions in the Following Year (2022)	\$	5	\$	33	\$ 4

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		Non-U.S. Plans	
	2021	2020	2021	2020
Cash and cash equivalents	1 %	1 %	6 %	3 %
Equities	45 %	29 %	18 %	10 %
Fixed income	54 %	70 %	34 %	38 %
Property	— %	— %	6 %	8 %
Alternative and other investments	— %	— %	36 %	41 %

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 10% equity securities and 90% 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: 35% in fixed income securities; 35% in alternative investments; 15% in equity securities; and 15% in real estate.

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, 2021 and 2020. 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 16.

U.S. Plans for the Year Ended December 31, 2021				
<i>(DOLLARS IN MILLIONS)</i>	Level 1	Level 2	Level 3	Total
Cash Equivalents	\$ —	\$ 5	\$ —	\$ 5
Fixed Income Securities				
Government & Government Agency Bonds	—	15	—	15
Corporate Bonds	—	77	—	77
Municipal Bonds	—	4	—	4
Assets measured at net asset value⁽¹⁾	—	—	—	547
Total	<u>\$ —</u>	<u>\$ 101</u>	<u>\$ —</u>	<u>\$ 648</u>
Receivables				\$ 1
Total				<u>\$ 649</u>

U.S. Plans for the Year Ended December 31, 2020				
<i>(DOLLARS IN MILLIONS)</i>	Level 1	Level 2	Level 3	Total
Cash Equivalents	\$ —	\$ 4	\$ —	\$ 4
Fixed Income Securities				
Government & Government Agency Bonds	—	19	—	19
Corporate Bonds	—	104	—	104
Municipal Bonds	—	6	—	6
Assets measured at net asset value⁽¹⁾	—	—	—	544
Total	<u>\$ —</u>	<u>\$ 133</u>	<u>\$ —</u>	<u>\$ 677</u>
Receivables				\$ 1
Total				<u>\$ 678</u>

(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 Sheets. The total amount measured at net asset value includes approximately \$294 million and \$201 million in pooled equity funds and \$253 million and \$343 million in fixed income mutual funds for the years ended December 31, 2021 and 2020, respectively.

**Non-U.S. Plans for the Year Ended
December 31, 2021**

<i>(DOLLARS IN MILLIONS)</i>	Level 1	Level 2	Level 3	Total
Cash	\$ 37	\$ 36	\$ —	\$ 73
Equity Securities				
U.S. Large Cap	100	—	—	100
Non-U.S. Large Cap	104	—	—	104
Non-U.S. Mid Cap	1	—	—	1
Non-U.S. Small Cap	1	—	—	1
Emerging Markets	30	—	—	30
Fixed Income Securities				
U.S. Corporate Bonds	42	—	—	42
Non-U.S. Treasuries/Government Bonds	162	—	—	162
Non-U.S. Corporate Bonds	58	137	—	195
Non-U.S. Asset-Backed Securities	—	51	—	51
Non-U.S. Other Fixed Income	2	—	—	2
Alternative Types of Investments				
Insurance Contracts	—	265	—	265
Derivative Financial Instruments	—	91	—	91
Absolute Return Funds	4	110	—	114
Other	—	2	10	12
Real Estate				
Non-U.S. Real Estate	5	—	72	77
Total	\$ 546	\$ 692	\$ 82	\$ 1,320

**Non-U.S. Plans for the Year Ended
December 31, 2020**

(DOLLARS IN MILLIONS)

	Level 1	Level 2	Level 3	Total
Cash	\$ 13	\$ 19	\$ —	\$ 32
Equity Securities				
U.S. Large Cap	57	8	—	65
Non-U.S. Large Cap	26	—	—	26
Non-U.S. Mid Cap	1	—	—	1
Non-U.S. Small Cap	1	—	—	1
Emerging Markets	25	—	—	25
Fixed Income Securities				
U.S. Corporate Bonds	—	43	—	43
Non-U.S. Treasuries/Government Bonds	163	—	—	163
Non-U.S. Corporate Bonds	34	139	—	173
Non-U.S. Asset-Backed Securities	—	51	—	51
Non-U.S. Other Fixed Income	3	—	—	3
Alternative Types of Investments				
Insurance Contracts	—	247	—	247
Derivative Financial Instruments	—	91	—	91
Absolute Return Funds	4	93	—	97
Other	11	3	19	33
Real Estate				
Non-U.S. Real Estate	—	—	94	94
Total	<u>\$ 338</u>	<u>\$ 694</u>	<u>\$ 113</u>	<u>\$ 1,145</u>

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, 2021:

(DOLLARS IN MILLIONS)

	Non-U.S. Plans		
	Real Estate	Hedge Funds	Total
Ending balance as of December 31, 2020	\$ 94	\$ 19	\$ 113
Actual return on plan assets	(3)	1	(2)
Purchases, sales and settlements	(19)	(10)	(29)
Ending balance as of December 31, 2021	<u>\$ 72</u>	<u>\$ 10</u>	<u>\$ 82</u>

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

	Expense		Liability	
	2021	2020	2021	2020
Discount rate	2.60 %	3.30 %	2.90 %	2.60 %
Current medical cost trend rate	7.00 %	7.25 %	6.75 %	7.00 %
Ultimate medical cost trend rate	4.75 %	4.75 %	4.75 %	4.75 %
Medical cost trend rate decreases to ultimate rate in year	2030	2030	2030	2030

The following table presents the sensitivity of disclosures to changes in selected assumptions for the year ended December 31, 2021:

<i>(DOLLARS IN MILLIONS)</i>	U.S. Pension Plans		Non-U.S. Pension Plans		Postretirement Benefit Plan	
25 Basis Point Decrease in Discount Rate						
Change in PBO	\$	19	\$	77		N/A
Change in ABO		19		73		2
Change in pension expense		—		5		—
25 Basis Point Decrease in Long-Term Rate of Return						
Change in pension expense		1		3		N/A

The Company contributed \$32 million to its non-U.S. pension plans in 2021. No contributions were made to the Company's qualified U.S. pension plans in 2021. The Company made \$5 million in benefit payments with respect to its non-qualified U.S. pension plan. In addition, \$4 million of payments were made with respect to the Company's other postretirement plans.

NOTE 16. 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 3, other than those included in pension asset trusts included in Note 15. These valuations take into consideration the Company's credit risk and its counterparties' credit risk.

The carrying value and the estimated fair values of financial instruments at December 31 consisted of the following:

<i>(DOLLARS IN MILLIONS)</i>	2021		2020	
	Carrying Value	Fair Value	Carrying Value	Fair Value
LEVEL 1				
Cash and cash equivalents ⁽¹⁾	\$ 711	\$ 711	\$ 650	\$ 650
2025 Notes ⁽⁶⁾	1,001	968	—	—
2027 Notes ⁽⁶⁾	1,218	1,180	—	—
2030 Notes ⁽⁶⁾	1,511	1,466	—	—
2040 Notes ⁽⁶⁾	775	762	—	—
2050 Notes ⁽⁶⁾	1,572	1,556	—	—
LEVEL 2				
Credit facilities and bank overdrafts ⁽²⁾	7	7	2	2
Derivatives				
Derivative assets ⁽³⁾	—	—	1	1
Derivative liabilities ⁽³⁾	7	7	29	29
Commercial paper ⁽²⁾	324	324	—	—
Long-term debt:				
2021 Euro Notes ⁽⁴⁾	—	—	368	370
2022 Notes ⁽⁴⁾	300	300	—	—
2023 Notes ⁽⁴⁾	300	308	299	316
2024 Euro Notes ⁽⁴⁾	565	585	614	648
2026 Euro Notes ⁽⁴⁾	900	960	978	1,061
2028 Notes ⁽⁴⁾	397	452	397	472
2047 Notes ⁽⁴⁾	494	585	494	608
2048 Notes ⁽⁴⁾	786	1,026	786	1,059
2018 Term Loan Facility ⁽²⁾	—	—	240	240
2022 Term Loan Facility ⁽²⁾	—	—	199	200
2024 Term Loan Facility ⁽⁷⁾	625	625	—	—
2026 Term Loan Facility ⁽⁷⁾	625	625	—	—
Amortizing Notes ⁽⁵⁾	—	—	36	37

(1) The carrying amount of cash and cash equivalents approximates fair value due to the short maturity of those instruments.

(2) The carrying amount 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 carrying amount approximates fair value as the instruments are marked-to-market and held at fair value on the Consolidated Balance Sheets.

(4) 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.

(5) The fair value of the Amortizing Notes of the TEUs was based on the most recently quoted price for the outstanding securities, adjusted for any known significant deviation in value. The estimated fair value of these long-term obligations is not necessarily indicative of the amount that would be realized in a current market exchange.

(6) The fair value of the Notes is based on marketed quoted price as there is an active market for the Notes and observable market data and inputs.

(7) The carrying amount approximates fair value as the Term Loans were assumed at fair value and the interest rate is reset frequently based on current market rates.

Derivatives

Forward Currency Forward Contracts

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.

Commodity Contracts

The Company utilizes options, futures and swaps that are not designated as hedging instruments to reduce exposure to commodity price fluctuations on purchases of inventory such as soybeans, soybean oil and soybean meal.

Cash Flow Hedges

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 Statements of Income and Comprehensive Income (Loss). 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 Statements of Income and Comprehensive Income (Loss) in the same period as the related costs are recognized.

Hedges Related to Issuances of Debt

Subsequent to the issuance of the 2021 Euro Notes and 2026 Euro Notes during the third quarter of 2018, 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 Statements of Income and Comprehensive Income (Loss).

Subsequent to the issuance of the 2024 Euro Notes 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 Statements of Income and Comprehensive Income (Loss).

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 Statements of Income and Comprehensive Income (Loss). The Company incurred a loss of €3 million (\$3 million) due to the termination of these swaps. The loss is being amortized as interest expense over the life of the 2024 Euro Notes as discussed in Note 9.

During the fourth quarter of 2016 and the first quarter of 2017, the Company entered into interest rate swap agreements to hedge the anticipated issuance of fixed-rate debt, which are designated as cash flow hedges. The various hedge instruments were settled upon issuance of the debt on May 18, 2017 and resulted in a loss of approximately \$5 million. As discussed in Note 9, the loss is being amortized as interest expense over the life of the 2047 Notes.

Cross Currency Swaps

During the third quarter of 2019, the Company entered into a transaction to unwind the four cross currency swaps designated as net investment hedges issued in the fourth quarter of 2018 and received proceeds of \$34 million, including \$8 million of interest income. The gain arising from the termination of the swaps has been included as a component of Accumulated other comprehensive loss. Following the termination of the existing swaps, (during the third quarter of 2019,) the Company entered into four new EUR/USD cross currency swaps that mature through May 2023. The swaps all qualified as net investment hedges in order to mitigate a portion of the Company's net European investments from foreign currency risk. During the third quarter of 2020, the Company entered into a transaction to unwind two of the swaps issued in the third quarter of 2019 and paid proceeds of \$15 million, net of accrued interest receivable of \$2 million. The loss arising from the termination of the swaps has been included as a component of accumulated other comprehensive loss. As of December 31, 2021, the two remaining swaps were in a net liability position with an aggregate fair value of \$5 million which was classified as other current liabilities. Changes in fair value related to cross currency swaps are recorded in OCI.

The following table shows the notional amount of the Company's derivative instruments outstanding as of December 31, 2021 and December 31, 2020:

<i>(DOLLARS IN MILLIONS)</i>	December 31,	
	2021	2020
Foreign currency contracts	\$ 46	\$ 221
Commodity contracts	10	—
Cross currency swaps	300	300

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, 2021 and December 31, 2020:

<i>(DOLLARS IN MILLIONS)</i>	December 31, 2021		
	Fair Value of Derivatives Designated as Hedging Instruments	Fair Value of Derivatives Not Designated as Hedging Instruments	Total Fair Value
Derivative assets ⁽¹⁾			
Foreign currency contracts	\$ —	\$ —	\$ —
Derivative liabilities ⁽²⁾			
Foreign currency contracts	\$ —	\$ 2	\$ 2
Cross currency swaps	5	—	5
Total derivative liabilities	\$ 5	\$ 2	\$ 7

<i>(DOLLARS IN MILLIONS)</i>	December 31, 2020		
	Fair Value of Derivatives Designated as Hedging Instruments	Fair Value of Derivatives Not Designated as Hedging Instruments	Total Fair Value
Derivative assets ⁽¹⁾			
Foreign currency contracts	\$ —	\$ 1	\$ 1
Derivative liabilities ⁽²⁾			
Foreign currency contracts	\$ 6	\$ —	\$ 6
Cross currency swaps	23	—	23
Total derivative liabilities	\$ 29	\$ —	\$ 29

(1) Derivative assets are recorded to Prepaid expenses and other current assets in the Consolidated Balance Sheets.

(2) Derivative liabilities are recorded as Other current liabilities in the Consolidated Balance Sheets.

The following table shows the effect of the Company's derivative instruments which were not designated as hedging instruments in the Consolidated Statements of Income and Comprehensive Income (Loss) for the years ended December 31, 2021 and December 31, 2020:

<i>(DOLLARS IN MILLIONS)</i>	Amount of Gain (Loss) For the year ended December 31,		Location of Gain (Loss) Recognized in Income on Derivative
	2021	2020	
Foreign currency contracts	\$ 6	\$ 9	Other (income) expense, net

These net gains (losses) mostly 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, net of tax, in the Consolidated Statements of Income and Comprehensive Income (Loss) for the years ended December 31, 2021 and December 31, 2020:

	Amount of Gain (Loss) Recognized in OCI on Derivative (Effective Portion)		Location of Gain (Loss) Reclassified from AOCI into Income (Effective Portion)	Amount of Gain (Loss) Reclassified from AOCI into Income (Effective Portion)	
	For the years ended December 31,			For the years ended December 31,	
	2021	2020		2021	2020
<i>(DOLLARS IN MILLIONS)</i>					
Derivatives in Cash Flow Hedging Relationships:					
Foreign currency contracts	\$ 7	\$ (10)	Cost of goods sold	\$ (6)	\$ 5
Interest rate swaps ⁽¹⁾	1	1	Interest expense	(1)	(1)
Derivatives in Net Investment Hedging Relationships:					
Cross currency swaps	14	(13)	N/A	—	—
Non-Derivatives in Net Investment Hedging Relationships:					
2024 Euro Notes	38	(42)	N/A	—	—
2021 Euro Notes & 2026 Euro Notes	72	(92)	N/A	—	—
Total	\$ 132	\$ (156)		\$ (7)	\$ 4

(1) Interest rate swaps were entered into as pre-issuance hedges for the Company's bond offerings.

The ineffective portion of the above noted cash flow hedges and net investment hedges was not material for the years ended December 31, 2021 and 2020.

At December 31, 2021, based on current market rates, the Company does not expect any derivative losses (net of tax), included in AOCI, to be reclassified into earnings within the next 12 months.

NOTE 17. 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:

<i>(DOLLARS IN MILLIONS)</i>	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, 2020	\$ (285)	\$ (7)	\$ (406)	\$ (698)
OCI before reclassifications	(848)	1	97	(750)
Amounts reclassified from AOCI	—	7	18	25
Net current period other comprehensive income (loss)	(848)	8	115	(725)
Accumulated other comprehensive loss, net of tax, as of December 31, 2021	<u>\$ (1,133)</u>	<u>\$ 1</u>	<u>\$ (291)</u>	<u>\$ (1,423)</u>

<i>(DOLLARS IN MILLIONS)</i>	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, 2019	\$ (373)	\$ 2	\$ (346)	\$ (717)
OCI before reclassifications	88	(5)	(74)	9
Amounts reclassified from AOCI	—	(4)	14	10
Net current period other comprehensive income (loss)	88	(9)	(60)	19
Accumulated other comprehensive loss, net of tax, as of December 31, 2020	<u>\$ (285)</u>	<u>\$ (7)</u>	<u>\$ (406)</u>	<u>\$ (698)</u>

<i>(DOLLARS IN MILLIONS)</i>	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, 2018	\$ (397)	\$ 5	\$ (310)	\$ (702)
OCI before reclassifications	24	5	(46)	(17)
Amounts reclassified from AOCI	—	(8)	10	2
Net current period other comprehensive income (loss)	24	(3)	(36)	(15)
Accumulated other comprehensive (loss) income, net of tax, as of December 31, 2019	\$ (373)	\$ 2	\$ (346)	\$ (717)

The following table provides details about reclassifications out of AOCI to the Consolidated Statement of Comprehensive Income:

<i>(DOLLARS IN MILLIONS)</i>	Year Ended December 31,			Affected Line Item in the Consolidated Statement of Comprehensive Income
	2021	2020	2019	
(Losses) gains on derivatives qualifying as hedges				
Foreign currency contracts	\$ (7)	\$ 6	\$ 10	Cost of goods sold
Interest rate swaps	(1)	(1)	(1)	Interest expense
Tax	1	(1)	(1)	Provision for income taxes
Total	\$ (7)	\$ 4	\$ 8	Total, net of income taxes
(Losses) gains on pension and postretirement liability adjustments				
Prior service cost	\$ 7	\$ 7	\$ 6	⁽¹⁾
Actuarial losses	(38)	(30)	(19)	⁽¹⁾
Other items	17	—	—	⁽²⁾
Tax	(4)	9	3	Provision for income taxes
Total	\$ (18)	\$ (14)	\$ (10)	Total, net of income taxes

(1) The amortization of prior service cost and actuarial loss is included in the computation of net periodic benefit cost. Refer to Note 15 to the Consolidated Financial Statements for additional information regarding net periodic benefit cost.

(2) Represents certain amounts of pension income that were corrected in the current year. Refer to Note 15 for additional information.

NOTE 18. 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 no customer that accounted for more than 10% of its consolidated net sales for the years ended 2021, 2020 and 2019.

NOTE 19. COMMITMENTS AND CONTINGENCIES

Guarantees and Letters of Credit

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

At December 31, 2021, the Company had total bank guarantees, commercial guarantees, standby letters of credit and surety bonds of approximately \$392 million with various financial institutions. Included in the above aggregate amount was a total of \$12 million for other assessments in Brazil for various income tax and indirect tax disputes related to fiscal years 1998-2011. There was a total of approximately \$28 million outstanding under the bank guarantees and standby letters of credit and approximately \$98 million outstanding under the commercial guarantees as of December 31, 2021.

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 \$7 million as of December 31, 2021.

Lines of Credit

The Company has various lines of credit which are available to support its ongoing business operations. As of December 31, 2021, the Company had available lines of credit of \$1.398 billion with various financial institutions, in addition to the \$1.025 billion of capacity under the Credit Facility. There were total draw downs of approximately \$334 million pursuant to these lines of credit as of December 31, 2021, including approximately \$324 million related to the issuance of commercial paper.

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.

Litigation Matters

On August 12, 2019, Marc Jansen filed a putative securities class action against IFF, its Chairman and CEO, and its then-CFO, in the United States District Court for the Southern District of New York. The lawsuit was filed after IFF disclosed that preliminary results of investigations indicated that Frutarom businesses operating principally in Russia and Ukraine had made improper payments to representatives of customers. On March 16, 2020, an amended complaint was filed, which added Frutarom and certain former officers of Frutarom as defendants. The amended complaint alleges, among other things, that defendants made materially false and misleading statements or omissions concerning IFF's acquisition of Frutarom, the integration of the two companies, and the companies' financial reporting and results. The amended complaint asserts claims under Section 10(b) of the Securities Exchange Act of 1934 and SEC Rule 10b-5, and under the Israeli Securities Act-1968, against all defendants, and under Section 20(a) of the Securities Exchange Act of 1934 against the individual defendants, on behalf of a putative class of persons and entities who purchased or otherwise acquired IFF securities on the New York Stock Exchange between May 7, 2018 and August 12, 2019 and persons and entities who purchased or otherwise acquired IFF securities on the Tel Aviv Stock Exchange between October 9, 2018 and August 12, 2019. The amended complaint seeks an award of unspecified compensatory damages, costs, and expenses. IFF, its officers, and Frutarom filed a motion to dismiss the case on June 26, 2020, which was granted on March 30, 2021. On April 28, 2021, lead plaintiffs filed a notice of appeal to the United States Court of Appeals for the Second Circuit. Lead plaintiffs are pursuing the appeal only against Frutarom and certain former officers of Frutarom. The parties have submitted their briefs to the Court of Appeals, and the Court of Appeals heard oral argument on February 10, 2022.

Two motions to approve securities class actions were filed in the Tel Aviv District Court, Israel, in August 2019, similarly alleging, among other things, false and misleading statements largely in connection with IFF's acquisition of Frutarom and the above-mentioned improper payments. One motion ("Borg") asserts claims under the U.S. federal securities laws against IFF, its Chairman and CEO, and its former CFO. On November 8, 2020, IFF and its officers filed their response to the Borg motion. On April 20, 2021, Mr. Borg filed a motion to stay the proceeding pending an appellate decision in the U.S. proceeding. On June 15, 2021, August 11, 2021 November 9, 2021 and January 9, 2022, the U.S. lead plaintiffs filed update notices with the Israeli court regarding the appeal in the U.S. proceeding. The other motion ("Oman") (following an initial amendment) asserted claims under the Israeli Securities Act-1968 against IFF, its Chairman and CEO, and its former CFO, and against Frutarom and certain former Frutarom officers and directors, as well as claims under the Israeli Companies Act-1999 against certain former Frutarom officers and directors. On February 17, 2021, the court granted a motion by the Oman plaintiff to remove IFF and its officers from the motion and to add factual allegations from the US amended complaint. The amended Oman motion was filed on July 4, 2021. On August 29, 2021, the former Frutarom officers and certain former Frutarom directors filed a motion to dismiss the case. On September 30, 2021, Frutarom notified the court that it joins the legal arguments made in the motion to dismiss. A court hearing on the motion to dismiss was held on October 25, 2021, and on February 22, 2022, the court denied the motion to dismiss.

On October 29, 2019, IFF and Frutarom filed a claim in the Tel Aviv District Court, Israel, against Ori Yehudai, the former President and CEO of Frutarom, and against certain former directors of Frutarom, challenging the bonus of US \$20 million granted to Yehudai in 2018. IFF and Frutarom allege, among other things, that Yehudai was not entitled to receive the bonus because he breached his fiduciary duty by, among other things, knowing of the above-mentioned improper payments and failing to prevent them from being made. The parties agreed, pursuant to the court's recommendation, to attempt to resolve the dispute through mediation, which is still ongoing, during which the proceedings relating to this claim are stayed. A court decision is pending with regard to the order in which this claim, if it does not settle, and the class action described below will be heard.

On March 11, 2020, an IFF shareholder filed a motion to approve a class action in Israel against, among others, Frutarom, Yehudai, and Frutarom's former board of directors, alleging that former minority shareholders of Frutarom were harmed as a result of the US \$20 million bonus paid to Yehudai. The parties to this motion agreed to attempt to resolve the dispute through mediation to take place regarding the aforesaid claim against Yehudai. On July 27, 2021, counsel to the movant in the class action filed a notice with the court that the mediation process ended without an agreement. On August 26, 2021, a motion to dismiss the class action application was filed by Yehudai and certain former directors of Frutarom. On September 9, 2021, an additional motion to dismiss was filed by other former directors of Frutarom together with ICC Industries, Inc. and its affiliates. A court hearing on the motions to dismiss was held on December 6, 2021, and on December 9, 2021, the court denied the motions to dismiss.

Investigation

On June 3, 2020, the Israel Police's National Fraud Investigation Unit and the Israeli Securities Authority commenced an investigation into Frutarom and certain of its former executives, based on suspected bribery of foreign officials, money laundering, and violations of the Israeli Securities Act-1968. As part of the investigation, the National Fraud Investigation Unit and the Israeli Securities Authority have provided IFF and Frutarom with various orders, mainly requesting that IFF and Frutarom provide certain documents and materials. In addition, a seizure of assets was imposed on Frutarom and certain of its affiliates. IFF has been working to ensure compliance with such orders, all in accordance with, and subject to, Israeli law. On August 25, 2021, the Israeli Police informed Frutarom that they have decided to remove the temporary criminal seizure of assets order from the real estate assets of Frutarom and its related companies, which was done in parallel with the transfer of the case to the District Attorney's Office in Israel.

China Facilities

Hangzhou Ingredients Plant

As previously disclosed, in 2014 the Company agreed to relocate an ingredients facility in Hangzhou, China to Jiande, China. In connection with such relocation, the Company entered into a land swap and relocation agreement with the local authority pursuant to which the Company agreed to transfer ownership of the land underlying the facility in exchange for various elements of compensation, including cash and land use rights for the new facility. The Company initially determined that the gain, if any, would be recognized upon final transfer of ownership. During the fourth quarter of 2019, the Company completed the final environmental cleanup activities and transferred ownership of the land to the local authority. The amount of the gain ultimately recognized in the fourth quarter of 2019 was \$4 million. The amount was recorded as a component of Other income, net.

The net book value of the plant in Jiande, China was approximately \$67 million as of December 31, 2021.

Guangzhou Taste Plant

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 Taste 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. To address the governmental authorities' requirements, the Company has been transferring certain production capabilities from the Guangzhou Taste plant to a newly built facility in Zhangjiagang.

The net book value of the plant in Guangzhou was approximately \$60 million as of December 31, 2021.

Guangzhou Scent Plant

During the second quarter of 2019, the Company was notified that certain governmental authorities had changed the zoning where the Guangzhou Scent plant is located. The zoning change did not affect the current operations but prevents expansions or other increases in the operating capacity of the plant. The Company believes that it is possible that the zoning may be enforced in the future such that it would not be able to continue manufacturing at the existing site. 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 \$8 million as of December 31, 2021.

Zhejiang Ingredients Plant

In the fourth quarter of 2017, the Company concluded discussions with the government regarding the relocation of its Fragrance Ingredients plant in Zhejiang and, based on the agreements reached, expects to receive total compensation payments up to approximately \$50 million. The relocation compensation will be paid to the Company over the period of the relocation which is expected to be through the end of 2022. The Company received payments totaling \$30 million through the end of 2019. In the third quarter of 2020, the Company received a payment of approximately \$13 million. A final payment is expected to be received upon completion of the final environmental inspection.

Production at the facility ceased during 2019. In the second quarter of 2020, the Company transferred ownership of the site to the government. The land remediation activities are in progress and are expected to be completed in the second half of 2022. During the second quarter of 2020, the remaining net book value of the plant was written off. Products previously manufactured at the Zhejiang Ingredients plant are now being produced at the Company's Ingredients plant in Jiande.

Total China Operations

The total net book value of all plants in China was approximately \$279 million as of December 31, 2021.

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 \$19 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.

Brazil Tax Credits

In 2017 the Brazilian Supreme Court ("BSC") ruled that Brazilian tax authorities should not include a value added tax known as "ICMS" in the calculation of certain indirect taxes ("PIS/COFINS"). By removing the ICMS from the calculation of the indirect tax base, the Court effectively eliminated a "tax on tax". The Brazilian tax authorities filed an appeal seeking clarification of certain matters, including the amount of ICMS to which taxpayers would be entitled in order to reduce their indirect tax base (i.e. the gross rate or the net rate.)

In light of the BSC's decision, in November 2017, the Company filed suit consistent with the BSC decision to require that ICMS be excluded from the PIS/COFINS calculation and received a favorable preliminary decision that was confirmed by the BSC in September 2018. This preliminary ruling granted the Company the right to prospectively exclude ICMS amounts from the PIS/COFINS calculation, but left open the issue of whether the Company could recover the gross or net amount of ICMS amounts paid on PIS/COFINS for the period from November 2011 to December 2018.

In January 2020, the Company was informed of a favorable ruling from the Brazilian tax authorities confirming that the Company was entitled to recover the overpayments of certain indirect taxes (known as PIS/COFINS) for the period from November 2011 to December 2018, plus interest on the amount of the overpayments. The overpayments arose from the inclusion of a value added tax known as ICMS in the calculation of the PIS/COFINS tax. The ruling did not, however, settle the question of whether the Company is eligible to recover overpayments based on the gross or the net amount of ICMS amounts paid on PIS/COFINS. The Company calculated the amount of overpayments using the gross method which yields a higher amount than the application of the net method. A final ruling on the gross versus net amount issue was made by the Brazilian Supreme Court who affirmed the use of the gross calculation with respect to claims submitted prior to March 2017. Although the Company had not submitted a claim until after March 2017, the Company believes that the Supreme Court, whilst confirming the use of the gross method of calculation, does not override the January 2020 ruling by the Brazilian tax authorities with respect to the timeframe for the calculation.

In addition to the \$8 million recognized in the fourth quarter of 2019, during the first quarter of 2020 the Company recognized \$4 million as an additional recovery on the existing claim. During 2020, the Company also recognized \$3 million related to a claim from another of its subsidiaries in Brazil. The income was recognized as a reduction in Selling and Administrative expenses.

Avicel® PH NF (Pharma Solutions)

The Company has determined that certain grades of microcrystalline cellulose (Avicel® PH 101, 102, and 200 NF and Avicel® RC-591 NF) were found to be out-of-specification (collectively, "OOS Avicel® NF"). The Company does not expect this issue to affect the functionality of Avicel® NF grades or to pose a human health hazard. Corrective actions have been implemented to improve operational and laboratory conditions. Based on the information available, as of December 31, 2021, costs associated with the issue are approximately \$21 million, and the Company has a current accrual of approximately \$40 million. The total amount of exposure may increase as additional customers present claims.

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 \$42 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.

NOTE 20. REDEEMABLE NON-CONTROLLING INTERESTS

Through certain subsidiaries of the Company's Frutarom acquisition, there are certain non-controlling interests that carry redemption features. The non-controlling interest holders have the right, over a stipulated period of time, to sell their respective interests to Frutarom, and Frutarom has the option to purchase these interests (subject to the same timing). These options carry, in most cases, similar price and conditions of exercise, and will be settled on a pre-agreed formula based on a multiple of the average EBITDA of consecutive quarters to be achieved during the period ending prior to the exercise date.

The following table sets forth the details of the Company's redeemable non-controlling interests:

<i>(DOLLARS IN MILLIONS)</i>	Redeemable Noncontrolling Interests	
Balance at December 31, 2018	\$	82
Acquired through acquisitions during 2019		24
Share of profit or loss attributable to redeemable noncontrolling interests		1
Redemption value adjustment for the current period		2
Measurement period adjustments		5
Dividends paid		(1)
Exercises of redeemable noncontrolling interests		(14)
Balance at December 31, 2019	\$	99
Impact of foreign exchange translation		13
Share of profit or loss attributable to redeemable noncontrolling interests		3
Redemption value adjustment for the current period		(2)
Measurement period adjustments		(1)
Dividends paid		(2)
Exercises of redeemable noncontrolling interests		(12)
Balance at December 31, 2020	\$	98
Impact of foreign exchange translation		1
Share of profit or loss attributable to redeemable noncontrolling interests		6
Redemption value adjustment for the current period		2
Dividends paid		(2)
Balance at December 31, 2021	\$	105

For 2019, the increase in redeemable non-controlling interests was primarily due to the interests acquired through acquisitions during the first quarter of 2019.

For 2020, the increase in redeemable non-controlling interests was primarily due to the impact of foreign exchange translation offset by the exercise of options. In addition, during 2020, the Company paid \$14 million related to the purchase of certain non-controlling interests where the option related to the purchase had been exercised in the fourth quarter of 2019.

For 2021, the increase in redeemable non-controlling interests was primarily due to profits attributable to redeemable non-controlling interests.

NOTE 21. BUSINESS DIVESTITURES

Fruit Preparation

During the second quarter of 2021, the Company entered into an agreement to divest its fruit preparation business, which is a part of the Nourish segment. The transaction closed on October 1, 2021, with the Company receiving cash proceeds of approximately \$115 million in the third quarter of 2021, net of tax of approximately \$12 million.

NOTE 22. ASSETS HELD FOR SALE

Microbial Control

During the third quarter of 2021, the Company announced it had entered into an agreement to sell its Microbial Control business unit, which is a part of the Health & Biosciences segment. The Company acquired the Microbial Control business unit as part of the Merger with N&B.

The Company classifies assets as "held for sale" when, among other factors, management approves and commits to a formal plan of sale with the expectation the sale will be completed within one year. Pursuant to ASC 360, assets held for sale were recorded at the lower of carrying value or the fair market value, less costs to sell. The sale does not constitute a strategic shift of the Company's operations and does not, and will not, have major effects on the Company's operations and financial results; therefore, the transaction does not meet the discontinued operations criteria.

Based on the agreement to sell, it was determined that the assets and liabilities of the Microbial Control business unit met the criteria to be presented as "held for sale." As a result, as of December 31, 2021, such assets and liabilities were classified as held for sale and are reported on the Consolidated Balance Sheets. The Company expects that the transaction will close for approximately \$1.273 billion in the second quarter of 2022 and that the sale proceeds less costs to sell will exceed the carrying value of the net assets.

Included in the Company's Consolidated Balance Sheets as of December 31, 2021 are the following carrying amounts of the assets and liabilities held for sale:

<i>(DOLLARS IN MILLIONS)</i>	December 31, 2021	
Assets		
Trade receivables, net	\$	63
Inventories		125
Property, plant and equipment, net		30
Goodwill		536
Other intangible assets, net		349
Operating lease right-of-use assets		5
Other assets		14
Total assets held-for-sale	\$	<u>1,122</u>
Liabilities		
Accounts payable	\$	69
Deferred tax liability		24
Other liabilities		8
Total liabilities held-for-sale	\$	<u>101</u>

NOTE 23. SUBSEQUENT EVENTS

Health Wright Products, LLC Acquisition

On February 16, 2022, the Company announced that it had entered into an agreement to acquire Health Wright Products, LLC, a leader in formulation and capsule manufacturing for the dietary supplement industry.

(a)(3) EXHIBITS

**Exhibit
Number Description**

-
- 2.1 [Agreement and Plan of Merger, dated May 7, 2018, by and among the Registrant, Frutarom Industries Ltd. and Icon Newco Ltd., incorporated by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed on May 9, 2018.](#)
 - 2.2 [Amendment No. 1 to Agreement and Plan of Merger, dated August 25, 2018, by and among International Flavors & Fragrances, Inc., Frutarom Industries Ltd. and Icon Newco Ltd. incorporated by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed on August 27, 2018.](#)
 - 2.3 [Agreement and Plan of Merger, dated December 15, 2019, by and among DuPont de Nemours Inc., Nutrition & Biosciences, Inc., International Flavors & Fragrances Inc. and Neptune Merger Sub I Inc., incorporated by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed on December 18, 2019.](#)
 - 2.4 [Separation and Distribution Agreement, dated as of December 15, 2019, by and among DuPont de Nemours Inc., Nutrition & Biosciences, Inc. and International Flavors & Fragrances Inc., incorporated by reference to Exhibit 2.2 to the Registrant's Current Report on Form 8-K filed on December 18, 2019.](#)
 - 2.4(i) [Amendment No. 1 to the Separation and Distribution Agreement, dated January 22, 2021, by and among DuPont de Nemours, Inc., Nutrition & Biosciences, Inc., International Flavors & Fragrances Inc. and Neptune Merger Sub II LLC, incorporated by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed on January 25, 2021.](#)
 - 2.4(ii) [Amendment No. 2 to the Separation and Distribution Agreement, dated February 1, 2021, by and among DuPont de Nemours, Inc., Nutrition & Biosciences, Inc., International Flavors & Fragrances Inc. and Neptune Merger Sub II LLC, incorporated by reference to Exhibit 2.4 to the Registrant's Current Report on Form 8-K filed on February 3, 2021.](#)
 - 3.1 [Restated Certificate of Incorporation of the Registrant, incorporated by reference to Exhibit 10\(g\) to the Registrant's Quarterly Report on Form 10-Q filed on August 12, 2002.](#)
 - 3.2 [Bylaws of International Flavors & Fragrances Inc., effective as of October 29, 2019, incorporated by reference to Exhibit 3\(i\) to the Registrant's Current Report on Form 8-K filed on February 8, 2022.](#)
 - 4.1 [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 the Registrant's Current Report on Form 8-K filed on April 4, 2013.](#)
 - 4.2 [Indenture, dated as of March 2, 2016, between the Registrant and U.S. Bank National Association, as Trustee \(including the form of Debt Security\), incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-3 \(Registration No. 333-209889\) filed on March 2, 2016.](#)
 - 4.3 [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 the Registrant's Current Report on Form 8-K filed on March 14, 2016.](#)
 - 4.4 [Second Supplemental Indenture, dated as of May 18, 2017, between the Registrant and U.S. Bank National Association, as Trustee \(including the form of Notes\), incorporated by reference to Exhibit 4.7 to the Registrant's Current Report on Form 8-K filed on May 18, 2017.](#)
 - 4.5 [Third Supplemental Indenture, dated as of September 17, 2018, between International Flavors & Fragrances Inc. and U.S. Bank National Association, as trustee, incorporated by reference to Exhibit 4.5 to the Registrant's Current Report on Form 8-K filed on September 17, 2018.](#)
 - 4.6 [Form of Amortizing Note, incorporated by reference to Exhibit 4.5 to the Registrant's Current Report on Form 8-K filed on September 17, 2018.](#)
 - 4.7 [Purchase Contract Agreement, dated September 17, 2018, between International Flavors & Fragrances Inc. and U.S. Bank National Association, as purchase contract agent, as attorney-in-fact for holders of the purchase contracts referred to therein and as trustee under the indenture referred to therein, incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed on September 17, 2018.](#)
 - 4.8 [Form of Unit, incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed on September 17, 2018.](#)
 - 4.9 [Form of Purchase Contract, incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed on September 17, 2018.](#)
 - 4.10 [Fourth Supplemental Indenture, dated as of September 25, 2018, between International Flavors & Fragrances Inc. and U.S. Bank National Association, as trustee, incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed on September 25, 2018.](#)
 - 4.11 [Form of Global Note for the 2021 Notes, incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed on September 25, 2018.](#)
 - 4.12 [Form of Global Note for the 2026 Notes, incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed on September 25, 2018.](#)

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- 4.13 [Fifth Supplemental Indenture, dated as of September 26, 2018, between International Flavors & Fragrances Inc. and U.S. Bank National Association, as trustee, incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed on September 26, 2018.](#)
- 4.14 [Form of Global Note for the 2020 Notes, incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed on September 26, 2018.](#)
- 4.15 [Form of Global Note for the 2028 Notes, incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed on September 26, 2018.](#)
- 4.16 [Form of Global Notes for the 2048 Notes, incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed on September 26, 2018.](#)
- 4.17 [Indenture, dated as of September 16, 2020, between the N&B and U.S. Bank National Association, as Trustee \(including the form of Notes\), incorporated by reference to Exhibit 99.16 to the Registrant's Registration Statement on Form S-4 \(Registration No. 333-238072\) filed on October 5, 2020.](#)
- 4.18 [First Supplemental Indenture, dated as of February 1, 2021, among Nutrition & Biosciences, Inc., International Flavors & Fragrances Inc. and U.S. Bank National Association, as Trustee. Incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed on February 4, 2021.](#)
- 4.19 [Second Supplemental Indenture, dated as of March 4, 2021, among Nutrition & Biosciences, Inc., International Flavors & Fragrances Inc. and U.S. Bank National Association, as trustee, incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed on March 4, 2021.](#)
- 4.20 [Icon Debt Assumption Supplement, dated as of March 4, 2021, among Neptune Merger Sub II LLC \(as successor by merger to Nutrition & Biosciences, Inc.\) and International Flavors & Fragrances Inc., and as acknowledged by Morgan Stanley Senior Funding, Inc., as administrative agent, incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed on March 4, 2021.](#)
- 4.21 [Description of Securities, incorporated by reference to Exhibit 4.17 to the Registrant's Annual Report on Form 10-K filed on March 3, 2020.](#)
- *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 [Letter Agreement between International Flavors & Fragrances Inc. and Franklin K. Clyburn, Jr., effective January 18, 2022, incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on January 20, 2022.](#)
- *10.3 [Supplemental Retirement Plan, incorporated by reference to Exhibit 10.5 to the Registrant's Annual Report on Form 10-K filed on February 27, 2008.](#)
- *10.4 [2021 Stock Award and Incentive Plan, incorporated by reference to Annex 1 to the Registrant's Proxy Statement filed with the Commission on March 23, 2021.](#)
- *10.5 [Form of Restricted Stock Units Agreement – Non-Employee Director under the 2021 Stock Award and Incentive Plan, filed herewith.](#)
- *10.6 [Form of Restricted Stock Units Award Agreement under the 2021 Stock Award and Incentive Plan, filed herewith.](#)
- *10.7 [Form of Equity Choice Program Award Agreement under the 2021 Stock Award and Incentive Plan, filed herewith.](#)
- *10.8 [Form of Performance-Based Restricted Stock Units Award Agreement under the 2021 Stock Award and Incentive Plan, filed herewith.](#)
- *10.9 [2015 Stock Award and Incentive Plan, as amended and restated February 7, 2017, incorporated by reference to Exhibit 10.13 to the Registrant's Annual Report on Form 10-K filed on February 28, 2017.](#)
- *10.10 [Form of Annual Incentive Plan Award Agreement under the 2015 Stock Award and Incentive Plan, incorporated by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q filed on May 12, 2015.](#)
- *10.11 [Form of Long-Term Incentive Plan Award Agreement under the 2015 Stock Award and Incentive Plan, incorporated by reference to Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q filed on May 12, 2015.](#)
- *10.12 [Form of Equity Choice Program Award Agreement under the 2015 Stock Award and Incentive Plan, incorporated by reference to Exhibit 10.5 to the Registrant's Quarterly Report on Form 10-Q filed on May 12, 2015.](#)
- *10.13 [Form of Restricted Stock Units Award Agreement under the 2015 Stock Award and Incentive Plan, incorporated by reference to Exhibit 10.6 to the Registrant's Quarterly Report on Form 10-Q filed on May 12, 2015.](#)

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- *10.14 [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 the Registrant's Quarterly Report on Form 10-Q filed on May 12, 2015.](#)
- *10.15 [Form of Equity Choice Program Award Agreement under the 2015 Stock Award and Incentive Plan, incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed on November 9, 2015.](#)
- *10.16 [Form of Long-Term Incentive Plan Award Agreement under the 2015 Stock Award and Incentive Plan, incorporated by reference to Exhibit 10.25 to the Registrant's Annual Report on Form 10-K filed on March 1, 2016.](#)
- *10.17 [Amended and Restated Executive Severance Policy, as amended through and including November 1, 2017, incorporated by reference to Exhibit 10.17 to the Registrant's Annual Report on Form 10-K filed on February 27, 2018 \(the "Executive Severance Policy"\).](#)
- *10.18 [Amendment to the Executive Severance Policy dated November 3, 2020, incorporated by reference to Exhibit 10.18 to the Registrant's Annual Report on Form 10-K filed on February 22, 2021.](#)
- *10.19 [Form of Director/Officer Indemnification Agreement, incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on July 28, 2008.](#)
- *10.20 [Form of Executive Death Benefit Program - Plan Agreement, incorporated by reference to Exhibit 10.27 to the Registrant's Annual Report on Form 10-K filed on February 28, 2012.](#)
- *10.21 [Deferred Compensation Plan, as amended and restated December 12, 2011, incorporated by reference to Exhibit 10.28 to the Registrant's Annual Report on Form 10-K filed on February 28, 2012 \(the "Deferred Compensation Plan"\).](#)
- *10.22 [First Amendment to the Deferred Compensation Plan dated as of December 31, 2020, incorporated by reference to Exhibit 10.22 to the Registrant's Annual Report on Form 10-K filed on February 22, 2021.](#)
- 10.23(i) [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 the Registrant's Current Report on Form 8-K filed on December 5, 2016.](#)
- 10.23(ii) [Amendment No. 1 to Credit Agreement, dated as of May 21, 2018, among the Registrant, 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 lenders signatory thereto and Citibank, N.A. as administrative agent, incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on May 24, 2018.](#)
- 10.23(iii) [Amendment No. 2 to Credit Agreement, dated as of June 6, 2018, among the Registrant, 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 lenders signatory thereto and Citibank, N.A. as administrative agent, incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on June 8, 2018.](#)
- 10.23(iv) [Amendment No. 3 to Credit Agreement, dated as of July 13, 2018, among the Registrant, 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 lenders signatory thereto and Citibank, N.A. as administrative agent, incorporated by reference to Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q filed on August 7, 2018.](#)
- 10.23(v) [Amendment No. 4 to Credit Agreement, dated as of January 17, 2020 among International Flavors & Fragrances Inc., 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 lenders signatory thereto and Citibank, N.A. as administrative agent, incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on January 22, 2020.](#)
- 10.23(vi) [Second Amended and Restated Credit Agreement, dated as of August 25, 2020 among International Flavors & Fragrances Inc., International Flavors & Fragrances \(Nederland\) Holding B.V. and International Flavors & Fragrances I.F.F. \(Nederland\) B.V., as borrowers, the lenders signatory thereto and Citibank, N.A. as administrative agent, incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on August 28, 2020.](#)
- 10.23(vii) [Third Amended and Restated Credit Agreement, dated as of July 28, 2021 among International Flavors & Fragrances Inc., International Flavors & Fragrances \(Nederland\) Holding B.V. and International Flavors & Fragrances I.F.F. \(Nederland\) B.V., as borrowers, the lenders signatory thereto and Citibank, N.A. as administrative agent, incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on July 28, 2021.](#)

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- 10.24(i) [Term Loan Credit Agreement, dated as of June 6, 2018, among the Registrant, as borrower, the lenders signatory thereto and Morgan Stanley Senior Funding, Inc. as administrative agent, incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on June 8, 2018.](#)
- 10.24(ii) [Amendment No 1 to Term Loan Credit Agreement, dated as of July 13, 2018, among the Registrant, as borrower, the lenders signatory thereto and Morgan Stanley Senior Funding, Inc. as administrative agent, incorporated by reference to Exhibit 10.6 to the Registrant's Quarterly Report on Form 10-Q filed on August 7, 2018.](#)
- 10.24(iii) [Amendment No. 2 to Term Loan Credit Agreement, dated as of January 17, 2020 among International Flavors & Fragrances Inc., as borrower, the lenders signatory thereto and Morgan Stanley Senior Funding, Inc. as administrative agent, incorporated by reference to Exhibit 10.2 to the Registrant's Current Report filed on Form 8-K filed on January 22, 2020.](#)
- 10.24(iv) [Amendment No. 3 to Credit Agreement, dated as of August 25, 2020 among International Flavors & Fragrances Inc., as borrower, the lenders signatory thereto and Morgan Stanley Senior Funding, Inc. as administrative agent, incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on August 28, 2020.](#)
- 10.25 [Employee Matters Agreement, dated as of December 15, 2019, by and among DuPont de Nemours Inc., Nutrition & Biosciences, Inc. and International Flavors & Fragrances Inc, incorporated by reference to the Registrant's Current Report on Form 8-K filed on December 18, 2019.](#)
- 10.25(i) [Amendment to the Employee Matters Agreement, dated January 22, 2021, by and among International Flavors & Fragrances Inc., DuPont de Nemours, Inc. and Nutrition & Biosciences, Inc., incorporated by reference to the Registrant's Current Report on Form 8-K filed on January 25, 2021.](#)
- 10.26(i) [Term Loan Credit Agreement, dated as of May 15, 2020 among International Flavors & Fragrances Inc., as borrower, the lenders signatory thereto and China Construction Bank Corporation, New York Branch, as administrative agent, incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on May 21, 2020.](#)
- 10.26(ii) [Amendment No. 1 to Credit Agreement, dated as of August 25, 2020, among the Company, as borrower, the lenders signatory thereto and China Construction Bank Corporation, New York Branch as administrative agent, incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed on August 28, 2020.](#)
- 10.27 [Term Loan Credit Agreement, dated as of January 17, 2020, by and among Nutrition & Biosciences, Inc., as borrower, and Morgan Stanley Senior Funding Inc., as administrative agent, and the other lenders party thereto, incorporated by reference to Exhibit 99.14 to the Registrant's Form S-4 Registration Statement filed on October 5, 2020.](#)
- 10.27(i) [Amendment No. 1 to Credit Agreement, dated as of August 25, 2020, by and among Nutrition & Biosciences, Inc., the lenders signatory thereto and Morgan Stanley Senior Fund, Inc., as administrative agent, incorporated by reference to Exhibit 99.15 to the Registrant's Form S-4 Registration Statement filed on October 5, 2020.](#)
- 10.28 [Co-Operation Agreement, dated as of March 7, 2021, incorporated by reference to the Registrant's Current Report on Form 8-K filed on March 8, 2021.](#)
- 10.29 [Tax Matters Agreement, dated as of February 1, 2021, by and among DuPont de Nemours, Inc., Nutrition & Biosciences, Inc. and International Flavors & Fragrances Inc., incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on February 4, 2021.](#)
- 10.30 [Intellectual Property Cross-License Agreement, dated as of February 1, 2021, by and between Nutrition & Biosciences, Inc. and DuPont de Nemours, Inc., incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on February 4, 2021.](#)
- 21 [List of Principal Subsidiaries.](#)
- 23 [Consent of PricewaterhouseCoopers LLP.](#)
- 31.1 [Certification of Frank Clyburn pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.](#)
- 31.2 [Certification of Glenn Richter pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.](#)
- 32 [Certification of Frank Clyburn and Glenn Richter 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

**Exhibit
Number Description**

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/ Glenn Richter
Name: **Glenn Richter**
Title: *Executive Vice President and Chief Financial Officer*

Dated: February 28, 2022

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:

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Frank Clyburn</u> Frank Clyburn	Chief Executive Officer and Director (Principal Executive Officer)	February 28, 2022
<u>/s/ Glenn Richter</u> Glenn Richter	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 28, 2022
<u>/s/ Robert Anderson</u> Robert Anderson	Senior Vice President, Corporate Controller and Chief Accounting Officer (Principal Accounting Officer)	February 28, 2022
<u>/s/ Dale F. Morrison</u> Dale F. Morrison	Chairman of the Board, Director	February 28, 2022
<u>/s/ Kathryn J. Boor</u> Kathryn J. Boor	Director	February 28, 2022
<u>/s/ Edward D. Breen</u> Edward D. Breen	Director	February 28, 2022
<u>/s/ Barry A. Bruno</u> Barry A. Bruno	Director	February 28, 2022
<u>/s/ Carol Anthony (John) Davidson</u> Carol Anthony (John) Davidson	Director	February 28, 2022
<u>/s/ Michael Ducker</u> Michael Ducker	Director	February 28, 2022
<u>/s/ Roger W. Ferguson, Jr.</u> Roger W. Ferguson, Jr.	Director	February 28, 2022
<u>/s/ John F. Ferraro</u> John F. Ferraro	Director	February 28, 2022
<u>/s/ Christina Gold</u> Christina Gold	Director	February 28, 2022
<u>/s/ Ilene Gordon</u> Ilene Gordon	Director	February 28, 2022
<u>/s/ Matthias Heinzl</u> Matthias Heinzl	Director	February 28, 2022
<u>/s/ Kåre Schultz</u> Kåre Schultz	Director	February 28, 2022
<u>/s/ Stephen Williamson</u> Stephen Williamson	Director	February 28, 2022

INTERNATIONAL FLAVORS & FRAGRANCES INC. AND SUBSIDIARIES
SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS AND RESERVES

(IN MILLIONS)

For the Year Ended December 31, 2021							
	Balance at beginning of period	Additions (deductions) charged to costs and expenses	Acquisitions	Accounts written off	Translation adjustments	Other⁽¹⁾	Balance at end of period
Allowance for doubtful accounts	\$ 21	\$ 6	\$ —	\$ (1)	\$ —	\$ 20	\$ 46
Valuation allowance on credit and operating loss carryforwards and other net deferred tax assets	257	(18)	9	—	(16)	—	232
For the Year Ended December 31, 2020							
	Balance at beginning of period	Additions charged to costs and expenses	Acquisitions	Accounts written off	Translation adjustments	Other	Balance at end of period
Allowance for doubtful accounts	\$ 16	\$ 6	\$ —	\$ (1)	\$ —	\$ —	\$ 21
Valuation allowance on credit and operating loss carryforwards and other net deferred tax assets	204	35	—	—	18	—	257
For the Year Ended December 31, 2019							
	Balance at beginning of period	Additions charged to costs and expenses	Acquisitions	Accounts written off	Translation adjustments	Other⁽²⁾	Balance at end of period
Allowance for doubtful accounts	\$ 9	\$ 1	\$ —	\$ (2)	\$ —	\$ 8	\$ 16
Valuation allowance on credit and operating loss carryforwards and other net deferred tax assets	200	6	—	—	(2)	—	204

(1) The amount relates to adjustment to allowances for bad debts as a result of purchase price allocation related to the Merger with N&B.

(2) The amount relates to an adjustment to reflect the correct classification of amounts between the allowance for bad debts and Trade Receivables.

**INTERNATIONAL FLAVORS & FRAGRANCES INC.
NON-EMPLOYEE DIRECTOR
RESTRICTED STOCK UNITS (“RSU”) AWARD AGREEMENT
(the “RSU AWARD AGREEMENT”)**

Participant: [Name]

This RSU Award Agreement, dated as of [X, 20XX] (the “**Grant Date**”), is made by and between International Flavors & Fragrances Inc., a New York Corporation, including its affiliates (the “**Company**”) and [NAME OF PARTICIPANT] (the “**Participant**”) under the International Flavors & Fragrances Inc. 2021 Stock Award and Incentive Plan, as it may be amended from time to time (the “**Plan**”). Pursuant to Section 7 of the Plan, Participant has been granted an RSU Award, as described below (the “**RSU Award**”) subject to the Participant’s acceptance of the attached RSU Terms and Conditions and the Plan, both of which are made a part hereof and are incorporated herein by reference.

RSU Award Information					
Grant Date	RSU Award Value on Grant Date (\$US)	Number of RSUs Granted	Closing Price of a Share of Common Stock on Grant Date (\$US)	Vesting Date	Settlement of RSU Award
[DATE]	[\$__]	[_____]	[\$__.]	[DATE]	Awards are settled by delivery of one share of Common Stock for each RSU being settled

BY ELECTRONICALLY ACCEPTING THIS RSU AWARD, PARTICIPANT AGREES TO BE BOUND BY THE PROVISIONS OF THE PLAN, THIS RSU AWARD AGREEMENT AND THE RSU TERMS AND CONDITIONS AND RELATED ADDENDUM. THE PARTICIPANT HAS REVIEWED THE PLAN, THE RSU AWARD AGREEMENT AND THE RSU TERMS AND CONDITIONS IN THEIR ENTIRETY, HAS HAD AN OPPORTUNITY TO OBTAIN THE ADVICE OF COUNSEL PRIOR TO ACCEPTING THE RSU AWARD AND FULLY UNDERSTANDS ALL OF THE PROVISIONS OF THE PLAN, THIS RSU AWARD AGREEMENT AND THE RSU TERMS AND CONDITIONS. THE PARTICIPANT HAS BEEN PROVIDED WITH A COPY OR ELECTRONIC ACCESS TO A COPY OF THE U.S. PROSPECTUS FOR THE PLAN AND THE TAX SUPPLEMENT TO THE U.S. PROSPECTUS FOR PARTICIPANT’S COUNTRY OF RESIDENCE. PARTICIPANT HEREBY AGREES TO ACCEPT AS BINDING, CONCLUSIVE AND FINAL ALL DECISIONS OR INTERPRETATIONS OF THE COMMITTEE ARISING UNDER THE PLAN, THE RSU AWARD AGREEMENT OR THE RSU TERMS AND CONDITIONS.

I ACCEPT

**INTERNATIONAL FLAVORS & FRAGRANCES INC.
NON-EMPLOYEE DIRECTOR
RSU AWARD AGREEMENT
TERMS AND CONDITIONS (the “RSU TERMS AND CONDITIONS”)**

These RSU Terms and Conditions, including the relevant addendum, are a part of each International Flavors & Fragrances Inc. (the “**Company**”) RSU Award Agreement made under the Plan, which is hereby incorporated by reference.

Capitalized terms not defined herein shall have the meanings ascribed to them in the Plan. In the event of any conflict between the provisions of these RSU Terms and Conditions and the Plan, the provisions of the RSU Award Agreement, including the RSU Terms and Conditions, shall govern.

1. **Amount of RSU Award.** As of the Grant Date, the Participant shall be eligible to receive an RSU Award in the number of RSUs specified on the first page of the RSU Award Agreement. The RSU Award provides Participant with a contractual right to receive one share of Common Stock for each RSU being settled upon vesting.
2. **Eligibility for Award.** A Participant's eligibility for an RSU Award shall be at the discretion of the Committee as authorized in Section 5 of the Plan. The grant of an RSU Award is a one-time benefit and does not create any contractual or other right to receive any future RSU Award.
3. **Vesting and Account.** Except as provided in Section 6 herein, the RSU Award will vest on the date set forth on the first page of the RSU Award Agreement if not previously forfeited, and is 0% vested before expiration of this period (the date on which the RSU Award vests, the “**Vesting Date**”). Prior to the Vesting Date, the Company or its designated agent shall maintain a bookkeeping account reflecting the number of RSUs credited to a Participant's account.
4. **Settlement of the Award.** Upon vesting as provided in Section 3 or Section 6 herein, the RSU Award will be settled by delivery of one share of Common Stock for each RSU being settled. Such settlement shall occur within thirty (30) days following the Vesting Date.
5. **Voting Rights and Dividends.** RSUs do not provide voting or dividend rights until fully vested and no dividends or dividend equivalents will be paid or credited on any unvested RSUs.
6. **Termination.** A Participant's rights under the RSU Award following termination as a director shall be determined in accordance with the following provisions:
 - a. **Resignation or Removal.** If a Participant resigns or is removed with cause as set forth in the Company's By-Laws then all unvested RSUs will be immediately forfeited.
 - b. **Other Termination.** If a Participant terminates service due to death, Disability or Retirement, then all outstanding unvested RSUs will become immediately vested and will be settled in accordance with Section 4. “**Retirement**” shall mean Participant not standing for re-election, Participant not being re-elected by the Company's shareholders or as determined by the Committee in its sole discretion.
7. **Change in Control.** In the event the Company undergoes a “Change in Control” (as defined in the Plan) following the Grant Date, RSU Awards shall be treated as provided for in Section 11 of the Plan. For the avoidance of doubt, the Company's combination with DuPont de Nemours, Inc.'s Nutrition & Biosciences business will not be considered a Change in Control for purposes of this agreement, or the ESP, with respect to the awards granted hereunder. For the avoidance of doubt, such RSU Awards shall be settled within thirty (30) days following the earlier of (i) the Vesting Date or (ii) the date

they become free of all restrictions, limitations and conditions and become fully vested as provided in Section 11 of the Plan.

8. **Clawback and Recoupment Provisions.** Notwithstanding anything herein to the contrary, any RSU Award made or payable shall be subject to the clawback, recoupment and forfeiture provisions of Section 32 of the Plan. By acknowledging the RSU Award Agreement, the Participant acknowledges that any and all RSU Awards previously granted to the Participant prior to the Grant Date, and any other cash or shares of Common Stock provided to the Participant following the Grant Date and under the RSU Award or otherwise under the Plan, are subject to the provisions of Section 32 of the Plan.
9. **Limits on Transfers of Awards.** Except as provided by the Committee, no RSU Award and no right under any RSU Award, shall be assignable, alienable, saleable, or transferable by a Participant other than by will or by the laws of descent and distribution in accordance with Section 23 of the Plan.
10. **Administration.**
 - a. Administration. The Board has delegated administrative authority to the Committee and the RSU Awards shall be administered by the Committee.
 - b. Powers and Duties. The Committee shall have sole discretion and authority to make any and all determinations necessary or advisable for administration of an RSU Award and may adopt, amend or revoke any rule or regulation established for the proper administration of an RSU Award. The Committee shall have the ability to modify the RSU Award provisions, to the extent necessary, or delegate such authority, to accommodate any changes in law or regulations in jurisdictions in which Participants will receive RSU Awards. The Committee or its designee, if applicable, will oversee RSU Award calculations. All interpretations, decisions, or determinations made by the Committee or its designee, if applicable, pursuant to an RSU Award shall be final and conclusive.
11. **Amendment; Termination of the RSU Award.** The Committee has the right to revise, modify, or terminate an RSU Award in whole or in part at any time or for any reason, and the right to modify any RSU Award amount in accordance with Section 31 of the Plan.
12. **Tax Liability and Withholding.** The Participant shall be responsible for any tax liability that may arise as a result of the payments contemplated by an RSU Award or these RSU Terms and Conditions in accordance with Section 20 of the Plan. The Participant acknowledges the Company is authorized to withhold taxes due, or potentially payable in connection with any payment of an RSU Award in accordance with Section 20 of the Plan. Further, the Participant agrees to any deduction or set off by the Company as provided under Section 26 of the Plan.
13. **Severability; Survival of Terms.** Should any provision of an RSU Award or these RSU Terms and Conditions be held by a court of competent jurisdiction to be unenforceable, such holding shall not affect the validity of the remainder of the RSU Award or these RSU Terms and Conditions. These RSU Terms and Conditions shall apply to and bind the Participant and the Company and their respective permitted assignees and transferees, heirs, legatees, executors, administrators and legal successors.
14. **Entire Agreement; Dispute Resolution.** These RSU Terms and Conditions and all addendums hereto, the RSU Award Agreement and the Plan constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and the Participant with respect to the subject matter hereof.

15. **Non U.S. Residents.** Rights and restrictions for Participants residing in foreign countries may differ and shall be based on applicable foreign law and will be governed by Section 33 of the Plan.
16. **Electronic Delivery.** The Company may, in its sole discretion, deliver any documents related to an RSU Award by electronic means. The Participant hereby consents to receive such documents by electronic delivery and, if requested, to agree to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.
17. **Governing Law.** These RSU Terms and Conditions and the RSU Award Agreement shall be governed by and construed according to the laws of the State of New York and the United States without regard to principles of conflict of law.
18. **Consent for Data Transfer.** By accepting this RSU Award Agreement, the Participant voluntarily acknowledges and consents to the collection, use processing and transfer of personal data as described herein, including for the purpose of managing and administering the Plan, certain personal information, including name, home address and telephone number, date of birth, social security number, salary, nationality, job title, any shares of Common Stock or directorships held in the Company, and details of all options or any other entitlement to shares of Common Stock or other equity of the Company awarded, canceled, purchased, vested, unvested or outstanding in Participant's favor ("**Data**"). The Company and/or its affiliates will transfer Data among themselves as necessary for the purpose of implementation, administration and management of the Plan and may further transfer Data to any third parties assisting the Company in the implementation, administration and management of the Plan. These recipients may be located in the European Economic Area, or elsewhere throughout the world, such as the United States. Participant authorizes them to receive, possess, use, retain and transfer the Data, in electronic or other form, for the purposes of implementing, administering and managing Participant's participation in the Plan, including any requisite transfer of such Data as may be required for the administration of the Plan and/or the subsequent holding of shares of Common Stock or equity on Participant's behalf to a broker or other third party with whom Participant may elect to deposit any shares of Common Stock acquired pursuant to the Plan. Participant may, at any time, review Data, require any necessary amendments to it or withdraw the consents herein in writing by contacting the Company; however, withdrawing consent may affect Participant's ability to participate in the Plan.
19. **Addendum.** Notwithstanding any provision in these RSU Terms and Conditions to the contrary, the RSUs shall be subject to any special terms and conditions for Participant's country of residence set forth in an addendum to these RSU Terms and Conditions (an "**Addendum**"). Further, if Participant transfers Participant's residence to another country, at the time of transfer, the special terms and conditions for such country will apply to Participant to the extent the Company determines, in its sole discretion, that the application of such terms and conditions is necessary or advisable in order to comply with local laws, rules and regulations or to facilitate the operation and administration of the RSUs and the Plan (or the Company may establish alternative terms and conditions as may be necessary or advisable to accommodate Participant's transfer). Any applicable Addendum shall constitute part of these RSU Terms and Conditions.
20. **Private Placement.** The grant of RSUs to Participants outside of the United States is not intended to be a public offering of securities in Participant's country of residence (and country of Employment, if different). The Company has not submitted any registration statement, prospectus or other filings with the local securities authorities (unless otherwise required under local law) outside of the United States, and the grant of the RSUs is not subject to the supervision of the local securities authorities outside of the United States.

21. **Notices.** Any notice required or permitted to be given under this RSU Award Agreement or the RSU Terms and Conditions shall be in writing and shall be deemed to have been given when delivered personally or by courier, or sent by certified or registered mail, postage prepaid, return receipt requested, duly addressed to the party concerned at the address indicated below or to such changed address as such party may subsequently by similar process give notice of:

If to the Company:

International Flavors & Fragrances Inc.
521 W. 57th Street
New York, New York 10019
Attn: Chief Human Resources Officer

If to the Participant:

To the last address delivered to the Company by the Participant in the manner set forth herein.

**INTERNATIONAL FLAVORS & FRAGRANCES INC.
2021 STOCK AWARD AND INCENTIVE PLAN
ADDENDUM TO NON-EMPLOYEE DIRECTOR
TERMS AND CONDITIONS OF RESTRICTED STOCK UNITS**

In addition to the terms of the International Flavors & Fragrances Inc. 2021 Stock Award and Incentive Plan, as it may be amended from time to time (the "Plan"), the Restricted Stock Unit ("RSU") Award Agreement, and the RSU Terms and Conditions, the RSUs are subject to the following additional terms and conditions as set forth in this addendum (the "Addendum") to the extent the Participant resides and/or is employed in one of the countries addressed herein. All defined terms contained in this Addendum shall have the same meaning as set forth in the Plan, the RSU Award Agreement and the RSU Terms and Conditions. To the extent the Participant relocates the Participant's residence to another country, the additional terms and conditions as set forth for such country (if any) shall also apply to the RSUs to the extent the Company determines, in its sole discretion, that the application of such provisions is necessary or advisable in order to comply with local laws, rules and regulations, or to facilitate the operation and administration of the RSUs and the Plan (or the Company may establish alternative terms and conditions as may be necessary or advisable to accommodate the Participant's transfer).

GERMANY

No country-specific provisions.

ISRAEL

1. Type of Grant. The RSUs are not intended to qualify for favorable tax treatment in Israel under Section 102 of the Income Tax Ordinance (New Version) – 1961.

**INTERNATIONAL FLAVORS & FRAGRANCES INC.
RESTRICTED STOCK UNITS (“RSU”) AWARD AGREEMENT
(the “RSU AWARD AGREEMENT”)**

Participant: [Name]

This RSU Award Agreement, dated as of [X, 20XX] (the “**Grant Date**”), is made by and between International Flavors & Fragrances Inc., a New York Corporation, including its affiliates (the “**Company**”) and [NAME OF PARTICIPANT] (the “**Participant**”) under the International Flavors & Fragrances Inc. 2021 Stock Award and Incentive Plan, as it may be amended from time to time (the “**Plan**”). Pursuant to Section 7 of the Plan, Participant has been granted an RSU Award, as described below (the “**RSU Award**”) subject to the Participant’s acceptance of the attached RSU Terms and Conditions and the Plan, both of which are made a part hereof and are incorporated herein by reference.

RSU Award Information					
Grant Date	RSU Award Value on Grant Date (\$US)	Number of RSUs Granted	Closing Price of a Share of Common Stock on Grant Date (\$US)	Vesting Date	Settlement of RSU Award
[DATE]	[\$__]	[_____]	[\$_.__]	[DATE]	Awards are settled by delivery of one share of Common Stock for each RSU being settled

BY ELECTRONICALLY ACCEPTING THIS RSU AWARD, PARTICIPANT AGREES TO BE BOUND BY THE PROVISIONS OF THE PLAN, THIS RSU AWARD AGREEMENT AND THE RSU TERMS AND CONDITIONS AND RELATED ADDENDUM. THE PARTICIPANT HAS REVIEWED THE PLAN, THE RSU AWARD AGREEMENT AND THE RSU TERMS AND CONDITIONS IN THEIR ENTIRETY, HAS HAD AN OPPORTUNITY TO OBTAIN THE ADVICE OF COUNSEL PRIOR TO ACCEPTING THE RSU AWARD AND FULLY UNDERSTANDS ALL OF THE PROVISIONS OF THE PLAN, THIS RSU AWARD AGREEMENT AND THE RSU TERMS AND CONDITIONS. THE PARTICIPANT HAS BEEN PROVIDED WITH A COPY OR ELECTRONIC ACCESS TO A COPY OF THE U.S. PROSPECTUS FOR THE PLAN AND THE TAX SUPPLEMENT TO THE U.S. PROSPECTUS FOR PARTICIPANT’S COUNTRY OF EMPLOYMENT. PARTICIPANT HEREBY AGREES TO ACCEPT AS BINDING, CONCLUSIVE AND FINAL ALL DECISIONS OR INTERPRETATIONS OF THE COMMITTEE ARISING UNDER THE PLAN, THE RSU AWARD AGREEMENT OR THE RSU TERMS AND CONDITIONS.

[] I ACCEPT

INTERNATIONAL FLAVORS & FRAGRANCES INC.
RSU AWARD AGREEMENT
TERMS AND CONDITIONS (the “RSU TERMS AND CONDITIONS”)

These RSU Terms and Conditions, including the relevant addendum, are a part of each International Flavors & Fragrances Inc. (the “**Company**”) RSU Award Agreement made under the Plan, which is hereby incorporated by reference.

Capitalized terms not defined herein shall have the meanings ascribed to them in the Plan. In the event of any conflict between the provisions of these RSU Terms and Conditions and the Plan, the provisions of the Plan shall govern.

1. **Amount of RSU Award.** As of the Grant Date, the Participant shall be eligible to receive an RSU Award in the number of RSUs specified on the first page of the RSU Award Agreement. The RSU Award provides Participant with a contractual right to receive one share of Common Stock for each RSU being settled upon vesting.
2. **Eligibility for Award.** A Participant's eligibility for an RSU Award shall be at the discretion of the Committee as authorized in Section 5 of the Plan. The grant of an RSU Award is a one-time benefit and does not create any contractual or other right to receive any future RSU Award.
3. **Vesting and Account.** Except as provided in Section 6 herein, the RSU Award will vest on the date set forth on the first page of the RSU Award Agreement, if not previously forfeited, and is 0% vested before expiration of this period (the date on which the RSU Award vests, the “**Vesting Date**”). Prior to the Vesting Date, the Company or its designated agent shall maintain a bookkeeping account reflecting the number of RSUs credited to a Participant's account.
4. **Settlement of the Award.** Upon vesting as provided in Section 3 or Section 6 herein, the RSU Award will be settled by delivery of one share of Common Stock, for each RSU being settled. Such settlement shall occur within thirty (30) days following the Vesting Date.
5. **Voting Rights and Dividends.** RSUs do not provide voting or dividend rights until fully vested and no dividends or dividend equivalents will be paid or credited on any unvested RSUs.
6. **Termination of Employment or Leave of Absence.** A Participant's rights under the RSU Award following termination of Employment or leave of absence shall be determined in accordance with the following provisions:
 - a. **Termination Not for Cause or Early Retirement.** If the Participant is involuntarily terminated not for Cause, or voluntarily terminates Employment due to Early Retirement, a pro-rata portion of all outstanding unvested RSUs shall remain outstanding and will become vested on the Vesting Date as though Participant had not had a termination of Employment under this subsection 6(a). The pro-rata portion shall be determined by multiplying the number of unvested RSUs by a fraction, (x) the numerator of which is the number of days from the Grant Date to the Participant's termination of Employment and (y) the denominator of which is the number of days from the Grant Date to the final Vesting Date. A Participant's RSUs that have not vested before such termination of Employment under this subsection 6(a), and which are not included in the pro rata portion subject to continued vesting

will be immediately forfeited. Upon vesting, such RSUs will be settled within thirty (30) days following the Vesting Date.

- b. **Resignation or Termination with Cause.** If a Participant resigns or is terminated by the Company for Cause, then all outstanding unvested RSUs will be immediately forfeited.
 - c. **Normal Retirement or Disability.** If a Participant terminates Employment due to Normal Retirement or Disability, then all outstanding unvested RSUs will remain outstanding and will become vested on the Vesting Date as though the Participant had not had a termination of Employment under this subsection 6(c). Upon vesting, such RSUs will be settled within thirty (30) days following the Vesting Date.
 - d. **Death.** If a Participant terminates Employment due to death, then all outstanding unvested RSUs will become immediately vested. Upon vesting, such RSUs will be settled within thirty (30) days following the date of the Participant's death.
 - e. **Leave of Absence.** If a Participant is not in active Employment for any portion of the vesting period as a result of a paid or unpaid leave of absence, the terms of any unvested RSU may be adjusted, subject to local legal requirements and applicable Company policies that govern leaves of absence.
7. **Change in Control.** In the event the Company undergoes a "Change in Control" (as defined in the Plan) following the Grant Date, RSU Awards shall be treated as provided for in Section 11 of the Plan. For the avoidance of doubt, such RSU Awards shall be settled within thirty (30) days following the earlier of (i) the Vesting Date or (ii) the date they become free of all restrictions, limitations and conditions and become fully vested as provided in Section 11 of the Plan.
 8. **Clawback and Recoupment Provisions.** Notwithstanding anything herein to the contrary, if a Participant is designated by the Company as grade level 7 or above for any portion of the vesting period, any RSU Award made or payable shall be subject to the clawback, recoupment and forfeiture provisions of Section 32 of the Plan and Section 9 of the ESP, if applicable. By acknowledging the RSU Award Agreement, the Participant acknowledges that any and all RSU Awards previously granted to the Participant prior to the Grant Date, and any other cash or shares of Common Stock provided to the Participant following the Grant Date and under the RSU Award or otherwise under the Plan, are subject to the provisions of Section 32 of the Plan and Section 9 of the ESP, as applicable.
 9. **Limits on Transfers of Awards.** Except as provided by the Committee, no RSU Award and no right under any RSU Award, shall be assignable, alienable, saleable, or transferable by a Participant other than by will or by the laws of descent and distribution in accordance with Section 23 of the Plan.
 10. **Section 409A.** Notwithstanding anything herein or in the Plan to the contrary, no payment or settlement of shares of Common Stock that constitute "non-qualified deferred compensation" for purposes of Section 409A of the Code will be made under these RSU Terms and Conditions to any Participant on account of such Participant's termination of Employment, if on such date, the Participant is a "specified employee" (within the meaning of that term under Section 409A(a)(2)(B) of the Code, or any successor provision thereto) until the date which is the earlier of (i) the expiration of the six (6)-month period measured

from the date of such Participant's termination of Employment and (ii) the date of such Participant's death.

11. Administration.

- a. Administration. The Board has delegated administrative authority to the Committee and the RSU Awards shall be administered by the Committee.
- b. Powers and Duties. The Committee shall have sole discretion and authority to make any and all determinations necessary or advisable for administration of an RSU Award and may adopt, amend or revoke any rule or regulation established for the proper administration of an RSU Award. The Committee shall have the ability to modify the RSU Award provisions, to the extent necessary, or delegate such authority, to accommodate any changes in law or regulations in jurisdictions in which Participants will receive RSU Awards. The Committee or its designee, if applicable, will oversee RSU Award calculations. All interpretations, decisions, or determinations made by the Committee or its designee, if applicable, pursuant to an RSU Award shall be final and conclusive.

12. **Amendment; Termination of the RSU Award**. The Committee has the right to revise, modify, or terminate an RSU Award in whole or in part at any time or for any reason, and the right to modify any RSU Award amount in accordance with Section 31 of the Plan.
13. **Tax Liability and Withholding**. The Participant shall be responsible for any tax liability that may arise as a result of the payments contemplated by an RSU Award or these RSU Terms and Conditions in accordance with Section 20 of the Plan. The Participant acknowledges the Company is authorized to withhold taxes due, or potentially payable, in connection with any payment of an RSU Award in accordance with Section 20 of the Plan. Further, the Participant agrees to any deduction or set off by the Company as provided under Section 26 of the Plan.
14. **Severability; Survival of Terms**. Should any provision of an RSU Award or these RSU Terms and Conditions be held by a court of competent jurisdiction to be unenforceable, such holding shall not affect the validity of the remainder of the RSU Award or these RSU Terms and Conditions. These RSU Terms and Conditions shall apply to and bind the Participant and the Company and their respective permitted assignees and transferees, heirs, legatees, executors, administrators and legal successors.
15. **Entire Agreement**. These RSU Terms and Conditions and all addendums hereto, the RSU Award Agreement and the Plan constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and the Participant with respect to the subject matter hereof.
16. **Non U.S. Residents**. Rights and restrictions for Participants residing in foreign countries may differ and shall be based on applicable foreign law and will be governed by Section 33 of the Plan.
17. **Electronic Delivery**. The Company may, in its sole discretion, deliver any documents related to an RSU Award by electronic means. The Participant hereby consents to receive such documents by electronic delivery and, if requested, to agree to participate in the Plan through an on-line or electronic system

established and maintained by the Company or another third party designated by the Company.

18. **Governing Law.** These RSU Terms and Conditions and the RSU Award Agreement shall be governed by and construed according to the laws of the State of New York and the United States without regard to principles of conflict of law.
19. **Consent for Data Transfer.** By accepting these RSU Terms and Conditions, the Participant voluntarily acknowledges and consents to the collection, use, processing and transfer of personal data as described herein, including for the purpose of managing and administering the Plan, certain personal information, including name, home address and telephone number, date of birth, social security number or other employee identification number, salary, nationality, job title, any shares of Common Stock or directorships held in the Company, and details of all options or any other entitlement to shares of Common Stock or other equity of the Company awarded, canceled, purchased, vested, unvested or outstanding in Participant's favor ("**Data**"). The Company and/or its affiliates will transfer Data among themselves as necessary for the purpose of implementation, administration and management of the Plan and may further transfer Data to any third parties assisting the Company in the implementation, administration and management of the Plan. These recipients may be located in the European Economic Area, or elsewhere throughout the world, such as the United States. Participant authorizes them to receive, possess, use, retain and transfer the Data, in electronic or other form, for the purposes of implementing, administering and managing Participant's participation in the Plan, including any requisite transfer of such Data as may be required for the administration of the Plan and/or the subsequent holding of shares of Common Stock or equity on Participant's behalf to a broker or other third party with whom Participant may elect to deposit any shares of Common Stock acquired pursuant to the Plan. Participant may, at any time, review Data, require any necessary amendments to it or withdraw the consents herein in writing by contacting the Company; however, withdrawing consent may affect Participant's ability to participate in the Plan.
20. **Addendum.** Notwithstanding any provision in these RSU Terms and Conditions to the contrary, the RSUs shall be subject to any special terms and conditions for Participant's country of residence (and country of Employment, if different) set forth in an addendum to these RSU Terms and Conditions (an "**Addendum**"). Further, if Participant transfers Participant's residence and/or Employment to another country, at the time of transfer, the special terms and conditions for such country will apply to Participant to the extent the Company determines, in its sole discretion, that the application of such terms and conditions is necessary or advisable in order to comply with local laws, rules and regulations or to facilitate the operation and administration of the RSUs and the Plan (or the Company may establish alternative terms and conditions as may be necessary or advisable to accommodate Participant's transfer). Any applicable Addendum shall constitute part of these RSU Terms and Conditions.
21. **Private Placement.** The grant of RSUs to Participants outside of the United States is not intended to be a public offering of securities in Participant's country of residence (and country of Employment, if different). The Company has not submitted any registration statement, prospectus or other filings with the local securities authorities (unless otherwise required under local law) outside of the

United States, and the grant of the RSUs is not subject to the supervision of the local securities authorities outside of the United States.

22. **Notices.** Any notice required or permitted to be given under these RSU Terms and Conditions or the RSU Award Agreement shall be in writing and shall be deemed to have been given when delivered personally or by courier, or sent by certified or registered mail, postage prepaid, return receipt requested, duly addressed to the party concerned at the address indicated below or to such changed address as such party may subsequently by similar process give notice of:

If to the Company:

International Flavors & Fragrances Inc.
521 W. 57th Street
New York, New York 10019
Attn: Chief Human Resources Officer

If to the Participant:

To the last address delivered to the Company by the Participant in the manner set forth herein.

*

**INTERNATIONAL FLAVORS & FRAGRANCES INC.
EQUITY CHOICE PROGRAM AWARD AGREEMENT (the "ECP AWARD AGREEMENT") PLAN YEAR 2021**

Participant: [•]	Job Level: [•]
Location: [•]	Position: [•]
ECP Award Amount: [•] USD	Grant Date: [•], 2021
Stock Price: [•] USD	Vesting Date: [•], 2024

This ECP Award Agreement, dated as of [], (the "Grant Date") is made by and between International Flavors & Fragrances Inc., a New York Corporation, including its subsidiaries and affiliates (the "**Company**") and [] (the "**Participant**") under the International Flavors & Fragrances Inc. 2021 Stock Award and Incentive Plan, as it may be amended from time to time (the "**Plan**"). Pursuant to Section 7 of the Plan, Participant has been granted an Equity Choice Program Award, as described below (the "**ECP Award**") subject to the Participant's acceptance of the attached ECP Terms and Conditions and the Plan, both of which are made a part hereof and are incorporated herein by reference.

ECP Award Information:

Vesting: All ECP Awards are subject to 35 month cliff vesting measured from Grant Date.

Payment of Award: ECP Awards are paid / exercisable following the ECP Vesting Date (as defined in Section 3 of the ECP Terms and Conditions). Any RSUs are settled within 60 days of the Vesting Date.

Participant Election(s):

ECP Award Type	Percentage of ECP Award	ECP Award Value USD	ECP Award Amount
PRSU	[] %	\$[]	Matched PRSU: [] PRSU is assigned an adjustment factor of []%
SSAR			SSARs: 0 Number of SSARs granted is based on 5 times the elected SSAR award value divided by the Fair Market Value* of a Share on the Grant Date.
RSU	[] %	\$[]	RSUs: []

* Each as defined in, and subject to, the attached ECP Terms and Conditions and the terms of the Plan. Each ECP Award type elected represents a separate grant under the Plan.

BY ELECTRONICALLY ACCEPTING THIS ECP AWARD, PARTICIPANT AGREES TO BE BOUND BY THE PROVISIONS OF THE PLAN, THIS ECP AWARD AGREEMENT AND THE ECP TERMS AND CONDITIONS. THE PARTICIPANT HAS REVIEWED THE PLAN, THE ECP AWARD AGREEMENT AND THE ECP TERMS AND CONDITIONS IN THEIR ENTIRETY, HAS HAD AN OPPORTUNITY TO OBTAIN THE ADVICE OF COUNSEL PRIOR TO ACCEPTING THE ECP AWARD AND FULLY UNDERSTANDS ALL OF THE PROVISIONS OF THE PLAN, THIS ECP AWARD AGREEMENT AND THE ECP TERMS AND CONDITIONS. THE PARTICIPANT HAS BEEN PROVIDED WITH A COPY OR ELECTRONIC ACCESS TO A COPY OF THE U.S. PROSPECTUS FOR THE PLAN AND THE TAX SUPPLEMENT TO THE U.S. PROSPECTUS FOR PARTICIPANT'S COUNTRY OF EMPLOYMENT. PARTICIPANT HEREBY AGREES TO ACCEPT AS BINDING, CONCLUSIVE AND FINAL ALL DECISIONS OR INTERPRETATIONS OF THE COMMITTEE UPON ANY QUESTIONS ARISING UNDER THE PLAN, THE ECP AWARD AGREEMENT AND THE ECP TERMS AND CONDITIONS.

ACCEPTED ON: .

**INTERNATIONAL FLAVORS & FRAGRANCES INC. EQUITY CHOICE
PROGRAM AWARD AGREEMENT
TERMS AND CONDITIONS (the "ECP TERMS AND CONDITIONS")**

These ECP Terms and Conditions, including the relevant addendum, are a part of each International Flavors & Fragrances Inc. (the "Company") ECP Award Agreement made under the Plan, which is hereby incorporated by reference.

Capitalized terms not defined herein shall have the meanings ascribed to them in the Plan. In the event of any conflict between the provisions of these ECP Terms and Conditions and the Plan, the provisions of the Plan shall govern.

- 1. Amount of ECP Award.** As of the Grant Date, the Participant shall be eligible to receive an ECP Award in the forms and amounts set forth on the first page of the ECP Award Agreement.
- 2. Eligibility for Award.** The Participant's eligibility for an ECP Award shall be at the discretion of the Committee. Eligibility for an ECP Award in one period does not guarantee eligibility for an ECP Award in a later period.
- 3. Vesting of Award.** The ECP Award vests on the date set forth on the first page of the ECP Award Agreement (the "ECP Vesting Date") if not previously forfeited, and is 0% vested before expiration of this period.
- 4. ECP Award Allocations.** The Participants may elect to allocate their total ECP Award between three types of ECP Award grants in 5% increments: (i) PRSUs (as defined below) (ii) Stock-Settled Appreciation Rights ("SSARs"), and (iii) Restricted Stock Units ("RSUs"). If the Participant does not elect an ECP Award type within the time period specified by the Committee, 100% of the ECP Award will be allocated to RSUs by default or such other default selection specified by the Committee.

5. Purchased Shares and Matching Restricted Stock Units.

(a) Adjusted ECP Award Value. As used herein, the term "PRSU" shall mean RSUs granted by the Company under Section 7 of the Plan. There is a 20% adjustment upward of the ECP Award value for any allocation of the ECP Award elected in PRSUs (the "Adjusted ECP Award Value"). For example, if the Participant elects to receive \$100 of his or her ECP in PRSUs, the Participant will be required to tender shares of Common Stock ("Shares"), or a combination of cash and Shares, with a fair value of \$120 as of the Grant Date and will receive a corresponding match in the form of PRSUs from the Company with a Grant Date fair value of \$120.

(i) If the Participant chooses PRSUs on or prior to the date specified by the Company, he or she must (x) deliver funds to the Company, equal to the dollar amount of all or a portion of the Adjusted ECP Award Value, which funds will be used to purchase Shares equivalent to that portion of the Adjusted ECP Award Value for which the Participant chooses to deliver funds and/or (y) tender a sufficient number of Shares to be held in an account designated by the Company, with a value equal to any portion of the Adjusted ECP Award Value which is not covered by the delivery of funds pursuant to (x), calculated based on the Fair Market Value of a Share on the Grant Date (the Shares described in (x) or (y), the "Purchased Shares"). Shares held in a qualified 401(k) plan or in a nonqualified deferred stock compensation shall not be eligible for purposes of this Section 5. Upon receipt of the funds and/or tender Shares, the Company will grant to the Participant a matching grant of a number of PRSUs, with a value on the Grant Date equal to the Fair Market Value of the Purchased Shares on the Grant Date (the "Matched PRSUs").

(ii) Notwithstanding anything herein to the contrary, in the event the Participant fails to tender funds or Shares with a value at least equal to the Adjusted ECP Award Value as required by Section 5(a)(i) herein, the Company shall only grant to the Participant a number of Matched PRSUs with a value equal to the reduced amount tendered and any shortfall in the ECP Award Value shall be allocated in RSUs.

6.Evidence of Purchased Shares and Matched PRSUs.

- (i) Purchased Shares shall be issued and registered in the name of the Participant and evidence of ownership of the Purchased Shares shall be retained by the Company in a restricted account maintained by the Company's designated agent.
 - (ii) Prior to settlement, the Company or its designated agent shall maintain a bookkeeping account reflecting the number of Matched PRSUs granted as part of an ECP Award, and credited to the Participant's account.
- (a) Voting Rights. The Participant shall be entitled to vote Purchased Shares on any matter submitted to a vote of holders of Shares, and shall have all other rights of a shareholder of the Company, except as expressly limited by the ECP Award Agreement or the Plan. Prior to their settlement in accordance with ECP Terms and Conditions and the terms and conditions of the ECP Award Agreement and the Plan, the Participant shall not be entitled to vote Matched PRSUs.
- (b) Dividends and Distributions. Purchased Shares earn dividends and Matched PRSUs earn dividend equivalents and are entitled to distributions during the vesting period if and to the extent that (x) with respect to the Purchased Shares, the Participant is the record owner of such Purchased Shares on any record date for such a dividend or distribution and (y) with respect to the Matched PRSUs, if the Participant has not forfeited the Matched PRSUs on or before the payment date for such dividend or distribution and complies with the vesting conditions set forth below.
- (i) In the event of a cash dividend or cash distribution on Shares, such dividend or distribution shall be paid in cash to the Participant at the time of payment to shareholders generally and shall be non-forfeitable.
 - (ii) In the event of any non-cash dividend or distribution in the form of property other than Shares, such property shall be distributed in respect of Purchased Shares, but the Company (or its designated agent) shall retain in its custody the property so distributed in respect of Matched PRSUs, which property, (1) will become vested if and to the same extent the underlying Matched PRSUs becomes vested, (2) will be settled if and to the same extent the underlying Matched PRSUs are settled and, (3) to the greatest extent practicable, shall be subject to all other terms and conditions applied to the underlying Matched PRSUs, including in the event of any dividends or distributions paid in respect of such property.
 - (iii) In the event of a dividend or distribution in the form of Shares or a stock split of Shares, the Shares so issued or delivered will be deemed to be additional Purchased Shares and in the case of Matched PRSUs will be credited to the Participant's bookkeeping account as additional Matched PRSUs and will become vested and will settle if and to the same extent as the underlying Matched PRSUs. With respect to dividends and distributions in respect of the Purchased Shares, such dividends and distributions will be made in the form of additional Shares, while with respect to dividends and distributions in respect of Matched PRSUs, the dividends and distributions will be made in the form of additional RSUs.
- (c) Restrictions on Purchased Shares and Matched PRSUs. The Purchased Shares and Matched PRSUs shall be subject to the following restrictions during the vesting period:
- (i) *Purchased Shares*. The Participant shall have the right to withdraw, transfer, sell, assign, pledge or encumber (subject to Section 23 of the Plan) any or all of the Purchased Shares at any time, by written notice addressed to the Company; provided that such withdrawal, transfer, sale, assignment, pledge or encumbrance of Purchased Shares will result in forfeiture of a corresponding number of Matched PRSUs. Upon forfeiture of any number of Matched PRSUs, the restrictions on the corresponding number of Purchased Shares will lapse.
 - (ii) *Matched PRSUs*. Matched PRSUs are subject to the risk of forfeiture and other restrictions specified in the Plan, the ECP Award Agreement and these ECP Terms and Conditions. The Participant shall have no right to settlement of Matched PRSUs and delivery of Shares underlying such Matched PRSUs until such time as the Matched PRSUs have become vested. Upon vesting, the Matched PRSUs will be settled by delivery of one Share for each Matched PRSU being settled. Except as otherwise provided in Section 8 below, such settlement shall occur within thirty (30) days following the ECP Vesting Date.

7. Stock-Settled Appreciation Rights ("SSARs"). SSARs are an award granted under Section 7 of the Plan, under which the Participants receive a contractual right to receive the value in Shares of the appreciation in the Company's price per Share from the SSAR Grant Date to the date the SSAR is exercised by the Participant.

(a) Number of SSARs Granted. The total number of SSARs granted by the Company to the Participant is set forth on the first page of the ECP Award Agreement and is based on 5.0 times the Participant's SSARs award value divided by the Fair Market Value of a Share on the Grant Date. By way of example:

"If the Participant's ECP Award value is \$100 and the Participant elects to allocate the total ECP Award to SSARs, then the number of SSARs granted to the Participant would be equal to \$100 multiplied by 5.0 divided by the Fair Market Value of a Share on the Grant Date. If the Fair Market Value of a Share on the Grant Date was \$10 per Share, then the Participant would receive 50 SSARs."

(b) Evidence of SSAR Awards. Prior to vesting, the Company (or its designated agent) shall maintain a bookkeeping account reflecting the number of SSARs granted as part of an ECP Award, and credited to the Participant's account.

(c) Exercise and Payment of Awards. The Participant may exercise vested SSARs by delivering written notice to the Company stating the number of Shares as to which SSARs are being exercised and the name in which the Participant wishes the Shares to be issued. SSARs may only be exercised on a date that the Fair Market Value of a Share exceeds the Base Price (as defined below) and only if the SSARs are otherwise exercisable at such date. Upon exercise of SSARs, the Participant shall be entitled to receive payment in Shares, calculated as follows:

Shares Paid = (FMV minus Base Price) multiplied by (number of SSARs exercised) divided by FMV "FMV" is the Fair Market Value of a Share at the exercise date

"Base Price" is the Fair Market Value of a Share on the Grant Date as set forth in the Award Agreement.

If any fractional Share would be deliverable upon exercise, after taking into account withholding for mandatory taxes, the Company will pay cash in lieu of delivery of such fractional Share or will use such cash to apply towards withholding for taxes.

(d) Exercise Period. SSARs are exercisable for a seven (7)-year period, as measured from the Grant Date or such earlier date as such SSAR may terminate as described herein.

(e) Dividend and Voting Rights. SSARs do not earn dividends and are not entitled to any voting rights.

8. Restricted Stock Units ("RSUs"). RSUs are an Award granted under Section 7 of the Plan, under which the Participants receive a contractual right to receive unrestricted Shares upon vesting.

(a) Number of RSUs granted. The total number of RSUs granted by the Company to the Participant is set forth on the first page of the ECP Award Agreement and is based on the Fair Market Value of a Share on the Grant Date.

(b) Evidence of RSU Award. Prior to vesting, the Company or its designated agent shall maintain a bookkeeping account reflecting the number of RSUs granted as part of an ECP Award, and credited to the Participant's account.

(c) Settlement of RSUs. Upon vesting, RSUs will be settled by delivery of one Share for each RSU being settled. Except as otherwise provided in Section 8 below, such settlement shall occur within thirty (30) days following the ECP Vesting Date. Notwithstanding the foregoing, the Company reserves the right to settle RSUs in cash, in its discretion.

(d) Dividends/Dividend Equivalents and Voting Rights. RSUs granted hereunder do not provide voting or dividend rights and no dividends will be paid or credited on any RSUs.

9. Termination of Employment. The following provisions will govern the treatment of the Participant's ECP Award in the event of a termination of Employment.

(a) Effect of Termination of Employment on Purchased Shares. If the Participant terminates Employment for any reason or no reason (including, without limitation, for any reason set forth in Sections 8(b) through 8(e) below), all restrictions on the Participant's Purchased Shares shall lapse as of the date of the Participant's termination of Employment.

(b) Termination for Cause or Resignation. If the Participant terminates Employment for Cause (as defined in the Plan) or voluntarily terminates (other than a voluntary termination of Employment by the Participant due to

(x) Normal Retirement, (y) Early Retirement or (z) with respect to Participants who are designated as Tier I Employees by the Company for purposes of the ESP, Good Reason), then:

(i) All outstanding unvested Matched PRSUs will be immediately forfeited;

(ii) All outstanding unvested SSARs will be immediately forfeited and all vested SSARs (i) will cease to be exercisable and will terminate three (3) months after termination of Employment with the Company (or an affiliate of the Company) due to a voluntary termination by the Participant (but in no event after the expiration date of the award grant) and (ii) all outstanding vested SSARs will cease to be exercisable and will immediately terminate in the case of a termination for Cause by the Company; and

(iii) All outstanding unvested RSUs will be immediately forfeited.

(c) Termination due to Disability or Normal Retirement. If the Participant terminates Employment due to Disability or Normal Retirement, then:

(i) All outstanding unvested Matched PRSUs will remain outstanding and will become vested at the ECP Vesting Date as though the Participant had not had a termination of Employment under this Section 8(c). Upon vesting, such Matched PRSUs will be settled within thirty (30) days following the ECP Vesting Date.

(ii) All outstanding unvested SSARs will remain outstanding and will become exercisable at the ECP Vesting Date as though the Participant had not had a termination of Employment under this Section 8(c). SSARs that were vested at the time of the Participant's termination of Employment and those that become vested thereafter will remain outstanding and exercisable until the expiration date of the SSARs, at which date the SSARs will cease to be exercisable and will terminate.

(d) All outstanding unvested RSUs will remain outstanding and will become vested at the ECP Vesting Date as though the Participant had not had a termination of Employment under this Section 8(c). Upon vesting, such RSUs will be settled within thirty (30) days after the ECP Vesting Date.

(e) Termination Not for Cause, for Good Reason or Early Retirement. If the Participant involuntarily terminates Employment not for Cause, or voluntarily terminates Employment due to (x) Early Retirement or (y) with respect to the Participants who are designated as Tier I Employees by the Company for purposes of the ESP, Good Reason, then:

(i) A pro rata portion of all outstanding unvested Matched PRSUs will remain outstanding and will become vested at the ECP Vesting Date as though the Participant had not had a termination of Employment under this Section 8(d). Upon vesting, such Matched PRSUs will be settled within thirty (30) days following the ECP Vesting Date.

(ii) A pro rata portion of all outstanding unvested SSARs will remain outstanding and will become exercisable at the ECP Vesting Date as though the Participant had not had a termination of Employment under this Section 8(d). SSARs that were vested at the time of the Participant's termination of Employment and those that become vested thereafter will remain outstanding and exercisable until the expiration date of the SSARs, at which date the SSARs will cease to be exercisable and will terminate.

(iii) A pro rata portion of all outstanding unvested RSUs will remain outstanding and will become vested at the ECP Vesting Date as though the Participant had not had such a termination of Employment under this Section 8(d). Upon vesting, such RSUs will be settled within thirty (30) days following the ECP Vesting Date.

(iv) For purposes of Section 8(d)(i) through 8(d)(iii), the pro rata portion will be determined by multiplying the number of unvested Matched PRSUs, SSARs or RSUs, as the case may be, by a fraction, the numerator of which is (x) the number of days from the Grant Date to the date of the Participant's termination of Employment and the denominator of which is (y) []. The Participant's Matched PRSUs, SSARs or RSUs, as the case may be, that had not vested before such termination of Employment under this Section 8(d) and which are not included in the pro rata portion subject to continued vesting will be immediately forfeited.

(f) Termination due to Death. If the Participant terminates Employment due to death, then:

(i) All outstanding unvested Matched PRSUs will become immediately vested. Upon vesting, such Matched PRSUs will be settled within thirty (30) days following the date of the Participant's death.

(ii) All outstanding unvested SSARs will become immediately vested and exercisable, and all SSARs that were vested at the time of the Participant's termination of Employment and those that become vested thereafter will remain outstanding and exercisable until the expiration date of the grant, at which date the SSARs will cease to be exercisable and will terminate; and

(iii) All outstanding unvested RSUs will become immediately vested. Upon vesting, such RSUs will be settled within thirty (30) days following the date of the Participant's death

10. Change in Control. In the event the Company undergoes a "Change in Control" (as defined in the Plan) following the Grant Date, ECP Awards shall be treated as provided in Section 11 of the Plan. For the avoidance of doubt, the Company's combination with DuPont de Nemours, Inc.'s Nutrition & Biosciences business will not be considered a Change in Control for purposes of this agreement, or the ESP, with respect to the awards granted hereunder. For the avoidance of doubt, Matched PRSUs and RSUs shall be settled within thirty (30) days following the earlier of (i) the Vesting Date or (ii) the date they become free of all restrictions, limitations and conditions and become fully vested as provided in Section 11 of the Plan.

11. Clawback and Recoupment Provisions. Notwithstanding anything herein to the contrary, any ECP Award paid or payable in connection with the ECP shall be subject to the clawback, recoupment and forfeiture provisions of Section 32 of the Plan and Section 9 of the ESP. By acknowledging the ECP Award Agreement, the Participant acknowledges that any and all ECP Awards previously granted to the Participant prior to the Grant Date, and any other cash or Shares provided to the Participant following the Grant Date and under the ECP Award or otherwise under the Plan, are subject to the provisions of Section 32 of the Plan and Section 9 of the ESP, as applicable. For purposes of the foregoing, the Participant expressly and explicitly authorizes the Company to issue instructions, on the Participant's behalf, to any brokerage firm and/or third party administrator engaged by the Company to hold the Participant's Shares and other amounts acquired under the Plan to re-convey, transfer or otherwise return such Shares and/or other amounts to the Company.

12. Limits on Transfers of Awards. Except as provided by the Committee, no ECP Award and no right under any ECP Award, shall be assignable, alienable, saleable, or transferable by the Participant other than by will or by the laws of descent and distribution in accordance with Section 23 of the Plan.

13. Section 409A. Notwithstanding anything herein or in the Plan to the contrary, no payment or settlement of Shares that constitute "non-qualified deferred compensation" for purposes of Section 409A of the Code will be made under this ECP Award Agreement to the Participant on account of such Participant's termination of Employment, if on such date, the Participant is a "specified employee" (within the meaning of that term under Section 409A(a)(2)(B) of the Code, or any successor provision thereto) until the date which is the earlier of (i) the expiration of the six (6)-month period measured from the date of the Participant's termination of Employment and the date of the Participant's death.

14. Administration.

(a) Administration. The Board has delegated administrative authority to the Committee and the ECP shall be administered by the Committee.

(b) Powers and Duties. The Committee shall have sole discretion and authority to make any and all determinations necessary or advisable for administration of the ECP and may adopt, amend or revoke any rule or regulation established for the proper administration of the ECP. The Committee shall have the ability to modify the ECP provisions, to the extent necessary, or delegate such authority, to accommodate any changes in law or regulations in jurisdictions in which the Participant receives ECP Awards. The Committee or its designee will oversee ECP Award calculations. All interpretations, decisions, or determinations made by the Committee or its designee, if applicable, pursuant to the ECP shall be final and conclusive.

15. Amendment; Termination of the ECP. The Committee has the right to revise, modify, or terminate the ECP in whole or in part at any time or for any reason, and the right to modify any ECP Award amount in accordance with Section 31 of the Plan.

16. Tax Liability and Withholding. Regardless of any action the Company or the Participant's employer takes with respect to any or all income tax (including U.S. federal, state and local taxes and/or non-U.S. taxes), social insurance, payroll tax, payment on account or other tax-related items resulting from the ECP Award ("**Tax-Related Items**"), the Participant acknowledges that the ultimate liability for all Tax-Related Items legally due by the Participant is and remains the Participant's responsibility, and may exceed the amount actually withheld by the Company or the Participant's employer, if any. The Participant also acknowledges that the Company and the Participant's employer (a) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the ECP Award, including the grant of the ECP Award, the vesting of the ECP Award, the subsequent sale of any Shares acquired pursuant to the ECP Award and the receipt of any dividends or dividend equivalents; and (b) do not commit to structure the terms of the grant or any aspect of the ECP Award to reduce or eliminate the Participant's liability for Tax-Related Items. Unless otherwise determined by the Committee, at the time of the taxable event, the Company will withhold from any Shares deliverable in settlement of the ECP Award, in accordance with Section 20(a) of the Plan, the number of whole Shares having a value as nearly as possible equal to the amount of Tax-Related Items required to be withheld under applicable local laws and regulations, and pay such amount in cash to the appropriate taxing authorities. Alternatively, the Company may, in its discretion, withhold any amount necessary to pay the Tax-Related Items from the Participant's salary/wages or other amounts payable to the Participant, with no withholding in Shares.

In the event the withholding requirements are not satisfied through the withholding of Shares or through the Participant's salary/wages or other amounts payable to the Participant, no Shares will be issued upon vesting of the ECP Award unless and until satisfactory arrangements (as determined by the Company) have been made by the Participant with respect to the payment of any Tax-Related Items which the Company determines, in its sole discretion, must be withheld or collected with respect to such ECP Award. Further, if the Participant becomes subject to taxation in more than one country between the Grant Date and the date of any relevant taxable or tax withholding event, as applicable, the Participant acknowledges that the Company may be required to withhold or account for Tax-Related Items in more than one country. Depending on the withholding method, the Company may withhold or account for Tax-Related Items by considering applicable statutory withholding rates or other applicable withholding rates, including maximum applicable rates. By accepting this grant of ECP Award, the Participant expressly consents to the withholding of Shares and/or cash as provided for hereunder. All other Tax-Related Items related to the ECP Award and any Shares delivered in payment thereof are the Participant's sole responsibility.

17. Severability; Survival of Terms. Should any provision of an ECP Award or these ECP Terms and Conditions be held by a court of competent jurisdiction to be unenforceable, such holding shall not affect the validity of the remainder of the ECP Award or these ECP Terms and Conditions. These ECP Terms and Conditions shall apply to and bind the Participant and the Company and their respective permitted assignees and transferees, heirs, legatees, executors, administrators and legal successors.

18. Dispute Resolution. These ECP Terms and Conditions, the ECP Award Agreement and the Plan constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and the Participant with respect to the subject matter hereof.

19. Non U.S. Residents. Rights and restrictions for the Participants residing and/or employed in foreign countries may differ and shall be based on applicable foreign law and will be governed by Section 33 of the Plan.

20. Electronic Delivery. The Company may, in its sole discretion, deliver any documents related to this ECP Award or ECP Award Agreement by electronic means. The Participant hereby consents to receive such documents by electronic delivery and, if requested, to agree to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

21. Governing Law. This ECP Award Agreement and the ECP Terms and Conditions shall be governed by and construed according to the laws of the State of New York and of the United States without regard to principles of conflict of law.

22. Consent for Data Transfer. By accepting this ECP Award Agreement, the Participant voluntarily acknowledges and consents to the collection, use, processing and transfer of personal data as described herein, including for the purpose of managing and administering the Plan, certain personal information, including name, home address and telephone number, date of birth, social security number or other employee identification number, salary, nationality, job title, any Shares or directorships held in the Company, and details of all options or any other entitlement to Shares awarded, canceled, purchased, vested, unvested or outstanding in the Participant's favor ("**Data**"). The Company and/or its affiliates will transfer Data among themselves as necessary for the purpose of implementation, administration and management of the Plan and may further transfer Data to any third parties assisting the Company in the implementation, administration and management of the Plan. These recipients may be located in the European Economic Area, or elsewhere throughout the world, such as the United States. The Participant authorizes them to receive, possess, use, retain and transfer the Data, in electronic or other form, for the purposes of implementing, administering and managing the Participant's participation in the Plan, including any requisite transfer of such Data as may be required for the administration of the Plan and/or the subsequent holding of Shares or other equity of the Company on the Participant's behalf to a broker or other third party with whom the Participant may elect to deposit any Shares or equity acquired pursuant to the Plan. The Participant may, at any time, review Data, require any necessary amendments to it or withdraw the consents herein in writing by contacting the Company; however, withdrawing consent may affect the Participant's ability to participate in the Plan.

The Participant may, at any time, exercise the Participant's rights provided under applicable personal data protection laws, which may include the right to (a) obtain confirmation as to the existence of the Data, (b) verify the content, origin and accuracy of the Data, (c) request the integration, update, amendment, deletion or blockage (for breach of applicable laws) of the Data and (d) oppose, for legal reasons, the collection, processing or transfer of the Data that is not necessary or required for the implementation, administration and/or operation of the Plan and the Participant's participation in the Plan. The Participant may seek to exercise these rights by contacting the Participant's local HR manager or the Company's Director of Global Compensation.

23. Addendum. Notwithstanding any provision in these ECP Terms and Conditions to the contrary, the Purchased Shares, Matched PRSUs, SSARs and RSUs shall be subject to any special terms and conditions for the Participant's country of residence (and country of Employment, if different) set forth in an addendum to these ECP Terms and Conditions (an "**Addendum**"). Further, if the Participant transfers the Participant's residence and/or Employment to another country, at the time of transfer, the special terms and conditions for such country will apply to the Participant to the extent the Company determines, in its sole discretion, that the application of such terms and conditions is necessary or advisable in order to comply with local laws, rules and regulations or to facilitate the operation and administration of the Purchased Shares, Matched PRSUs, SSARs and RSUs and the Plan (or the Company may establish alternative terms and conditions as may be necessary or advisable to accommodate the Participant's transfer). Any applicable Addendum shall constitute part of these ECP Terms and Conditions.

24. Private Placement. The grant of Matched PRSUs, SSARs and RSUs to the Participants outside of the United States and the purchase by the Participants of Purchased Shares is not intended to be a public offering of securities in the Participant's country of residence (and country of Employment, if different). The Company has not submitted any registration statement, prospectus or other filings with the local securities authorities (unless otherwise required under local law) outside of the United States, and the grant of the Matched PRSUs, SSARs and RSUs and purchase of Purchased Shares is not subject to the supervision of the local securities authorities outside of the United States.

25. Notices. Any notice required or permitted to be given under these ECP Terms and Conditions or the ECP Award Agreement shall be in writing and shall be deemed to have been given when delivered personally or by courier, or sent by certified or registered mail, postage prepaid, return receipt requested, duly addressed to the party concerned at the address indicated below or to such changed address as such party may subsequently by similar process give notice of:

If to the Company:

International Flavors & Fragrances Inc. 521 W. 57th Street
New York, New York 10019 Attn:

If to the Participant:

To the last address delivered to the Company by the Participant in the manner set forth herein.

26. Compliance with Age Discrimination Rules. If the Participant is a local national of and employed in a country that is a member of the European Union, the grant of the ECP Award and the terms and conditions governing the grant of the ECP Award are intended to comply with the age discrimination provisions of the EU Equal Treatment Framework Directive, as implemented into local law (the "**Age Discrimination Rules**"). To the extent a court or tribunal of competent jurisdiction determines that any provision of the grant of the ECP Award is invalid or unenforceable, in whole or in part, under the Age Discrimination Rules, the Company, in its sole discretion, shall have the power and authority to revise or strike such provision to the minimum extent necessary to make it valid and enforceable to the full extent permitted under local law.

27. Repatriation; Compliance with Laws. The Participant agrees, as a condition of the grant of the ECP Award, to repatriate all payments attributable to the ECP Award and/or cash acquired under the Plan (including, but not limited to, dividends, dividend equivalents, and any proceeds derived from the sale of the Shares acquired pursuant to the ECP Award) in accordance with all foreign exchange rules and regulations applicable to the Participant.

Notwithstanding anything to the contrary contained in the ECP Award Agreement, the Company may, in its sole discretion, settle the ECP Award in the form of: (1) a cash payment to the extent settlement in Shares (a) is prohibited under local law, rules and regulations, (b) would require the Participant, the Company or an affiliate of the Company to obtain the approval of any governmental and/or regulatory body in the Participant's country of residence (and/or country of employment, if different), or (c) is administratively burdensome; or (2) Shares, but require the Participant to immediately sell such Shares (in which case, the ECP Award Agreement shall give the Company the authority to issue sales instructions on behalf of the Participant).

In addition, the Participant agrees to take any and all actions, and consents to any and all actions taken by the Company, as may be required to allow the Company to comply with all laws, rules and regulations applicable to the Participant. Finally, the Participant agrees to take any and all actions as may be required to comply with the Participant's personal legal and tax obligations under all laws, rules and regulations applicable to the Participant.

28. English Language. The Participant acknowledges and agrees that it is expressly intended that the Plan, the ECP Award Agreement, these ECP Terms and Conditions and all other documents, notices and legal proceedings entered into, given or instituted pursuant to the ECP Award, be provided in English. If the Participant has received the Plan, the ECP Award Agreement, these ECP Terms and Conditions or any other documents related to the ECP Award translated into a language other than English, and if the meaning of the translated version is different than the English version, the English version shall control.

29. Additional Requirements. The Company reserves the right to impose other requirements on the ECP Award, any Shares acquired pursuant to the ECP Award, and the Participant's participation in the Plan, to the extent the Company determines, in its sole discretion, that such other requirements are necessary or advisable in order to comply with local laws, rules and regulations or to facilitate the administration of the Plan. Such requirements may include (but are not limited to) requiring the Participant to sign any agreements or undertakings that may be necessary to accomplish the foregoing.

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**INTERNATIONAL FLAVORS & FRAGRANCES INC.
2021 STOCK AWARD AND INCENTIVE PLAN ADDENDUM TO
EQUITY CHOICE PROGRAM AWARD AGREEMENT TERMS AND CONDITIONS**

In addition to the terms of the International Flavors & Fragrances Inc. 2021 Stock Award and Incentive Plan, as may be amended from time to time (the "Plan"), the Equity Choice Program ("ECP") Award Agreement, and the ECP Terms and Conditions, the ECP Award is subject to the following additional terms and conditions as set forth in this addendum (the "Addendum") to the extent the Participant resides and/or is employed in one of the countries addressed herein. All defined terms contained in this Addendum shall have the same meaning as set forth in the Plan, the ECP Award Agreement and the ECP Terms and Conditions. To the extent the Participant relocates the Participant's residence and/or employment to another country, the additional terms and conditions as set forth for such country (if any) shall also apply to the ECP Award to the extent the Company determines, in its sole discretion, that the application of such provisions is necessary or advisable in order to comply with local laws, rules and regulations, or to facilitate the operation and administration of the ECP Award and the Plan (or the Company may establish alternative terms and conditions as may be necessary or advisable to accommodate the Participant's transfer).

ALL COUNTRIES

1. No Right To Employment or Other Status. The grant of the ECP Award shall not be construed as giving the Participant the right to continued employment or any other relationship with the Company or any affiliate of the Company and shall not interfere with the ability of the Company or the affiliate of the Company that employs the Participant, as applicable, to terminate the Participant's employment or service relationship (if any). Further, no claim or entitlement to compensation or damages shall arise from forfeiture of the ECP Award resulting from the Participant's termination of Employment (regardless of the reason for such termination and whether or not later found to be invalid or in breach of employment laws in the jurisdiction where the Participant is employed or the terms of the Participant's employment agreement, if any).
2. Nature of Grant. In accepting the grant of the ECP Award, the Participant acknowledges, understands and agrees that:
 - a. the Plan is established voluntarily by the Company, it is discretionary in nature and it may be modified, amended, suspended or terminated by the Company at any time, to the extent permitted by the Plan;
 - b. the grant of the ECP Award is exceptional, discretionary, voluntary and occasional and does not create any contractual or other right to receive future grants of ECP Award, or benefits in lieu of the ECP Award, even if the ECP Award have been granted in the past;
 - c. all decisions with respect to future the ECP Award or other grants, if any, will be at the sole discretion of the Company;
 - d. the Participant is voluntarily participating in the Plan;
 - e. the ECP Award, the Shares subject to the ECP Award, and the income from and value of same, are not intended to replace any pension rights or compensation;
 - f. unless otherwise agreed with the Company, the ECP Award and the Shares subject to the ECP Award, and the income from and value of same, are not granted as consideration for, or in connection with, the service the Participant may provide as a director of a subsidiary of the Company;
 - g. the ECP Award and the Shares subject to the ECP Award, and the income from and value of same, are not part of normal or expected compensation for any purpose including, but not limited to, calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments, holiday pay, bonuses, long-service awards, leave-related payments, pension or retirement or welfare benefits or similar mandatory payments;
 - h. the future value of the underlying Shares is unknown, indeterminable and cannot be predicted with certainty;

- i. except as otherwise provided in the ECP Award Agreement and ECP Terms and Conditions, in the Plan or by the Company in its discretion, the ECP Award and the benefits evidenced by the ECP Award Agreement do not create any entitlement to have the ECP Award or any such benefits transferred to, or assumed by, another company nor be exchanged, cashed out or substituted for, in connection with any corporate transaction affecting the Shares; and
- j. neither the Company or any affiliate of the Company shall be liable for any foreign exchange rate fluctuation between the Participant's local currency and the United States Dollar that may affect the value of the ECP Award or of any amounts due to the Participant pursuant to the settlement of the ECP Award or the subsequent sale of any Shares acquired upon settlement.

ARGENTINA

1. Compliance with the Law. By accepting the ECP Award, the Participant acknowledges his or her agreement to comply with applicable Argentine laws and, regardless of any action taken by the Company or the Employer, to pay any and all applicable Tax-Related Items.

2. Securities Law Information. Neither the grant of the ECP Award, nor the issuance of Shares subject to the ECP Award, constitutes a public offering. The offering of the Plan is a private placement and is not subject to the supervision of any Argentine governmental authority.

BRAZIL

1. Compliance with Law. By accepting the ECP Award, the Participant acknowledges to comply with applicable Brazilian laws and to pay any and all applicable taxes associated with the vesting of the ECP Award, the receipt of any dividends, and the sale of Shares acquired under the Plan.

2. Labor Law Acknowledgment. The Participant expressly acknowledges and agrees, for all legal purposes, that

(i) the benefits provided under the ECP Terms and Conditions and the Plan are the result of commercial transactions unrelated to the Participant's Employment; (ii) the ECP Terms and Conditions and the Plan are not a part of the terms and conditions of the Participant's Employment; and (iii) the income from the ECP Award, if any, is not part of the Participant's remuneration from employment.

BY SIGNING BELOW, THE PARTICIPANT ACKNOWLEDGES, UNDERSTANDS AND AGREES TO THE PROVISIONS OF THE ECP TERMS AND CONDITIONS, THE PLAN AND THIS ADDENDUM.

Signature

Printed Name

Date

IMPORTANT NOTE: THIS ADDENDUM MUST BE SIGNED AND RETURNED TO THE LOCAL HR DEPARTMENT OF IFF BRAZIL WITHIN 8 WEEKS FROM THE GRANT DATE.

CANADA

1. Settlement in Shares. Notwithstanding anything to the contrary in the ECP Terms and Conditions, the ECP Award shall be settled only in Shares (and may not be settled in cash).

2. Securities Law Information. The Participant is permitted to sell Shares acquired through the Plan through the designated broker appointed under the Plan (the "**Designated Broker**"), if any (or any other broker acceptable to the Company), provided the resale of Shares acquired under the Plan takes place outside of Canada through the facilities of a stock exchange on which the shares are listed. The Shares are currently listed on the New York Stock Exchange.

3. Use of English Language. If the Participant is a resident of Quebec, by accepting the ECP Award, the Participant acknowledges and agrees that it is the Participant's wish that the ECP Award Agreement, this Addendum, as well as all other documents, notices and legal proceedings entered into, given or instituted pursuant to the ECP Award, either directly or indirectly, be drawn up in English.

Utilisation de l'anglais. Si le bénéficiaire est un résident du Québec, en acceptant le ECP Award, le bénéficiaire reconnaît et accepte que ce est le souhait du Bénéficiaire que le certificat de récompense, le présent Addenda, ainsi que tous autres documents, avis et procédures judiciaires, exécutés, donnés ou intentés en vertu de le ECP Award, liés directement ou indirectement, soient rédigés en anglais.

FRANCE

1. French-Qualified RSUs. Notwithstanding anything to the contrary in the ECP Award Agreement, the ECP Terms and Conditions, this Addendum or the Plan, if the Participant is a French resident and qualifies for participation in the French-qualified regime, any RSU that may be granted to the Participant pursuant to the ECP Award shall be granted under the French specific regime provided by Articles L225-197-1 and seq. of the French Commercial Code, as may be amended from time to time, and subject to the Rules of the International Flavors and Fragrances Inc. 2015 Stock Award and Incentive Plan for Grants of RSU Awards in France (the "French Sub-Plan") and the related French-Qualified RSU Award Agreement, incorporated herein by reference.

2. Matching RSUs and SARs. These awards are not eligible for tax preferential treatment under a French specific regime and are treated as benefit in-kind from a tax perspective.

3. English Language. The Participant acknowledges and agrees that the ECP Award Agreement, the ECP Terms and Conditions, this Addendum and the Plan and all other documents, notices and legal proceedings entered into, given or instituted pursuant to the ECP, are drawn up in English. If the Participant has received these above documents translated into a language other than English, and if the meaning of the translated version is different than the English version, the English version shall control.

Langue anglaise. Le Participant reconnaît et accepte que les documents suivants : le document précisant le choix du type d'attribution, les Termes et Conditions régissant ce choix du type d'attribution, le présent avenant, le Plan et tous les autres documents, avis et procédures judiciaires dan le cadre du choix du type d'attribution, sont établis en anglais. Si le Participant a reçu ces documents traduits dans une langue autre que l'anglais et si le sens de la version traduite est différent que celui de la version en anglais, la version en anglais prévaudra.

BY SIGNING BELOW, THE PARTICIPANT ACKNOWLEDGES, UNDERSTANDS AND AGREES TO THE PROVISIONS OF THE ECP TERMS AND CONDITIONS, THE PLAN AND THIS ADDENDUM.

Signature

Printed Name

Date

IMPORTANT NOTE: THIS ADDENDUM MUST BE SIGNED AND RETURNED TO THE LOCAL HR DEPARTMENT OF IFF FRANCE WITHIN 8 WEEKS FROM THE GRANT DATE.

NETHERLANDS

1. Waiver of Termination Rights. In accepting the grant of the ECP Award, the Participant waives any and all rights to compensation or damages as a result of a termination of Employment, insofar as those rights result or may result from: (a) the loss or diminution in value of such rights or entitlements under the Plan; or (b) the Participant ceasing to have rights, or ceasing to be entitled to any awards, under the Plan as a result of such termination of Employment.

2. Securities Law Information. The Participant should be aware of Dutch insider-trading rules, which may impact the sale of Shares acquired under the Plan. In particular, the Participant may be prohibited from effectuating certain transactions involving Shares during the period in which the Participant has "inside information" regarding the Company.

By accepting the ECP Award and participating in the Plan, the Participant acknowledges having read and understood this Securities Law Information and further acknowledges that it is the Participant's responsibility to comply with the following Dutch insider-trading rules:

Under Article 5:56 of the Dutch Financial Supervision Act, anyone who has "inside information" related to an issuing company is prohibited from effectuating a transaction in securities in or from the Netherlands. "Inside information" is defined as knowledge of details concerning the issuing company to which the securities relate, which is not public and which, if published, would reasonably be expected to affect the stock price, regardless of the development of the price. The insider could be a service provider in the Netherlands who has inside information as described herein.

Given the broad scope of the definition of inside information, certain service providers working in the Netherlands (possibly including the Participant) may have inside information and, thus, would be prohibited from effectuating a transaction in securities in the Netherlands at a time when the Participant had such inside information.

SINGAPORE

1. Qualifying Person Exemption. The grant of the ECP Award under the Plan is being made pursuant to the "Qualifying Person" exemption under section 273(1)(f) of the Securities and Futures Act (Chapter 289) ("SFA"). The Plan has not been and will not be lodged or registered as a prospectus with the Monetary Authority of Singapore and is not regulated by any financial supervisory authority pursuant to any legislation in Singapore. The Participant should note that, as a result, the ECP Award is subject to section 257 of the SFA and the Participant will be unable to make (a) any subsequent sale of the Shares acquired pursuant to the ECP Award in Singapore or (b) any offer for sale of the Shares acquired pursuant to the ECP Award in Singapore, unless such sale or offer is made pursuant to the exemptions under Part XIII Division (1) Subdivision (4) (other than section 280) of the SFA.

SPAIN

1. Nature of Grant. In accepting the ECP Award, the Participant consents to his or her participation in the Plan and acknowledges that the Participant has received a copy of the Plan. The Participant understands that the Company has unilaterally, gratuitously and discretionally decided to grant the ECP Award under the Plan to individuals who may be employees of the Company throughout the world. The decision is a limited decision that is entered into upon the express assumption and condition that any grant will not economically or otherwise bind the Company. Consequently, the Participant understands that the ECP Award is granted on the assumption and condition that the ECP Award and any Shares acquired upon vesting of the ECP Award are not part of any employment contract with the Company and shall not be considered a mandatory benefit, salary for any purposes (including severance compensation) or any other right whatsoever. In addition, the Participant understands that the ECP Award would not be granted to the Participant but for the assumptions and conditions referred to herein; thus, the Participant expressly acknowledges and freely accepts that should any or all of the assumptions be mistaken or should any of the conditions not be met for any reason, then the grant of the ECP Award shall be null and void.

Further, the ECP Award are a conditional right to Shares and can be forfeited in the case of, or affected by, the Participant's termination of Employment. This will be the case, for example, even if (a) the Participant is considered to be unfairly terminated without good cause; (b) the Participant is terminated for disciplinary or objective reasons or due to a collective dismissal; (c) the Participant terminates Employment due to a change of work location, duties or any other Employment or contractual conditions; (d) the Participant terminates Employment due to unilateral breach of contract of the Company; or (e) the Participant's Employment terminates for any other reason whatsoever, except for cause. Consequently, upon termination of the Participant's Employment for any of the reasons set forth above, the Participant automatically may lose any rights to the unvested ECP Award granted to the Participant as of the date of the Participant's termination of Employment, as described in the Plan, the ECP Award Agreement and the ECP Award Terms and Conditions.

BY SIGNING BELOW, THE PARTICIPANT ACKNOWLEDGES, UNDERSTANDS AND AGREES TO THE PROVISIONS OF THE ECP TERMS AND CONDITIONS, THE PLAN AND THIS ADDENDUM.

Signature

Printed Name

Date

IMPORTANT NOTE: THIS ADDENDUM MUST BE SIGNED AND RETURNED TO THE LOCAL HR DEPARTMENT OF IFF SPAIN WITHIN 8 WEEKS FROM THE GRANT DATE.

SWITZERLAND

1. Securities Law Information. Neither this document nor any other materials relating to the ECP Award (i) constitute a prospectus according to articles 35 et seq. of the Swiss Federal Act on Financial Services ("FinSA"), (ii) may be publicly distributed nor otherwise made publicly available in Switzerland to any person other than an employee of the Company, or (iii) has been or will be filed with, approved or supervised by any Swiss reviewing body according to article 51 of FinSA or any Swiss regulatory authority, including the Swiss Financial Market Supervisory Authority (FINMA).

UNITED ARAB EMIRATES

1. Nature of Grant. The Participant acknowledges that the ECP Award and related benefits do not constitute a component of the Participant's "wages" for any legal purpose. Therefore, the ECP Award and related benefits will not be included and/or considered for purposes of calculating any and all labor benefits, such as social insurance contributions and/or any other labor-related amounts which may be payable.

2. Securities Law Information. The Plan is an employee equity incentive plan and is only being offered to select employees of the Company in the United Arab Emirates. The Plan and the ECP Award Agreement are intended for distribution only to such employees and may not be delivered to, or relied on by, any other person. The Emirates Securities and Commodities Authority has no responsibility for reviewing or verifying any documents in connection with the Plan. Neither the Ministry of Economy nor the Dubai Department of Economic Development have approved the Plan or the ECP Award Agreement nor taken steps to verify the information set out therein, and have no responsibility for such documents. The Participant should conduct his or her own due diligence on the securities offered under the Plan. If the Participant does not understand the contents of the ECP Award Agreement or the Plan, the Participant should consult an authorized financial adviser.

UNITED KINGDOM

1. Mandatory Tax Withholding. The following provision shall supplement Section 16 of the ECP Terms and Conditions:

Without limitation to Section 16 of the ECP Terms and Conditions, the Participant hereby agrees that the Participant is liable for all Tax-Related Items and hereby consents to pay all such Tax-Related Items, as and when requested by the Company or the HM Revenue & Customs ("HMRC") (or any other tax authority or any other relevant authority). The Participant hereby agrees to indemnify and keep indemnified the Company against any Tax-Related Items that they are required to pay or withhold on the Participant's behalf or have paid or will pay to HMRC (or any other tax authority or any other relevant authority).

Notwithstanding the foregoing, if the Participant is a director or executive officer (as within the meaning of Section 13(k) of the U.S. Securities Exchange Act of 1934, as amended), the terms of the immediately foregoing provision will not apply. In the event that the Participant is a director or executive officer and income tax due is not collected from or paid by the Participant within ninety (90) days after the U.K. tax year in which an event giving rise to the indemnification described above occurs, the amount of any uncollected tax may constitute a benefit to the Participant on which additional income tax and national insurance contributions may be payable. The Participant acknowledges that he or she ultimately will be responsible for reporting and paying any income tax due on this additional benefit directly to HMRC under the self-assessment regime and for reimbursing the Company for the value of any employee national insurance contributions due on this additional benefit, which the Company may recover from the Participant at any time thereafter by any of the means referred to in Section 16 of the ECP Terms and Conditions or in the Plan.

2. Exclusion of Claim. The Participant acknowledges and agrees that the Participant shall have no entitlement to compensation or damages insofar as such entitlement arises or may arise from the Participant's ceasing to have rights under or to be entitled to vest in the Participant's ECP Award, whether or not as a result of such termination (whether the termination is in breach of contract or otherwise), or from the loss or diminution in value of the Participant's ECP Award. Upon the grant of the ECP Award, the Participant shall be deemed irrevocably to have waived any such entitlement.

* * * * *

**INTERNATIONAL FLAVORS & FRAGRANCES INC.
 PERFORMANCE-BASED RESTRICTED STOCK UNITS (“PSU”) AWARD AGREEMENT
 (the “PSU AWARD AGREEMENT”)**

Participant: [NAME]
Date of Grant: [DATE]
Total Target Number of Performance-Based Stock Units: []

This PSU Award Agreement, dated as of [X, 20XX] (the “**Grant Date**”), is made by and between International Flavors & Fragrances Inc., a New York Corporation, including its affiliates (the “**Company**”) and [NAME OF PARTICIPANT] (the “**Participant**”) under the International Flavors & Fragrances Inc. 2021 Stock Award and Incentive Plan, as it may be amended from time to time (the “**Plan**”). Pursuant to Section 9 of the Plan, Participant has been granted a PSU Award, as described below (the “**PSU Award**”) subject to the Participant’s acceptance of the attached PSU Terms and Conditions and the Plan, both of which are made a part hereof and are incorporated herein by reference.

Settlement of the PSU Award in respect of each Performance Segment will be determined by the Committee based on achievement of the Performance Measure set forth below.

PSU Award Information				
Performance Segment	PSU Targets	Performance Measure and Performance Achievement Level	Vesting of PSUs	Settlement of PSU Award
Year 1: []	[]	[]	The PSUs shall vest based on achievement of the Performance Measure, subject to your continuous Employment through each Vesting Date, in accordance with the attached PSU Terms and Conditions	Awards are settled by delivery of one share of Common Stock for each vested PSU
Year 2: []	[]	[]		
Total PSU Target	[]			

BY ELECTRONICALLY ACCEPTING THIS PSU AWARD, PARTICIPANT AGREES TO BE BOUND BY THE PROVISIONS OF THE PLAN, THIS PSU AWARD AGREEMENT AND THE PSU TERMS AND CONDITIONS AND RELATED ADDENDUM. THE PARTICIPANT HAS REVIEWED THE PLAN, THE PSU AWARD AGREEMENT AND THE PSU TERMS AND CONDITIONS IN THEIR ENTIRETY, HAS HAD AN OPPORTUNITY TO OBTAIN THE ADVICE OF COUNSEL PRIOR TO ACCEPTING THE PSU AWARD AND FULLY UNDERSTANDS ALL OF THE PROVISIONS OF THE PLAN, THIS PSU AWARD AGREEMENT AND THE PSU TERMS AND CONDITIONS. THE PARTICIPANT HAS BEEN PROVIDED WITH A COPY OR ELECTRONIC ACCESS TO A COPY OF THE U.S. PROSPECTUS FOR THE PLAN AND THE TAX SUPPLEMENT TO THE U.S. PROSPECTUS FOR PARTICIPANT’S COUNTRY OF EMPLOYMENT. PARTICIPANT HEREBY AGREES TO ACCEPT AS BINDING, CONCLUSIVE AND FINAL ALL DECISIONS OR INTERPRETATIONS OF THE COMMITTEE ARISING UNDER THE PLAN, THE PSU AWARD AGREEMENT OR THE PSU TERMS AND CONDITIONS.

ACCEPTED: _____ DATE _____

INTERNATIONAL FLAVORS & FRAGRANCES INC.
PSU AWARD AGREEMENT
TERMS AND CONDITIONS (the “PSU TERMS AND CONDITIONS”)

These PSU Terms and Conditions, including the relevant addendum, are a part of each International Flavors & Fragrances Inc. (the “**Company**”) PSU Award Agreement made under the Plan, which is hereby incorporated by reference.

Capitalized terms not defined herein shall have the meanings ascribed to them in the Plan. In the event of any conflict between the provisions of these PSU Terms and Conditions and the Plan, the provisions of the Plan shall govern.

1. **Amount of PSU Award.** As of the Grant Date, the Participant shall be eligible to receive a PSU Award in respect of the target number of PSUs specified on the PSU Award Agreement, as such amount may be adjusted as described in Section 7 below. The PSU Award provides Participant with a contractual right to receive one share of Common Stock for each PSU being settled upon vesting.
2. **Eligibility for Award.** A Participant's eligibility for a PSU Award shall be at the discretion of the Committee as authorized in Section 5 of the Plan. The grant of a PSU Award is a one-time benefit and does not create any contractual or other right to receive any future PSU Award.
3. **Achievement of Performance Measure.** The PSU Award provides the Participant with an opportunity to receive a PSU Award payout in shares of Common Stock (the “**PSU Award Payment**”), if the Company achieves a satisfactory level of performance (each, a “**Performance Achievement Level**”) in respect of one or more measures (each, a “**Performance Measure**”) specified by the Committee in the PSU Award Agreement. Performance Measures must be met over discrete periods of time (each, a “**Performance Segment**”) within or over a multi-year performance period, as specified in the PSU Award Agreement. The Committee may, in its discretion, adjust the Performance Measure or the Performance Achievement Level as it deems appropriate, based on such factors as the Committee may deem relevant.
4. **Employment Condition.** Subject to Sections 10 and 11 below, a Participant must remain Employed by the Company continuously from the Grant Date of the PSU Award through each Vesting Date (as defined below). Accordingly, there is no partial payout for PSU Awards, except as provided in Section 10 below.
5. **Total PSU Target.** The PSU Award Agreement specifies the Participant's target number of PSU that may vest with respect to each Performance Segment (each, a “**PSU Target**” and collectively for the PSU Award the “**Total PSU Target**”), which provides the Participant with an opportunity to receive a PSU Award Payment in an amount equal to the Total PSU Target. However, the actual PSU Award Payment may be less than the Total PSU Target, depending on the performance of the Company during the Performance Segments, as described in Section 6 below.

6. **Vesting and Account.** Except as otherwise provided herein, with respect to each Performance Segment, the PSU Target for such Performance Segment will vest upon satisfaction of each of the following two conditions: (i) the Committee's determination that the applicable Performance Achievement Level has been achieved in respect of a Performance Measure and (ii) the Participant remaining Employed by the Company continuously from the Grant Date of the PSU Award through the last day of the applicable Performance Segment (each, a "**Vesting Date**"). Prior to the Vesting Date, the Company or its designated agent shall maintain a bookkeeping account reflecting the number of PSUs credited to a Participant's account, if any.
7. **Achievement of Performance Achievement Levels.** The Committee shall specify the Performance Achievement Level for each Performance Segment that will provide a PSU Award Payment at PSU Target for such Performance Segment. If 100% or greater of the Performance Achievement Level is achieved for a Performance Segment, the PSU Award Payment shall be equal to the PSU Target for such Performance Segment. If less than 100% of the Performance Achievement Level is met, none of the PSUs will vest and the PSU Award Payout for such Performance Segment will be zero. In no event shall the PSU Award Payment for any Performance Segment be more than 100% of the PSU Target for such Performance Segment.
8. **Settlement of the Award.** Upon vesting as provided in Section 6 or Section 10 herein, the PSU Award will be settled by delivery of one share of Common Stock, for each vested PSU being settled. Such settlement shall occur within thirty (30) days following each Vesting Date, but in any event no later than March 15 of the year following the year in which the Performance Segment ends.
9. **Voting Rights and Dividends.** PSUs do not provide voting or dividend rights until fully vested and no dividends or dividend equivalents will be paid or credited on any unvested PSUs.
10. **Termination of Employment or Leave of Absence.** A Participant's rights under the PSU Award following termination of Employment or leave of absence shall be determined in accordance with the following provisions:
 - a. **Termination Not for Cause, Good Reason or Early Retirement.** If the Participant is involuntarily terminated not for Cause, for Good Reason or voluntarily terminates Employment due to Early Retirement, a pro-rata portion of the outstanding unvested PSUs in respect of the then current Performance Segment shall remain outstanding and, assuming that the applicable Performance Achievement Level is achieved, will become vested on the Vesting Date for such Performance Segment as though Participant had not had a termination of Employment under this subsection 10(a) and the portion of such outstanding unvested PSUs which is not included in the pro-rata portion subject to continued vesting will be immediately and automatically forfeited upon the date of termination. The pro-rata portion shall be determined by multiplying the unvested PSU Target by a fraction, (x) the numerator of which is the number of days from the Grant Date to the Participant's termination of Employment and (y) the denominator of which is the number of days from the Grant Date to the last day of the applicable Performance Segment. Upon vesting, such PSUs will be settled within thirty (30) days following the applicable Vesting Date, but in any event no later than March 15 of the year following the year in which the Performance Segment ends. To the extent Participant terminates employment under this subsection 10(a) prior to the start of a Performance Segment, all PSUs in respect of such

Performance Segment will be immediately and automatically forfeited upon the date of termination.

- b. Resignation or Termination With Cause. If a Participant resigns (other than as set forth in subsections 10(a) and 10(c)) or is terminated by the Company for Cause, then all outstanding unvested PSUs will be immediately forfeited.
 - c. Normal Retirement or Disability. If a Participant terminates Employment due to Normal Retirement or Disability, then all outstanding unvested PSUs will remain outstanding and, assuming that the applicable Performance Achievement Level is achieved, will become vested on the applicable Vesting Date as though the Participant had not had a termination of Employment under this subsection 10(c). Upon vesting, such PSUs will be settled within thirty (30) days following the applicable Vesting Date, but in any event no later than March 15 of the year following the year in which the applicable Performance Segment ends.
 - d. Death. If a Participant terminates Employment due to death, then all outstanding unvested PSUs will become immediately vested. Upon vesting, such PSUs will be settled within thirty (30) days following the date of the Participant's death.
 - e. Leave of Absence. If a Participant is not in active Employment for any portion of a Performance Segment as a result of a paid or unpaid leave of absence, the terms of any unvested PSU may be adjusted, subject to local legal requirements and applicable Company policies that govern leaves of absence.
11. **Change in Control**. In the event the Company undergoes a "Change in Control" (as defined in the Plan) following the Grant Date, PSU Awards shall be treated as provided for in Section 11 of the Plan. For the avoidance of doubt, such PSU Awards shall be settled within thirty (30) days following the earlier of (i) the applicable Vesting Date or (ii) the date they become free of all restrictions, limitations and conditions and become fully vested as provided in Section 11 of the Plan.
12. **Clawback and Recoupment Provisions**. Notwithstanding anything herein to the contrary, if a Participant is designated by the Company as grade level 7 or above for any portion of a Performance Segment, any PSU Award made or payable shall be subject to the clawback, recoupment and forfeiture provisions of Section 32 of the Plan and Section 9 of the ESP, if applicable. By acknowledging these PSU Terms and Conditions, the Participant acknowledges that any and all PSU Awards previously granted to the Participant prior to the Grant Date, and any other cash or shares of Common Stock provided to the Participant following the Grant Date and under the PSU Award or otherwise under the Plan, are subject to the provisions of Section 32 of the Plan and Section 9 of the ESP, as applicable.
13. **Limits on Transfers of Awards**. Except as provided by the Committee, no PSU Award and no right under any PSU Award, shall be assignable, alienable, saleable, or transferable by a Participant other than by will or by the laws of descent and distribution in accordance with Section 23 of the Plan.

14. **Section 409A.** Notwithstanding anything herein or in the Plan to the contrary, no payment or settlement of shares of Common Stock that constitute “non-qualified deferred compensation” for purposes of Section 409A of the Code will be made under these PSU Terms and Conditions to any Participant on account of such Participant’s termination of Employment, if on such date, the Participant is a “specified employee” (within the meaning of that term under Section 409A(a)(2)(B) of the Code, or any successor provision thereto) until the date which is the earlier of (i) the expiration of the six (6)-month period measured from the date of such Participant’s termination of Employment and (ii) the date of such Participant’s death.

15. **Administration.**

- a. Administration. The Board has delegated administrative authority to the Committee and the PSU Awards shall be administered by the Committee.
- b. Powers and Duties. The Committee shall have sole discretion and authority to make any and all determinations necessary or advisable for administration of an PSU Award and may adopt, amend or revoke any rule or regulation established for the proper administration of an PSU Award. The Committee shall have the ability to modify the PSU Award provisions, to the extent necessary, or delegate such authority, to accommodate any changes in law or regulations in jurisdictions in which Participants will receive PSU Awards. The Committee or its designee, if applicable, will oversee PSU Award calculations. All interpretations, decisions, or determinations made by the Committee or its designee, if applicable, pursuant to an PSU Award shall be final and conclusive.

16. **Amendment; Termination of the PSU Award.** The Committee has the right to revise, modify, or terminate a PSU Award in whole or in part at any time or for any reason, and the right to modify any PSU Target or PSU Award Payment in accordance with Section 31 of the Plan.

17. **Tax Liability and Withholding.** The Participant shall be responsible for any tax liability that may arise as a result of the payments contemplated by a PSU Award or these PSU Terms and Conditions in accordance with Section 20 of the Plan. The Participant acknowledges the Company is authorized to withhold taxes due, or potentially payable, in connection with any payment of a PSU Award in accordance with Section 20 of the Plan. Further, the Participant agrees to any deduction or set off by the Company as provided under Section 26 of the Plan.

18. **Severability; Survival of Terms.** Should any provision of an PSU Award or these PSU Terms and Conditions be held by a court of competent jurisdiction to be unenforceable, such holding shall not affect the validity of the remainder of the PSU Award or these PSU Terms and Conditions. These PSU Terms and Conditions shall apply to and bind the Participant and the Company and their respective permitted assignees and transferees, heirs, legatees, executors, administrators and legal successors.

19. **Entire Agreement; Dispute Resolution.** These PSU Terms and Conditions and all addendums hereto, the PSU Award Agreement and the Plan constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and the Participant with respect to the subject matter hereof.

20. **Non U.S. Residents.** Rights and restrictions for Participants residing in foreign countries may differ and shall be based on applicable foreign law and will be governed by Section 33 of the Plan.
21. **Electronic Delivery.** The Company may, in its sole discretion, deliver any documents related to a PSU Award by electronic means. The Participant hereby consents to receive such documents by electronic delivery and, if requested, to agree to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.
22. **Governing Law.** These PSU Terms and Conditions and the PSU Award Agreement shall be governed by and construed according to the laws of the State of New York and the United States without regard to principles of conflict of law.
23. **Consent for Data Transfer.** By accepting these PSU Terms and Conditions, the Participant voluntarily acknowledges and consents to the collection, use, processing and transfer of personal data as described herein, including for the purpose of managing and administering the Plan, certain personal information, including name, home address and telephone number, date of birth, social security number or other employee identification number, salary, nationality, job title, any shares of Common Stock or directorships held in the Company, and details of all options or any other entitlement to shares of Common Stock or other equity of the Company awarded, canceled, purchased, vested, unvested or outstanding in Participant's favor ("**Data**"). The Company and/or its affiliates will transfer Data among themselves as necessary for the purpose of implementation, administration and management of the Plan and may further transfer Data to any third parties assisting the Company in the implementation, administration and management of the Plan. These recipients may be located in the European Economic Area, or elsewhere throughout the world, such as the United States. Participant authorizes them to receive, possess, use, retain and transfer the Data, in electronic or other form, for the purposes of implementing, administering and managing Participant's participation in the Plan, including any requisite transfer of such Data as may be required for the administration of the Plan and/or the subsequent holding of shares of Common Stock or equity on Participant's behalf to a broker or other third party with whom Participant may elect to deposit any shares of Common Stock acquired pursuant to the Plan. Participant may, at any time, review Data, require any necessary amendments to it or withdraw the consents herein in writing by contacting the Company; however, withdrawing consent may affect Participant's ability to participate in the Plan.
24. **Addendum.** Notwithstanding any provision in these PSU Terms and Conditions to the contrary, the PSUs shall be subject to any special terms and conditions for Participant's country of residence (and country of Employment, if different) set forth in an addendum to these PSU Terms and Conditions (an "**Addendum**"). Further, if Participant transfers Participant's residence and/or Employment to another country, at the time of transfer, the special terms and conditions for such country will apply to Participant to the extent the Company determines, in its sole discretion, that the application of such terms and conditions is necessary or advisable in order to comply with local laws, rules and regulations or to facilitate the operation and administration of the PSUs and the Plan (or the Company may establish alternative terms and conditions as may be necessary or advisable to accommodate Participant's transfer). Any applicable Addendum shall constitute part of these PSU Terms and Conditions.

25. **Private Placement.** The grant of PSUs to Participants outside of the United States is not intended to be a public offering of securities in Participant's country of residence (and country of Employment, if different). The Company has not submitted any registration statement, prospectus or other filings with the local securities authorities (unless otherwise required under local law) outside of the United States, and the grant of the PSUs is not subject to the supervision of the local securities authorities outside of the United States.

26. **Notices.** Any notice required or permitted to be given under these PSU Terms and Conditions or the PSU Award Agreement shall be in writing and shall be deemed to have been given when delivered personally or by courier, or sent by certified or registered mail, postage prepaid, return receipt requested, duly addressed to the party concerned at the address indicated below or to such changed address as such party may subsequently by similar process give notice of:

If to the Company:

International Flavors & Fragrances Inc.
521 W. 57th Street
New York, New York 10019
Attn: Chief Human Resources Officer

If to the Participant:

To the last address delivered to the Company by the Participant in the manner set forth herein.

LIST OF SUBSIDIARIES OF INTERNATIONAL FLAVORS & FRAGRANCES INC.

(the "Company")

Name of Entity	Jurisdiction
International Flavors & Fragrances S.R.L.	Argentina
Solae Argentina S.A.	Argentina
Danisco Argentina S.A.	Argentina
Nutrition & Biosciences Argentina S.A.U.	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
Enzymotec Australia PTY LTD	Australia
Taura Natural Ingredients (Australia) Holdings Pty Limited	Australia
Solae Australia Pty Limited	Australia
Danisco Australia Pty Limited	Australia
Nutrition & Biosciences Australia Pty Ltd.	Australia
Kelp Industries Pty. Ltd	Australia
Microbial Control (Australia) Pty Ltd.	Australia
Frutarom GmbH	Austria
Frutarom Savory Solutions Austria GmbH	Austria
world wide WIBERG GmbH	Austria
Danisco Austria GmbH	Austria
PTI-BEL TUE	Belarus
Frutarom Belgium N.V.	Belgium
Taura Natural Ingredients NV	Belgium
TNI Investments NV	Belgium
Solae Belgium N.V.	Belgium
Danisco Ingredients Belgium N.V.	Belgium
Genencor International, BVBA	Belgium
IFF Essências e Fragrâncias Ltda.	Brazil
Bush Boake Allen do Brasil Indústria e Comércio Ltda.	Brazil
Bremil Industria e Comercio de Ingredientes Alimenticos Ltda. ⁽¹⁾	Brazil
Bremil S/A Industria De Produtos Alimenticos ⁽²⁾	Brazil
Envoltec Indústria de Embalagens Ltda. ⁽³⁾	Brazil
Frutarom Do Brazil Industria E Comercio Ltda.	Brazil
Sabormax Indústria de Alimentos e Representação Ltda. ⁽⁴⁾	Brazil
Protein Technologies Do Brasil, Ltda.	Brazil
Solae Do Brasil Industria E Comercio De Alimentos Ltda.	Brazil
Solae Investimentos LTDA	Brazil
Solae do Brasil Holdings Ltda.	Brazil
Danisco Flexible Brasil Ltda	Brazil
Danisco Brasil Ltda.	Brazil
Danisco Cultor Trading Ltda.	Brazil
DuPont Nutrition Ingredientes BRASIL LTDA	Brazil

Name of Entity	Jurisdiction
Nutrition & Biosciences Brasil Ingredientes Ltda.	Brazil
MC BRAZIL IMPORTAÇÃO E EXPORTAÇÃO DE MICROBIÓTICOS LTDA.	Brazil
Fragrance Resources Asia Pacific Ltd.	British Virgin Islands
IFF (BVI) Limited	British Virgin Islands
International Flavors & Fragrances (Canada) Ltd.	Canada
Lucas Meyer Cosmetics Canada Inc.	Canada
Les Laboratories Bio ForeXtra Inc.	Canada
David Michael & Company (Canada) 1986 Ltd.	Canada
Les Ingrédients Alimentaires BSA Inc.	Canada
1456111 Ontario Limited	Canada
Wiberg Canada Inc.	Canada
Wiberg Corporation.	Canada
Danisco Canada Inc.	Canada
Nutrition & Biosciences Canada Company	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
Frutarom Chile S.A.	Chile
Danisco Chile S.A.	Chile
Nutrition & Biosciences Chile SpA	Chile
International Flavors & Fragrances (Hangzhou) Co., Ltd. ⁽⁵⁾	China
IFF Flavors & Fragrances (Hangzhou) Trading Co., Ltd.	China
International Flavors & Fragrances (Zhejiang) Co., Ltd.	China
International Flavors & Fragrances (China) Ltd.	China
International Flavors & Fragrances (Zhangjiagang) Co., Ltd.	China
Fragrance Resources (Shanghai) Co. Ltd.	China
IFF Bio-Technology (Nanjing) Co., Ltd.	China
Fangchen International Trading Ltd. ⁽⁶⁾	China
Frutarom Flavors (Kushan) Co Ltd.	China
Frutarom F&F Trading (Shanghai) Co.	China
Tastepoint Flavors (Shanghai) Co., Ltd	China
Inventive Food Technology (ZQ) Ltd.	China
Pucheng Yongfang Fragrance Technology Co., Ltd. ⁽⁷⁾	China
DuPont Shineway Luohe Protein Company Limited ⁽⁸⁾	China
Solae Trading (Shanghai) Company Ltd.	China
DuPont Shineway Luohe Food Company Limited ⁽⁹⁾	China
Danisco (China) Co. Ltd.	China
Genencor (China) Bio-Products Co., Ltd.	China
Danisco (China) Holding Co. Ltd.	China
Danisco (Zhangjiagang) Textural Ingredients Co. Ltd.	China
DuPont Nutrition Food Ingredients (Beijing) Co., Ltd.	China
DuPont (Shanghai) Enterprise Co. Ltd.	China
Danisco Biosciences (Shanghai) Co., Ltd	China
Microbial Control Technologies (Shanghai) Co., Ltd.	China
International Flavors and Fragrances Colombia S.A.S.	Colombia

Name of Entity	Jurisdiction
Danisco Colombia Ltda.	Colombia
Nutrition & Biosciences Colombia S.A.S	Colombia
Specialty Products Balkans d.o.o.	Croatia
Alpris Holdings Ltd.	Cyprus
Vantodio Holdings Limited	Cyprus
Tastepoint CZ, s.r.o.	Czech Republic
Danisco Czech Republic, a.s.	Czech Republic
DuPont Denmark Holding ApS	Denmark
DuPont Nutrition Biosciences ApS	Denmark
Cometra ApS	Denmark
ApS Syntetic	Denmark
FYMSA del Caribe, S.R.L. ⁽¹⁰⁾	Dominican Republic
MISR Company for Aromatic products (S.A.E.)	Egypt
Danisco Egypt Trading LLC	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 Holdings (U.K.) Limited	England
International Flavours & Fragrances (GB) Holdings Limited	England
International Flavours & Fragrances I.F.F. (Great Britain) Limited	England
International Flavours & Fragrances (Pension Trustees) Limited	England
Dandy Lions Limited	England
Frutarom (UK) Holdings Limited	England
Frutarom (UK) Ltd.	England
Frutarom UK Investments Limited	England
Hagelin Flv (UK) Ltd.	England
Redbrook (UK) Limited	England
Savoury Flavours (Holding) Limited	England
Savoury Flavours Ltd.	England
Unique Ingredients Limited	England
Aromco Ltd.	England
Flavors and Essences UK Limited	England
FoodBlenders Limited	England
Frutarom - Etol (UK) Limited	England
Solae (UK) Limited	England
Danisco UK Ltd.	England
Danisco Holdings (UK) Ltd.	England
DuPont Nutrition Manufacturing UK Limited	England
Nutrition & Biosciences (UK) Ltd	England
Finnfeeds Finland Oy	Finland
Finnfeeds Oy	Finland
Genencor International Oy	Finland
Cultor Oy	Finland

Name of Entity	Jurisdiction
Danisco Sweeteners Oy	Finland
Nutrition & Biosciences (Finland) Oy	Finland
International Flavors & Fragrances IFF (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
Institut Européen de Biologie Cellulaire	France
Atelier du Parfumeur IFF Grasse SAS	France
Rene Laurent SAS	France
Danisco France SAS	France
Nutrition & Biosciences (France) SAS	France
Microbial Control France SAS	France
International Flavors & Fragrances IFF (Deutschland) GmbH	Germany
Leagel GmbH ⁽¹¹⁾	Germany
IFF Fragrance GmbH	Germany
Frutarom Germany GmbH	Germany
extrakt chemie Dr. Bruno Stellmach GmbH	Germany
Frutarom Production GmbH	Germany
Frutarom Savory Solutions Germany GmbH	Germany
Solae Deutschland GmbH	Germany
Danisco Deutschland GmbH	Germany
DDP Specialty Products Germany GmbH & Co. KG	Germany
DSP Germany N&B Real Estate GmbH & Co KG	Germany
N&B Real Estate Verwaltungs-GmbH	Germany
N&B Germany Verwaltungs-GmbH	Germany
MC (Germany) GmbH	Germany
Danisco Nutrition & Bioscience Greece Ltd.	Greece
Aroma S.A.	Guatemala
Manseg S.A.	Guatemala
Danisco Centro America S.A.	Guatemala
Danisco Guatemala S.A.	Guatemala
International Flavors & Fragrances (Hong Kong) Limited	Hong Kong
Frutarom (Asia Pacific) Limited	Hong Kong
Inventive Technology Ltd.	Hong Kong
Prowin International Ltd.	Hong Kong
VAYA PHARMA HONKG LTD	Hong Kong
Nutrition & Biosciences Hong Kong Limited	Hong Kong
Microbial Control (Hong Kong) Limited	Hong Kong
International Flavors & Fragrances I.F.F. (Hungary) Kft	Hungary
IFF Hungary Global Kft	Hungary
Nutrition & Biosciences Hungary Limited Liability Company	Hungary
Thorungaverksmidjan HF ⁽¹²⁾	Iceland
International Flavours & Fragrances India Private Limited ⁽¹³⁾	India
BSA India Food Ingr. P. Ltd.	India
Frutarom Flavours (India) Private Limited ⁽¹⁴⁾	India

Name of Entity	Jurisdiction
Sonarome Private Limited ⁽¹⁵⁾	India
Solae Company India Private Limited	India
Danisco (India) Private Limited	India
Danisco Nutrition and Biosciences India Private Ltd	India
Microbial Control (India) Private Limited	India
P.T. Essence Indonesia	Indonesia
PT Blue Cube Indonesia	Indonesia
IFF Capital Services	Ireland
Irish Flavours and Fragrances Limited	Ireland
Aromatics Holdings Limited	Ireland
International Flavors & Fragrances Irish Acquisition Company Limited	Ireland
Redbrook Blentech Limited	Ireland
Redbrook Ingredient Services Limited	Ireland
DuPont Nutrition Ireland	Ireland
DuPont Nutrition Manufacturing Ireland Limited	Ireland
Belden Company	Isle of Man
Arvin Company	Isle of Man
International Flavors and Fragrances Ingredients 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
Frutarom Global Ltd.	Israel
Frutarom Industries Ltd.	Israel
Frutarom Ltd.	Israel
Nutra-Lease Ltd. ⁽¹⁶⁾	Israel
Frutarom Trade & Marketing (1990) Ltd.	Israel
International Flavors e Fragrances IFF (Italia) S.r.l.	Italy
Frutarom Italy S.r.l	Italy
WIBERG Italia S.r.l.	Italy
Danisco Italia S.p.A.	Italy
DuPont Nutrition Italy SRL	Italy
Nutrition & Biosciences Italy S.r.l.	Italy
Microbial Control (Italy) S.R.L.	Italy
International Flavors & Fragrances (Japan) Ltd.	Japan
Danisco Japan Limited	Japan
Nutrition & Biosciences Japan K.K.	Japan
Microbial Control Japan G.K.	Japan
PTI Astana LLC	Kazakhstan
Frutarom Kenya Limited	Kenya
DuPont de Nemours Kenya Limited	Kenya
IFF (Korea) Inc.	Korea
Nutrition & Biosciences Korea Ltd.	Korea
Danisco Nutrition & Biosciences Korea Ltd.	Korea
Frutarom Finance EUR AG	Lichtenstein

Name of Entity	Jurisdiction
International Flavors & Fragrances (Luxembourg) S.à r.l.	Luxembourg
International Flavors & Fragrances Ardenne S.à r.l.	Luxembourg
Nutrition & Bioscience (Luxembourg) S.à r.l.	Luxembourg
L'Atelier Vanille Madagascar	Madagascar
Etol Skopje DRUŠTVO ZA TRGOVIJA ETOL UVOZ-IZVOZ DOOEL	North Macedonia
Ingredients doel Skopje	North Macedonia
International Flavors & Fragrances (Malaysia) Sdn. Bhd.	Malaysia
Danisco Malaysia Sdn. Bhd.	Malaysia
Danisco Nutrition & Biosciences Malaysia SDN. BHD.	Malaysia
International Flavours & Fragrances (Mauritius) Ltd	Mauritius
Genencor Mauritius Ltd.	Mauritius
Bush Boake Allen Controladora, S.A. de C.V.	Mexico
International Flavors & Fragrances (Mexico), S. de R.L. de C.V.	Mexico
Frutarom Flavors Mexico S.A. de C.V.	Mexico
Proveedores de Ingeniería Alimentaria, S.A. de C.V. ("PIASA") ⁽¹⁷⁾	Mexico
Representaciones FYMSA, S.A. de C.V. (FYMSA) ⁽¹⁸⁾	Mexico
Solae de Mexico S.A. de C.V.	Mexico
Danisco Mexicana S.A. de C.V.	Mexico
DuPont Nutrition Mexico S.A de C.V.	Mexico
DuPont Nutrition Mexicana S.A de C.V.	Mexico
Nutrition & Biosciences Mexico S. de R.L. de C.V.	Mexico
PTI-MOL LLC	Moldova
ERELEM	Morocco
International Flavors & Fragrances (Myanmar) Limited	Myanmar
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
Frutarom Netherlands B.V.	Netherlands
Solae Overseas, B.V.	Netherlands
Danisco Holland B.V.	Netherlands
Danisco Zaandam BV	Netherlands
Genencor International, B.V.	Netherlands
New Asia Holdco B.V.	Netherlands
DuPont LA Holding 1 BV	Netherlands
Genencor International Holding BV	Netherlands
N&H EMEA Holding B.V.	Netherlands
IB EMEA Holding 2 B.V.	Netherlands
N&H International Holding 1, B.V.	Netherlands
N&H EMEA Holding 1, BV	Netherlands
N&H EMEA Holding 2, BV	Netherlands
Nutrition & Biosciences Netherlands B.V.	Netherlands
N&B International Holding B.V.	Netherlands
N&B Services BV	Netherlands
SP EMEA Holding 8 BV	Netherlands
N&B EMEA Holding B.V.	Netherlands

Name of Entity	Jurisdiction
MC (Netherlands) 1 B.V.	Netherlands
MC (Netherlands) 2 B.V.	Netherlands
MC (Netherlands) B.V.	Netherlands
Taura Natural Ingredients Ltd.	New Zealand
International Flavours & Fragrances (NZ) Limited	New Zealand
Bush Boake Allen (New Zealand) Limited	New Zealand
Danisco New Zealand Limited	New Zealand
Nutrition & Biosciences New Zealand Limited	New Zealand
MC (New Zealand) Technologies Limited	New Zealand
IFF West Africa Limited	Nigeria
Frutarom Nigeria Limited	Nigeria
Du Pont de Nemours Nigeria Limited	Nigeria
Frutarom Norway A.S	Norway
DuPont Nutrition Norge AS	Norway
Nutrition & Bioscience Pakistan (Private) Ltd	Pakistan
Frutarom Perú S.A. (Montana Food activity)	Peru
Danisco Peru S.A.C.	Peru
International Flavors & Fragrances (Philippines), Inc.	Philippines
DuPont Nutrition Philippines Inc.	Philippines
International Flavors & Fragrances (Poland) Sp. z o.o.	Poland
Amco Sp. z o.o.	Poland
Tastepoint Polska Sp. z o.o.	Poland
Danisco Poland Sp. z o.o.	Poland
DDP Specialty Products Poland Sp. z o.o.	Poland
Chemical Process Materials and Equipment S.A.	Republic of Panama
International Aroma Group	Republic of Panama
Mark Services Holdings Inc.	Republic of Panama
Frutarom (Marketing) S.R.L.	Romania
Frutarom Etol RO SRL	Romania
International Flavors & Fragrances I.F.F. (Rus)	Russia
PTI Group of Companies LLC (GK PTI)	Russia
Tastepoint OOO (Tastepoint Russia Ltd)	Russia
ETOL-RUS, Ltd.	Russia
OOO WIBERG Rus	Russia
Platinum Absolut LLC	Russia
PTI Center LLC	Russia
PTI-NN LLC	Russia
Tekhnomol Soya Products LLC	Russia
ZAO Danisco	Russia
Leagel S.r.l. ⁽¹⁹⁾	San Marino
Tastepoint JVE d.o.o. Novi Sad	Serbia
International Flavors & Fragrances (Greater Asia) Pte. Ltd	Singapore
Enzymotec Singapore Pte. Ltd.	Singapore
Vaya Pharma Pte Ltd. ⁽²⁰⁾	Singapore
Danisco Singapore Pte. Ltd.	Singapore

Name of Entity	Jurisdiction
Nutrition & Biosciences Singapore Pte. Ltd.	Singapore
ETOL SK, s.r.o.	Slovakia
Tastepoint d.o.o.	Slovenia
Etol Proizvodnja Arom D.O.O	Slovenia
VITIVA proizvodnja in storitve d.d. (Short name: VITIVA d.d.)	Slovenia
International Flavors and Fragrances IFF (South Africa)	South Africa
Tastepoint SA (Pty) Ltd.	South Africa
Unique Flavors Proprietary Limited	South Africa
Unique Food Solutions Proprietary Limited	South Africa
DuPont Protein Technologies International Sales LLC	South Africa
Danisco South Africa (Pty) Ltd.	South Africa
Nutrition and Biosciences South Africa (Pty) Ltd	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
IFF Murcia Natural Ingredients, S.L.	Spain
DuPont Nutrition and Biosciences Iberica S.L.	Spain
Nutrition and Biosciences Spain S.L.	Spain
DuPont Lanka (Private) Limited	Sri Lanka
Speximo AB	Sweden
International Flavors & Fragrances I.F.F. (Norden) AB	Sweden
Danisco Cultor Sweden AB	Sweden
Nutrition & Biosciences (Sweden) AB	Sweden
Microbial Control Sweden Technologies AB	Sweden
Frutarom Savory Solutions Switzerland AG	Switzerland
Frutarom Switzerland Finance GBP AG	Switzerland
Frutarom Switzerland Ltd.	Switzerland
Frutarom Switzerland Finance CHF AG	Switzerland
Frutarom Switzerland Finance MXN AG	Switzerland
Frutarom Switzerland Finance USD AG	Switzerland
Solae Europe S.A.	Switzerland
Danisco Cultor (Switzerland) AG	Switzerland
Danisco Switzerland AG	Switzerland
N&H Switzerland Holding Sarl	Switzerland
Nutrition & Bioscience (Switzerland) GmbH	Switzerland
Microbial Control (Switzerland) GmbH	Switzerland
Danisco Nutrition & Biosciences Taiwan Limited	Taiwan
International Flavours & Fragrances (Thailand) Limited	Thailand
The Mighty Company Limited ⁽²¹⁾	Thailand
DuPont Nutrition (Thailand) Ltd	Thailand
Nutrition & Bioscience (Thailand) Co., Ltd.	Thailand
Microbial Control (Thailand) Co., Ltd.	Thailand
IFF Aroma Esans Sanayi Ve Ticaret Anonim Sirketi	Turkey
IFF Turkey Aroma Ve Esans Urunleri Satis Ticaret Anonim Sirketi	Turkey
Etol Aroma Ve Baharat Gida Ürünleri San.Ve Tic.a.ş.	Turkey

Name of Entity	Jurisdiction
Frutarom Gıda Ürünleri Sanayi Ve Ticaret Limited Sirketi	Turkey
Wiberg Baharat San.Tic.A.S	Turkey
Danisco Dis Ticaret Limited Sirketi	Turkey
DuPont Nutrition Dis Ticaret Limited Sirketi	Turkey
MC Turkey Teknoloji Limited Şirketi	Turkey
Frutarom Savory Solutions Ukraine	Ukraine
Frutarom Etol Ukraine LLC.	Ukraine
PARMA FA	Ukraine
PTI-Ukraine LLC	Ukraine
Danisco Ukraine LLC	Ukraine
International Flavors & Fragrances (Middle East) FZ-LLC	United Arab Emirates
Specialty Products FZE	United Arab Emirates
PTI CA LLC	Uzbekistan
Venezuela Protein Technologies Internationla -PTI, C.A.	Venezuela
International Flavors & Fragrances (Vietnam) Limited Liability Company	Vietnam
Nutrition & Biosciences Vietnam Company Limited	Vietnam
Bush Boake Allen Zimbabwe (Private) Limited	Zimbabwe
International Flavors & Fragrances (Zimbabwe) (Private) Ltd.	Zimbabwe
Asian Investments, Inc.	United States
Tastepoint Inc.	United States
IFF Augusta Holdings LLC	United States
IFF Chemical Holdings Inc.	United States
IFF Worldwide LLC	United States
International Flavors & Fragrances (Caribe) Inc.	United States
International Flavors & Fragrances Holdings, LLC	United States
The Additive Advantage, LLC	United States
iDrug Delivery, Inc.(Delaware) ⁽²²⁾	United States
IFF International Inc.	United States
van Ameringen-Haebler, Inc.	United States
Bush Boake Allen Inc.	United States
Columbia PhytoTechnology LLC	United States
Neptune Merger Sub II LLC	United States
MC (US) 1 LLC	United States
Flavor Systems International, Inc.	United States
Frutarom USA Holding, Inc.	United States
Frutarom USA Inc.	United States
International Frutarom Corporation	United States
Taura Natural Ingredients (North America) Inc.	United States
CitraSource Holdings, L.L.C.	United States
Crestmont Investment Co.	United States
Eden Essentials, Inc.	United States
FYMSA Real Estate LLC ⁽²³⁾	United States
Grow Company Inc.	United States
PIASA USA ⁽²⁴⁾	United States
The Foote & Jenks Corporation	United States

Name of Entity	Jurisdiction
UFC America Inc.	United States
W.W. Holdings Inc.	United States
Wiberg Corporation of California	United States
Enzymotec USA Inc.	United States
Vaya Pharma Inc.	United States
Pointer Specialty Chemicals, LLC	United States
Solae Holdings, LLC	United States
DuPont Protein Technologies International Sales, LLC	United States
Solae, LLC	United States
Butamax Advanced Biofuels, LLC	United States
DuPont Danisco Cellulosic Ethanol LLC	United States
Danisco Holding USA Inc.	United States
Danisco US Inc.	United States
Danisco USA Inc.	United States
Agtech Products, Inc.	United States
DuPont Acquisition, LLC	United States
Specialty Products US, LLC	United States
DuPont S&C Holding, LLC	United States
DuPont US Holding, LLC	United States
PM Taiwan, Inc.	United States
DuPont Nutrition USA, Inc.	United States
Specialty Products N&H, Inc.	United States
SP Nutrition and Health (Singapore), Inc.	United States
SP Holding IB, Inc.	United States
DuPont Electronics Holding, LLC	United States
Finnsugar Bioproducts, Inc.	United States
Rohm and Haas Wood Treatment LLC	United States
Nutrition Biosciences USA 4, Inc	United States
Nutrition & Biosciences USA 1, LLC	United States
Nutrition & Biosciences USA 2, LLC	United States
Nutrition & Biosciences USA 3, LLC	United States
Genencor International Wisconsin, Inc.	United States
Genentech Ventures, Inc.	United States
MC (US) 2 LLC	United States
MC (US) 3 LLC	United States

The companies listed above constitute all subsidiaries of the Company as of February 28, 2022. Except as otherwise indicated, such subsidiaries are wholly owned, directly or indirectly, by the Company.

- (1) 51% of the voting stock of Bremil Industria e Comercio de Ingredientes Alimenticos Ltda. is owned indirectly by the Company.
- (2) 51% of the voting stock of Bremil S/A Industria De Produtos Alimenticos is owned indirectly by the Company.
- (3) 51% of the voting stock of Envoltec Indústria de Embalagens Ltda. is owned indirectly by the Company.
- (4) 51% of the voting stock of Sabormax Indústria de Alimentos e Representação Ltda. is owned indirectly by the Company.

- (5) 95% of the voting stock of International Flavors & Fragrances (Hangzhou) Co., Ltd. is owned indirectly by the Company.
- (6) 62.3% of the voting stock of Fangchen International Trading Ltd. is owned indirectly by the Company.
- (7) 62.3% of the voting stock of Pucheng Yongfang Fragrance Technology Co., Ltd. is owned indirectly by the Company.
- (8) 60% of the voting stock of DuPont Shineway Luohe Protein Company Limited is owned indirectly by the Company.
- (9) 52% of the voting stock of DuPont Shineway Luohe Food Company Limited is owned indirectly by the Company.
- (10) 74.85% of the voting stock of FYMSA del Caribe, S.R.L is owned indirectly by the Company.
- (11) 70% of the voting stock of Leagel GmbH is owned indirectly by the Company.
- (12) 71.59% of the voting stock of Thorungaverksmidjan HF is owned indirectly by the Company.
- (13) 93.36% of the voting stock of International Flavours & Fragrances India Private Limited is owned indirectly by the Company.
- (14) 99.99% of the voting stock of Frutarom Flavours (India) Private Limited is owned indirectly by the Company.
- (15) 70% of the voting stock of Sonarome Private Limited is owned indirectly by the Company.
- (16) 56.9% of the voting stock of Nutra-Lease Ltd. is owned indirectly by the Company.
- (17) 75% of the voting stock of Proveedores de Ingeniería Alimentaria, S.A. de C.V. ("PIASA") is owned indirectly by the Company.
- (18) 75% of the voting stock of Representaciones FYMSA, S.A. de C.V (FYMSA) is owned indirectly by the Company.
- (19) 70% of the voting stock of Leagel S.r.l. is owned indirectly by the Company.
- (20) 80% of the voting stock of Vaya Pharma Pte Ltd. is owned indirectly by the Company.
- (21) 60% of the voting stock of The Mighty Company Limited is owned indirectly by the Company.
- (22) 65% of the voting stock of iDrug Delivery, Inc. is owned indirectly by the Company.
- (23) 75% of the voting stock of FYMSA Real Estate LLC is owned indirectly by the Company.
- (24) 75% of the voting stock of PIASA USA is owned indirectly by the Company.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (No. 333-231270) and Form S-8 (No. 333-252650, No. 033-54423, No. 333-61072, No. 333-120158, No. 333-126421, and No. 333-203902) of International Flavors & Fragrances Inc. of our report dated February 28, 2022 relating to the financial statements and financial statement schedule and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

New York, New York

February 28, 2022

CERTIFICATION

I, Frank Clyburn, 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, 2022

By: /s/ Frank Clyburn
Name: Frank Clyburn
Title: Chief Executive Officer

CERTIFICATION

I, Glenn Richter, 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, 2022

By: /s/ Glenn Richter
Name: Glenn Richter
Title: Executive Vice President and Chief Financial Officer

