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

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

For the quarterly period ended June 30, 2022
OR

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

For the transition period from __________ to ____________

Commission file number 1-4858

INTERNATIONAL FLAVORS & FRAGRANCES INC.
(Exact name of registrant as specified in its charter)

New York	**13-1432060**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

521 West 57th Street, New York, 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(s)	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

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 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	☑	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

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

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

Number of shares of common stock outstanding as of August 1, 2022: 254,947,085

INTERNATIONAL FLAVORS & FRAGRANCES INC.

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PART I. FINANCIAL INFORMATION
ITEM 1. FINANCIAL STATEMENTS.
INTERNATIONAL FLAVORS & FRAGRANCES INC.
CONSOLIDATED BALANCE SHEETS
(Unaudited)

(DOLLARS IN MILLIONS)	June 30, 2022	December 31, 2021
ASSETS		
Current Assets:		
Cash and cash equivalents	$ 569	$ 711
Restricted cash	4	4
Trade receivables (net of allowances of $64 and $46, respectively)	2,180	1,906
Inventories: Raw materials	1,065	854
Work in process	381	287
Finished goods	1,547	1,375
Total Inventories	2,993	2,516
Assets held for sale	1,206	1,122
Prepaid expenses and other current assets	778	728
Total Current Assets	7,730	6,987
Property, plant and equipment, at cost	6,138	6,161
Accumulated depreciation	(1,961)	(1,793)
Property, plant and equipment, net	4,177	4,368
Goodwill	16,071	16,414
Other intangible assets, net	9,867	10,506
Operating lease right-of-use assets	733	767
Other assets	726	616
Total Assets	$ 39,304	$ 39,658
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current Liabilities:		
Bank borrowings, overdrafts, and current portion of long-term debt	$ 957	$ 308
Commercial paper	792	324
Accounts payable	1,576	1,532
Accrued payroll and bonus	253	335
Dividends payable	201	201
Liabilities held for sale	75	101
Other current liabilities	866	832
Total Current Liabilities	4,720	3,633
Other Liabilities:		
Long-term debt	10,363	10,768
Retirement liabilities	372	385
Deferred income taxes	2,362	2,518
Operating lease liabilities	646	670
Other liabilities	462	462
Total Other Liabilities	14,205	14,803
Commitments and Contingencies (Note 15)		
Redeemable noncontrolling interests	86	105
Shareholders' Equity:		
Common stock $0.125 par value; 500,000,000 shares authorized; 275,726,629 shares issued as of June 30, 2022 and 275,726,629 shares issued as of December 31, 2021; and 254,944,731 and 254,573,984 shares outstanding as of June 30, 2022 and December 31, 2021, respectively	35	35
Capital in excess of par value	19,826	19,826
Retained earnings	3,589	3,641
Accumulated other comprehensive loss	(2,210)	(1,423)
Treasury stock, at cost (20,781,898 and 21,152,645 shares as of June 30, 2022 and December 31, 2021, respectively)	(980)	(997)
Total Shareholders' Equity	20,260	21,082
Noncontrolling interest	33	35
Total Shareholders' Equity including Noncontrolling interest	20,293	21,117
Total Liabilities and Shareholders' Equity	$ 39,304	$ 39,658

See Notes to Consolidated Financial Statements

INTERNATIONAL FLAVORS & FRAGRANCES INC.
Consolidated Statements of Income (Loss) and Comprehensive (Loss) Income
(Unaudited)

(AMOUNTS IN MILLIONS EXCEPT PER SHARE AMOUNTS)	Three Months Ended June 30, 2022	Three Months Ended June 30, 2021	Six Months Ended June 30, 2022	Six Months Ended June 30, 2021
Net sales	$ 3,307	$ 3,089	$ 6,533	$ 5,554
Cost of goods sold	2,171	2,179	4,252	3,890
Gross profit	1,136	910	2,281	1,664
Research and development expenses	158	164	315	307
Selling and administrative expenses	456	412	915	863
Amortization of acquisition-related intangibles	184	200	370	352
Impairment of long-lived assets	120	—	120	—
Restructuring and other charges	7	24	9	28
Gains on sales of fixed assets	(2)	—	(2)	—
Operating profit	213	110	554	114
Interest expense	77	77	149	142
Other expense (income), net	6	(11)	(10)	(18)
Income (loss) before taxes	130	44	415	(10)
Provision for income taxes	21	14	60	—
Net income (loss)	109	30	355	(10)
Net income attributable to noncontrolling interests	2	2	4	4
Net income (loss) attributable to IFF shareholders	$ 107	$ 28	$ 351	$ (14)
Net income (loss) per share - basic	$ 0.43	$ 0.11	$ 1.38	$ (0.06)
Net income (loss) per share - diluted	$ 0.43	$ 0.11	$ 1.38	$ (0.06)
Average number of shares outstanding - basic	255	254	255	230
Average number of shares outstanding - diluted	255	255	255	230
Statement of Comprehensive (Loss) Income				
Net income (loss)	$ 109	$ 30	$ 355	$ (10)
Other comprehensive (loss) income, after tax:				
Foreign currency translation adjustments	(589)	263	(788)	(154)
Gains on derivatives qualifying as hedges	—	2	—	6
Pension and postretirement liability adjustment	1	3	1	12
Other comprehensive (loss) income	(588)	268	(787)	(136)
Comprehensive (loss) income	(479)	298	(432)	(146)
Net income attributable to noncontrolling interests	2	2	4	4
Comprehensive (loss) income attributable to IFF shareholders	$ (481)	$ 296	$ (436)	$ (150)

See Notes to Consolidated Financial Statements

INTERNATIONAL FLAVORS & FRAGRANCES INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

(DOLLARS IN MILLIONS)	Six Months Ended June 30, 2022	Six Months Ended June 30, 2021
Cash flows from operating activities:		
Net income (loss)	$ 355	$ (10)
Adjustments to reconcile to net cash (used in) provided by operating activities		
Depreciation and amortization	604	564
Deferred income taxes	(178)	(137)
(Gains) Losses on sale of assets	(2)	—
Stock-based compensation	25	27
Pension contributions	(17)	(12)
Amortization of inventory step-up	—	377
Impairment of long-lived assets	120	—
Changes in assets and liabilities, net of acquisitions:		
Trade receivables	(363)	(205)
Inventories	(573)	(130)
Accounts payable	143	250
Accruals for incentive compensation	(62)	7
Other current payables and accrued expenses	(67)	32
Other assets/liabilities, net	(85)	(65)
Net cash (used in) provided by operating activities	(100)	698
Cash flows from investing activities:		
Cash paid for acquisitions, net of cash received	(123)	—
Additions to property, plant and equipment	(236)	(165)
Additions to intangible assets	(2)	—
Proceeds from disposal of assets	4	2
Cash provided by the Merger with N&B	11	193
Net cash (used in) provided by investing activities	(346)	30
Cash flows from financing activities:		
Cash dividends paid to shareholders	(402)	(274)
Increase (decrease) in revolving credit facility and short-term borrowings	351	(104)
Proceeds from issuance of commercial paper (maturities after three months)	160	—
Repayments of commercial paper (maturities after three months)	(230)	—
Net borrowings of commercial paper (maturities less than three months)	532	—
Repayments of long-term debt	—	(24)
Proceeds from issuance of long-term debt	—	3
Contingent consideration paid	—	(14)
Purchases of redeemable noncontrolling interest	(15)	—
Purchases of noncontrolling interest	(6)	—
Proceeds from issuance of stock in connection with stock options	7	5
Employee withholding taxes paid	(20)	(19)
Net cash provided by (used in) financing activities	377	(427)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(74)	(18)
Net change in cash, cash equivalents and restricted cash	(143)	283
Cash, cash equivalents and restricted cash at beginning of year	716	660
Cash, cash equivalents and restricted cash at end of period	$ 573	$ 943
Supplemental Disclosures:		
Interest paid, net of amounts capitalized	$ 143	$ 160
Income taxes paid	227	134
Accrued capital expenditures	71	36

See Notes to Consolidated Financial Statements

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

	Common stock					Treasury stock			
(DOLLARS IN MILLIONS)	Shares	Cost	Capital in excess of par value	Retained earnings	Accumulated other comprehensive (loss) income	Shares	Cost	Non-controlling interest	Total
Balance at March 31, 2021	270,266,598	$ 34	$ 19,796	$ 3,922	$ (1,102)	(21,406,957)	$ (1,008)	$ 39	$ 21,681
Net income				28					28
Cumulative translation adjustment					263				263
Gains on derivatives qualifying as hedges; net of tax of $0					2				2
Pension liability and postretirement adjustment; net of tax of $(2)					3				3
Cash dividends declared ($0.77 per share)				(191)					(191)
Stock options/SSARs			1			15,906	1		2
Vested restricted stock units and awards			(14)			174,994	9		(5)
Stock-based compensation			16						16
Redeemable NCI			1						1
Balance at June 30, 2021	270,266,598	$ 34	$ 19,800	$ 3,759	$ (834)	(21,216,057)	$ (998)	$ 39	$ 21,800

	Common stock					Treasury stock			
(DOLLARS IN MILLIONS)	Shares	Cost	Capital in excess of par value	Retained earnings	Accumulated other comprehensive (loss) income	Shares	Cost	Non-controlling interest	Total
Balance at March 31, 2022	275,726,629	$ 35	$ 19,823	$ 3,683	$ (1,622)	(20,921,882)	$ (986)	$ 32	$ 20,965
Net income				107					107
Cumulative translation adjustment					(589)				(589)
Pension liability and postretirement adjustment; net of tax of $(1)					1				1
Cash dividends declared ($0.79 per share)				(201)					(201)
Stock options/SSARs			1			4,024			1
Vested restricted stock units and awards			(16)			135,960	6		(10)
Stock-based compensation			16						16
Purchase of NCI								(1)	(1)
Redeemable NCI			2						2
Dividends paid on noncontrolling interest and Other								2	2
Balance at June 30, 2022	275,726,629	$ 35	$ 19,826	$ 3,589	$ (2,210)	(20,781,898)	$ (980)	$ 33	$ 20,293

See Notes to Consolidated Financial Statements

(DOLLARS IN MILLIONS)	Common stock Shares	Common stock Cost	Capital in excess of par value	Retained earnings	Accumulated other comprehensive (loss) income	Treasury stock Shares	Treasury stock Cost	Non-controlling interest	Total
Balance at January 1, 2021	128,526,137	$ 16	$ 3,853	$ 4,156	$ (698)	(21,588,147)	$ (1,017)	$ 12	$ 6,322
Net loss				(14)				1	(13)
Cumulative translation adjustment					(154)				(154)
Gains on derivatives qualifying as hedges; net of tax of $1					6				6
Pension liability and postretirement adjustment; net of tax of $(1)					12				12
Cash dividends declared ($1.54 per share)				(383)					(383)
Stock options/SSARs			2			114,635	6		8
Vested restricted stock units and awards			(18)			257,455	13		(5)
Stock-based compensation			27						27
Impact of N&B Merger	141,740,461	18	15,936					26	15,980
Balance at June 30, 2021	270,266,598	$ 34	$ 19,800	$ 3,759	$ (834)	(21,216,057)	$ (998)	$ 39	$ 21,800

(DOLLARS IN MILLIONS)	Common stock Shares	Common stock Cost	Capital in excess of par value	Retained earnings	Accumulated other comprehensive (loss) income	Treasury stock Shares	Treasury stock Cost	Non-controlling interest	Total
Balance at January 1, 2022	275,726,629	$ 35	$ 19,826	$ 3,641	$ (1,423)	(21,152,645)	$ (997)	$ 35	$ 21,117
Net income				351				2	353
Cumulative translation adjustment					(788)				(788)
Pension liability and postretirement adjustment; net of tax of $(1)					1				1
Cash dividends declared ($1.58 per share)				(403)					(403)
Stock options/SSARs			10			84,177	4		14
Vested restricted stock units and awards			(38)			286,570	13		(25)
Stock-based compensation			25						25
Purchase of NCI			1					(6)	(5)
Redeemable NCI			2						2
Dividends paid on noncontrolling interest and Other								2	2
Balance at June 30, 2022	275,726,629	$ 35	$ 19,826	$ 3,589	$ (2,210)	(20,781,898)	$ (980)	$ 33	$ 20,293

See Notes to Consolidated Financial Statements

INTERNATIONAL FLAVORS & FRAGRANCES INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

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

The accompanying interim Consolidated Financial Statements should be read in conjunction with the Consolidated Financial Statements and the related notes included in our 2021 Annual Report on Form 10-K ("2021 Form 10-K").

The interim Consolidated Financial Statements are unaudited. In addition, certain information and footnote disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles in the United States of America have been condensed or omitted, if not materially different from the 2021 Form 10-K. The year-end balance sheet data included in this Form 10-Q was derived from the audited financial statements. In the opinion of management, all adjustments, which consist of normal recurring adjustments necessary for a fair statement of the interim Consolidated Financial Statements, have been made.

On February 1, 2021 (the "Closing Date"), pursuant to an Agreement and Plan of Merger (the "Merger Agreement"), 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 three and six months ended June 30, 2022 reflect the results of N&B for the full three and six months in the period ended June 30, 2022, respectively, whereas the three and six months ended June 30, 2021 reflect three and five months of results of N&B in the period ended June 30, 2021, respectively.

Reporting Periods

The Company uses a calendar year of the twelve-month period from January 1 to December 31.

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") and the impairment of assets arising from the recent events in Russia and Ukraine 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.

Cash, Cash Equivalents and Restricted Cash

Cash, cash equivalents and restricted cash reported in the Company's balance sheet as of June 30, 2022, December 31, 2021, June 30, 2021 and December 31, 2020 were as follows:

(DOLLARS IN MILLIONS)	June 30, 2022	December 31, 2021	June 30, 2021	December 31, 2020
Current assets				
Cash and cash equivalents	$ 569	$ 711	$ 935	$ 650
Restricted cash	4	4	7	7
Noncurrent assets				
Restricted cash included in Other assets	—	1	1	3
Cash, cash equivalents and restricted cash	$ 573	$ 716	$ 943	$ 660

Accounts Receivable

The Company has various factoring agreements in the U.S. and The Netherlands under which it can factor up to approximately $250 million in receivables. In addition, the Company has factoring agreements sponsored by certain customers. Under all of the arrangements, the Company sells the receivables on a non-recourse basis to unrelated financial institutions and accounts for the transactions as a sale 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 flows from operating activities from participating in these programs was a decrease of approximately $59 million for the six months ended June 30, 2022 and an increase of approximately $46 million for the six months ended June 30, 2021. The cost of participating in these programs was approximately $2 million for the three months ended June 30, 2022 and 2021 and $3 million for the six months ended June 30, 2022 and 2021.

Revenue Recognition

The Company recognizes revenue when control of the promised goods is transferred to its 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. See Note 11 for further details on revenues disaggregated by segment.

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 June 30, 2022 and December 31, 2021, the Company's gross accounts receivable was $2.244 billion and $1.952 billion, respectively. The Company's contract assets and contract liabilities as of June 30, 2022 and December 31, 2021 were not material.

Expected Credit Losses

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 primary factors: i) the aging of the different categories of trade receivables, and ii) a specific reserve for accounts identified as uncollectible.

The Company also considers current and future economic conditions in the determination of the allowance. At June 30, 2022, the Company reported $2.180 billion of trade receivables, net of allowances of $64 million. Based on the aging analysis as of June 30, 2022, approximately 91% of the Company's accounts receivable were current based on the payment terms of the invoice. Receivables that were past due by over 365 days account for approximately 1% of the Company's accounts receivable.

The following is a rollforward of the Company's allowances for bad debts for the six months ended June 30, 2022:

(DOLLARS IN MILLIONS)	Allowances for Bad Debts
Balance at December 31, 2021	$ 46
Bad debt expense[1]	20
Write-offs	(1)
Foreign exchange	(1)
Balance at June 30, 2022	$ 64

(1) The bad debt expense included approximately $11 million related to expected credit losses on receivables from customers located in Russia and Ukraine (for export and domestic sales) due to recent events in those countries. The Company will continue to evaluate its credit exposure related to Russia and Ukraine.

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.

Recent Events in Russia and Ukraine

The Company maintains operations in both Russia and Ukraine and, additionally, exports products to customers in Russia and Ukraine from operations outside the region. In response to the events in Ukraine, the Company has limited the production and supply of ingredients in and to Russia to only those that meet the essential needs of people, including food, hygiene and medicine.

Impairment of Long-Lived Assets

During the second quarter of 2022, the sales and margins declined for certain entities within Russia due to supply chain issues, reduced product demand and exchange rate volatility. Further, it was determined that such declines in operating performance were not expected to reverse in the near future. Additionally, future expected growth is expected to be limited given operating conditions in Russia, which inhibit the required future investment.

In connection with uncertainties related to the Company’s operations in Russia and Ukraine, the Company updated its analysis of the undiscounted cash flows of the applicable asset groups to determine if the cash flows exceeded the carrying values of the applicable asset groups. With respect to an asset group in the Nourish segment, that manufactures and sells in Russia and related markets, it was determined that the undiscounted cash flows were insufficient to cover the carrying value and that an impairment charge was required to write-down the long-lived assets to their fair values. The fair value of such asset group was determined based on a discounted cash flow approach which involved estimating the future cash flows for the business discount to their present values. The discount rate used in the determination of such fair value was based on consideration of the risks inherent in the cash flows and market as of the valuation date.

As a result of this assessment, the Company recognized an impairment charge of $120 million in the Consolidated Statements of Income (Loss) and Comprehensive (Loss) Income during the three and six months ended June 30, 2022, which was allocated pro rata to intangible assets and property, plant and equipment within the asset group in the amounts of approximately $92 million and $28 million, respectively.

Allowances for Bad Debts

As indicated above, during the six months ended June 30, 2022, the Company also recorded a charge of approximately $11 million related to expected credit losses on receivables from customers located in Russia and Ukraine (for export and domestic sales) due to recent events in those countries. The Company will continue to evaluate its credit exposure related to Russia and Ukraine.

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 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 early adopted ASU 2021-08 during the second quarter of 2022. The adoption of the guidance did not have a material impact on the Consolidated Financial Statements.

In January 2021, the FASB issued ASU 2021-01, “Reference Rate Reform (Topic 848): Scope.” The ASU is intended to provide updates and responses to concerns over Topic 848 related to the cessation of reference rates in certain financial markets. 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 did not have a material impact on the Company's Consolidated Financial Statements.

NOTE 2. NET INCOME (LOSS) PER SHARE

A reconciliation of the shares used in the computation of basic and diluted net income (loss) per share is as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
(AMOUNTS IN MILLIONS EXCEPT PER SHARE AMOUNTS)	**2022**	**2021**	**2022**	**2021**
Net Income (Loss)				
Net income (loss) attributable to IFF shareholders	$ 107	$ 28	$ 351	$ (14)
Adjustment related to (increase) decrease in redemption value of redeemable noncontrolling interests in excess of earnings allocated	2	1	2	—
Net income (loss) available to IFF shareholders	$ 109	$ 29	$ 353	$ (14)
Shares				
Weighted average common shares outstanding (basic)[(1)]	255	254	255	230
Adjustment for assumed dilution[(2)]:				
SPC portion of TEUs	—	1	—	—
Weighted average shares assuming dilution (diluted)	255	255	255	230
Net Income (Loss) per Share				
Net income (loss) per share - basic	$ 0.43	$ 0.11	$ 1.38	$ (0.06)
Net income (loss) per share - diluted	0.43	0.11	1.38	(0.06)

(1) On September 15, 2021, additional shares of IFF's common stock were issued in settlement of the stock purchase contract (“SPC”) portion of the tangible equity units (“TEUs”). For the three and six months ended June 30, 2021, 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.

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.

The Company declared a quarterly dividend to its shareholders of $0.79 and $0.77 per share for the three months ended June 30, 2022 and 2021, respectively. For the six months ended June 30, 2022 and 2021, the Company declared quarterly dividends to its shareholders totaling $1.58 and $1.54, respectively.

There were no stock options or stock-settled appreciation rights (“SSARs”) excluded from the computation of diluted net income per share for the three and six months ended June 30, 2022 and three months ended June 30, 2021.

There were approximately one million potentially dilutive securities excluded from the computation of diluted net income (loss) per share for the six months ended June 30, 2021 because there was a net loss attributable to IFF for the period and, as such, the inclusion of these securities would have been anti-dilutive.

The Company issued 16,500,000 TEUs, consisting of a prepaid SPC and a senior amortizing note, for net proceeds of $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 20 day volume-weighted average price (“VWAP”) per share of the Company’s common stock. For purposes of calculating basic net income (loss) per share, the minimum settlement rate of 0.313400 shares per SPC on June 30, 2021 was used. For purposes of calculating diluted earnings per share, the SPCs were assumed to be settled at a conversion factor not to exceed 0.341100 shares per SPC on June 30, 2021.

The Company has issued shares of purchased restricted common stock units (“PRSUs”) which contain rights to nonforfeitable dividends while these shares are outstanding and thus are considered participating securities. Such securities are required to be included in the computation of basic and diluted earnings per share pursuant to the two-class method.

The Company did not present the two-class method since there was no difference between basic net income (loss) per share for both unrestricted common shareholders and PRSU shareholders for the three and six months ended June 30, 2022 and 2021. The difference between diluted net income per share for both unrestricted common shareholders and PRSU shareholders for the three and six months ended June 30, 2022 and three months ended June 30, 2021 was less than $0.01 per share and there was no difference between diluted net income (loss) per share for both unrestricted common shareholders and PRSU shareholders for the six months ended June 30, 2021. In addition, the number of PRSUs outstanding as of June 30, 2022 and 2021 was not material. Net income allocated to such PRSUs was not material for the three and six months ended June 30, 2022 and three months ended June 30, 2021. Net loss allocated to such PRSUs was not material for the six months ended June 30, 2021.

NOTE 3. ACQUISITIONS

Acquisition of Health Wright Products

On April 1, 2022 (“Acquisition Date”), the Company completed its acquisition of Health Wright Products, Inc. (“Health Wright”). IFF acquired 100% of the equity of Health Wright pursuant to a purchase agreement entered into on February 16, 2022. Health Wright is known in the consumer Health and Nutrition industries for providing high quality nutritional supplements. The acquisition was made in order to strengthen formulation and finished format capabilities to IFF’s Health & Biosciences probiotics, natural extracts and botanical businesses.

The acquisition was accounted for under the purchase method. The fair value of consideration transferred was approximately $157 million, including cash and estimated contingent consideration of $31 million. The preliminary purchase price allocation has been performed and resulted in intangible assets of approximately $75 million, and approximately $45 million of goodwill (which is deductible for tax purposes). The intangible assets primarily consisted of customer relationships of approximately $74 million that have been fair valued using the Multi-Period Excess Earning Method and which are being amortized over a period of approximately 19 years. The purchase price allocation is preliminary and is expected to be completed within the measurement period.

No pro forma information for 2022 was presented as the acquisition was not material to the Consolidated Financial Statements.

Transaction with N&B

On February 1, 2021, IFF completed the Merger with N&B. The aggregate purchase price consideration paid to acquire N&B was $15.942 billion. Refer to Note 3 of the Company's 2021 Form 10-K for additional information.

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 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 six months ended June 30, 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 six months ended June 30, 2021 were as follows:

(DOLLARS IN MILLIONS)	Six Months Ended June 30, 2021	
Unaudited pro forma net sales	$	6,061
Unaudited pro forma net income attributable to the Company		406

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. RESTRUCTURING AND OTHER CHARGES

Restructuring and other charges primarily consist of separation costs for employees including severance, outplacement and other employee benefit costs (“Severance”), charges related to the write-down of fixed assets of plants to be closed (“Fixed asset write-down”) and all other related restructuring (“Other”) costs. All restructuring and other charges are separately stated on the Consolidated Statements of Income (Loss) and Comprehensive (Loss) Income.

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 all closures targeted to occur by 2023. Since the inception of the initiative through June 30, 2022, the Company has closed 22 sites and expensed total costs of approximately $38 million. Total costs for the program are expected to be approximately $42 million including cash and non-cash items.

2019 Severance Program

During the year ended December 31, 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 to date.

N&B Merger Restructuring Liability

For the six months ended June 30, 2022, the Company incurred approximately $8 million of charges primarily related to severance. Since the inception of the restructuring activities, there have been approximately 270 headcount reductions and the Company has expensed approximately $38 million.

Changes in Restructuring Liabilities

Changes in restructuring liabilities during the six months ended June 30, 2022 were as follows:

(DOLLARS IN MILLIONS)	Balance at December 31, 2021	Additional Charges (Reversals), Net	Non-Cash Charges	Cash Payments	Balance at June 30, 2022
Frutarom Integration Initiative					
Severance	$ 5	$ —	$ —	$ —	$ 5
Fixed asset write down	—	1	(1)	—	—
Other	3	—	—	(1)	2
2019 Severance Program					
Severance	5	—	—	—	5
Other Restructuring Charges					
Severance	1	—	—	—	1
N&B Merger Restructuring Liability					
Severance	15	6	—	(8)	13
Other	—	2	—	(2)	—
Total restructuring and other charges	$ 29	$ 9	$ (1)	$ (11)	$ 26

Restructuring liabilities are presented in “Other current liabilities” on the Consolidated Balance Sheets.

Charges by Segment

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

	Three Months Ended June 30,		Six Months Ended June 30,	
(DOLLARS IN MILLIONS)	2022	2021	2022	2021
Nourish	$ 1	$ 17	$ 3	$ 20
Health & Biosciences	1	4	1	4
Scent	5	2	5	3
Pharma Solutions	—	1	—	1
Total Restructuring and other charges	$ 7	$ 24	$ 9	$ 28

NOTE 5. GOODWILL AND OTHER INTANGIBLE ASSETS, NET

Goodwill

Movements in goodwill attributable to each reportable segment for the six months ended June 30, 2022 were as follows:

(DOLLARS IN MILLIONS)	Nourish	Health & Biosciences	Scent	Pharma Solutions	Total
Balance at December 31, 2021	$ 6,555	$ 6,749	$ 1,828	$ 1,282	$ 16,414
Acquisitions	—	45	—	—	45
Transferred to assets held for sale	—	11	—	—	11
Foreign exchange	(131)	(179)	(42)	(47)	(399)
Balance at June 30, 2022	$ 6,424	$ 6,626	$ 1,786	$ 1,235	$ 16,071

Other Intangible Assets

Other intangible assets, net consisted of the following amounts:

(DOLLARS IN MILLIONS)	June 30, 2022	December 31, 2021
Asset Type		
Customer relationships	$ 8,794	$ 8,935
Technological know-how	2,430	2,494
Trade names & patents	399	411
Other	48	50
Total carrying value	11,671	11,890
Accumulated Amortization		
Customer relationships	(1,162)	(887)
Technological know-how	(505)	(388)
Trade names & patents	(90)	(68)
Other	(47)	(41)
Total accumulated amortization	(1,804)	(1,384)
Other intangible assets, net	$ 9,867	$ 10,506

Impairment of Intangible Assets

As discussed in Note 1, an impairment charge of approximately $92 million has been recorded in connection with intangible assets of an asset group that operates primarily in Russia.

Amortization

Amortization expense was $184 million and $200 million for the three months ended June 30, 2022 and 2021, respectively, and $370 million and $352 million for the six months ended June 30, 2022 and 2021, respectively.

Amortization expense for the next five years is expected to be as follows:

(DOLLARS IN MILLIONS)	2022	2023	2024	2025	2026
Estimated future intangible amortization expense	$ 372	$ 738	$ 737	$ 734	$ 732

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

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

(DOLLARS IN MILLIONS)	June 30, 2022	December 31, 2021
Value-added tax receivable	$ 192	$ 178
Income tax receivable	104	131
Prepaid expenses	344	288
Other	138	131
Total	$ 778	$ 728

Other assets consisted of the following amounts:

(DOLLARS IN MILLIONS)	June 30, 2022	December 31, 2021
Finance lease right-of-use assets	$ 41	$ 21
Deferred income taxes	130	82
Overfunded pension plans	138	136
Cash surrender value of life insurance contracts	45	52
Equity method investments	84	86
Other[(1)]	288	239
Total	$ 726	$ 616

(1) Includes land usage rights in China, long-term deposits and receivables on certain derivative instruments.

Other current liabilities consisted of the following amounts:

(DOLLARS IN MILLIONS)	June 30, 2022	December 31, 2021
Rebates and incentives payable	$ 96	$ 113
Value-added tax payable	44	50
Interest payable	47	48
Current pension and other postretirement benefit obligation	7	11
Accrued insurance (including workers’ compensation)	9	10
Restructuring and other charges	26	29
Current operating lease obligation	98	109
Current financing lease obligation	6	5
Accrued income taxes	165	94
Other accounts payable and accrued expenses payable	254	270
Other	114	93
Total	$ 866	$ 832

NOTE 7. DEBT

Debt consisted of the following:

(DOLLARS IN MILLIONS)	Effective Interest Rate	June 30, 2022	December 31, 2021
2022 Notes	0.69 %	$ 300	$ 300
2023 Notes[1]	3.30 %	300	300
2024 Euro Notes[1]	1.88 %	526	565
2025 Notes	1.22 %	1,000	1,001
2026 Euro Notes[1]	1.93 %	837	900
2027 Notes	1.56 %	1,217	1,218
2028 Notes[1]	4.57 %	398	397
2030 Notes	2.21 %	1,510	1,511
2040 Notes	3.04 %	774	775
2047 Notes[1]	4.44 %	495	494
2048 Notes[1]	5.12 %	787	786
2050 Notes	3.21 %	1,572	1,572
2024 Term Loan Facility	2.58 %	625	625
2026 Term Loan Facility	2.96 %	625	625
Amended Revolving Credit Facility[2]		350	—
Commercial paper[3]		792	324
Bank overdrafts and other		4	7
Total debt		12,112	11,400
Less: Short-term borrowings[4]		(1,749)	(632)
Total Long-term debt		$ 10,363	$ 10,768

(1) Amount is net of unamortized discount and debt issuance costs.
(2) The interest rate on the Amended 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.
(3) The effective interest rate of commercial paper issuances fluctuates 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.
(4) Includes bank borrowings, commercial paper, overdrafts and current portions of long-term debt.

Commercial Paper

In 2022, the Company had gross issuances of $3.646 billion and repayments of $3.178 billion under the Commercial Paper Program. The commercial paper issued had original maturities of less than 124 days. There were no commercial paper issuances or repayments during the 2021 period.

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.

Amended Revolving Credit Facility

In 2022, the Company had borrowings of $350 million, classified as short-term borrowings on the Consolidated Balance Sheets, under the $2.000 billion Amended Revolving Credit Facility. There were no borrowings under the Amended Revolving Credit Facility in the 2021 period.

The amount that we are able to draw down under the Amended Revolving Credit Facility is limited by financial covenants. Refer to Note 9 in the 2021 Form 10-K for additional information. As of June 30, 2022, the Company was in compliance with all covenants under the Amended Revolving Credit Facility.

NOTE 8. LEASES

The Company has leases for corporate offices, manufacturing facilities, research and development facilities, and certain transportation and office equipment. The Company's leases have remaining lease terms of up to 50 years, some of which include options to extend the leases for up to 5 years.

The components of lease expense were as follows:

(DOLLARS IN MILLIONS)	Three Months Ended June 30, 2022	Three Months Ended June 30, 2021	Six Months Ended June 30, 2022	Six Months Ended June 30, 2021
Operating lease cost	$ 45	$ 46	$ 92	$ 78
Finance lease cost	2	1	4	2

Supplemental cash flow information related to leases was as follows:

(DOLLARS IN MILLIONS)	Six Months Ended June 30, 2022	Six Months Ended June 30, 2021
Cash paid for amounts included in the measurement of lease liabilities		
Operating cash flows for operating leases	$ 70	$ 60
Financing cash flows for finance leases	3	2
Right-of-use assets obtained in exchange for lease obligations		
Operating leases	30	31
Finance leases	2	15

As a result of the Company's acquisition of Health Wright, there was an increase of approximately $22 million in both financing lease right-of-use assets and financing lease liabilities as of the Acquisition Date.

Operating lease right-of-use assets are presented in “Operating lease right-of-use assets” and financing lease right-of-use assets are presented in “Other assets” on the Consolidated Balance Sheets. Operating lease liabilities are presented in “Operating lease liabilities” and financing lease liabilities are presented in “Other liabilities” on the Consolidated Balance Sheets. Any other current liabilities related to operating and financing lease liabilities are presented in “Other current liabilities” on the Consolidated Balance Sheets.

NOTE 9. INCOME TAXES

Uncertain Tax Positions

As of June 30, 2022, the Company had approximately $123 million of unrecognized tax benefits recorded in Other liabilities and no amounts recorded to Other current liabilities. If these unrecognized tax benefits were recognized, the effective tax rate would be affected.

As of June 30, 2022, the Company had accrued interest and penalties of approximately $38 million classified in Other liabilities and no amounts classified in Other current liabilities.

As of June 30, 2022, the Company’s aggregate provisions for uncertain tax positions, including interest and penalties, was approximately $161 million associated with tax positions asserted in various jurisdictions.

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 June 30, 2022, the Company had a deferred tax liability of approximately $92 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. In addition, the Company has open tax years with various taxing jurisdictions that range primarily from 2012 to 2021. Based on currently available information, the Company does not believe the 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 results of operations.

The Company also has other ongoing tax audits and legal proceedings that relate to indirect taxes, such as value-added taxes, sales and use taxes and property taxes, which are discussed in Note 15.

Effective Tax Rate

The effective tax rate for the three months ended June 30, 2022 was 16.2% compared to 31.8% for the three months ended June 30, 2021. The quarter-over-quarter decrease was primarily due to the release of uncertain tax positions in connection to an audit settlement, a favorable mix of earnings and the impact of a one-time non-cash United Kingdom rate change from the prior year period.

The effective tax rate for the six months ended June 30, 2022 was 14.5% compared to 0% for the six months ended June 30, 2021. The year-over-year increase was primarily due to the release of uncertain tax positions in connection to an audit settlement, changes in the mix of earnings and a one-time benefit to record a receivable associated with the proceedings of a bi-lateral advance pricing agreement, partially offset by the impact of a one-time non-cash United Kingdom rate change from the prior year period.

NOTE 10. STOCK COMPENSATION PLANS

The Company has various plans under which its officers, senior management, other key employees and directors may be granted equity-based awards. Equity awards outstanding under the plans include PRSUs, RSUs, SSARs and Long-Term Incentive Plan awards. Liability-based awards outstanding under the plans are cash-settled RSUs.

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

	Three Months Ended June 30,		Six Months Ended June 30,	
(DOLLARS IN MILLIONS)	**2022**	**2021**	**2022**	**2021**
Equity-based awards	$ 16	$ 16	$ 25	$ 27
Liability-based awards	1	3	1	6
Total stock-based compensation expense	17	19	26	33
Less: Tax benefit	(3)	(4)	(5)	(7)
Total stock-based compensation expense, after tax	$ 14	$ 15	$ 21	$ 26

As of June 30, 2022, there was approximately $92 million of total unrecognized compensation cost related to non-vested awards granted under the equity incentive plans.

NOTE 11. SEGMENT INFORMATION

The Company is 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 segments.

Nourish 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 a vast portfolio including cellulosics and seaweed-based pharmaceutical 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.

Reportable segment information was as follows:

(DOLLARS IN MILLIONS)	Three Months Ended June 30, 2022	Three Months Ended June 30, 2021	Six Months Ended June 30, 2022	Six Months Ended June 30, 2021
Net sales:				
Nourish	$ 1,818	$ 1,668	$ 3,549	$ 2,976
Health & Biosciences	665	639	1,326	1,065
Scent	580	550	1,165	1,119
Pharma Solutions	244	232	493	394
Consolidated	$ 3,307	$ 3,089	$ 6,533	$ 5,554
Segment Adjusted Operating EBITDA:				
Nourish	$ 365	$ 324	$ 694	$ 594
Health & Biosciences	184	190	376	318
Scent	93	117	209	245
Pharma Solutions	58	48	123	91
Total	700	679	1,402	1,248
Depreciation & Amortization	(301)	(322)	(604)	(564)
Interest Expense	(77)	(77)	(149)	(142)
Other (Expense) Income, net	(6)	11	10	18
Acquisition Related Costs (a)	(1)	—	(1)	—
Restructuring and Other Charges	(7)	(24)	(9)	(28)
Gains on sales of fixed assets	2	—	2	—
Impairment of Long-Lived Assets (b)	(120)	—	(120)	—
Shareholder Activism Related Costs (c)	—	—	(3)	(7)
Business Divestiture Costs (d)	(30)	(5)	(60)	(5)
Employee Separation Costs (e)	—	(3)	(4)	(6)
Frutarom Acquisition Related Costs (f)	—	—	(1)	—
N&B Inventory Step-Up Costs	—	(195)	—	(377)
N&B Transaction Related Costs (g)	—	(2)	—	(91)
Integration Related Costs (h)	(30)	(18)	(48)	(56)
Income (Loss) Before Taxes	$ 130	$ 44	$ 415	$ (10)

(a) Represents costs related to the acquisition of Health Wright Products, primarily consulting and legal fees.

(b) Represents costs related to the impairment of intangible and fixed assets of an asset group that operates primarily in Russia.

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

(d) Represents costs related to the Company's 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.

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

(h) Represents costs related to integration activities since 2018, primarily for Frutarom and N&B. For 2022, represents costs primarily related to external consulting fees and internal integration costs, including salaries of individuals who are fully dedicated to integration efforts. For 2021, represents costs primarily related to performance stock awards and consulting fees for advisory services.

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

(DOLLARS IN MILLIONS)	Three Months Ended June 30, 2022	Three Months Ended June 30, 2021	Six Months Ended June 30, 2022	Six Months Ended June 30, 2021
Europe, Africa and Middle East	$ 1,100	$ 1,084	$ 2,228	$ 1,957
Greater Asia	755	707	1,499	1,294
North America	1,065	961	2,067	1,683
Latin America	387	337	739	620
Consolidated	$ 3,307	$ 3,089	$ 6,533	$ 5,554

(DOLLARS IN MILLIONS)	Three Months Ended June 30, 2022	Three Months Ended June 30, 2021	Six Months Ended June 30, 2022	Six Months Ended June 30, 2021
Net sales related to the U.S.	$ 978	$ 876	$ 1,879	$ 1,530
Net sales attributed to all foreign countries	2,329	2,213	4,654	4,024

No non-U.S. country had net sales greater than 6% of total consolidated net sales for the three and six months ended June 30, 2022, and 7% and 6% of total consolidated net sales for the three and six months ended June 30, 2021, respectively.

NOTE 12. EMPLOYEE BENEFITS

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

	U.S. Plans			
(DOLLARS IN MILLIONS)	Three Months Ended June 30, 2022	Three Months Ended June 30, 2021	Six Months Ended June 30, 2022	Six Months Ended June 30, 2021
Service cost for benefits earned[1]	$ —	$ 1	$ —	$ 1
Interest cost on projected benefit obligation[2]	4	3	8	6
Expected return on plan assets[2]	(6)	(5)	(11)	(10)
Net amortization and deferrals[2]	2	2	4	4
Net periodic benefit (income) cost	$ —	$ 1	$ 1	$ 1

	Non-U.S. Plans			
(DOLLARS IN MILLIONS)	Three Months Ended June 30, 2022	Three Months Ended June 30, 2021	Six Months Ended June 30, 2022	Six Months Ended June 30, 2021
Service cost for benefits earned[1]	$ 10	$ 12	$ 19	$ 22
Interest cost on projected benefit obligation[2]	4	3	9	5
Expected return on plan assets[2]	(11)	(13)	(22)	(25)
Net amortization and deferrals[2]	3	5	6	10
Net periodic benefit (income) cost	$ 6	$ 7	$ 12	$ 12

(1) Included as a component of Operating profit.
(2) Included as a component of Other expense (income), net.

The Company expects to contribute a total of $5 million to its U.S. pension plans and a total of $33 million to its non-U.S. pension plans during 2022. During the six months ended June 30, 2022, no contributions were made to the qualified U.S. pension plans, $15 million of contributions were made to the non-U.S. pension plans, and $2 million of benefit payments were made with respect to the Company's non-qualified U.S. pension plan.

(Income) expense recognized for postretirement benefits other than pensions included the following components:

(DOLLARS IN MILLIONS)	Three Months Ended June 30, 2022	Three Months Ended June 30, 2021	Six Months Ended June 30, 2022	Six Months Ended June 30, 2021
Interest cost on projected benefit obligation	$ 1	$ 1	$ 1	$ 1
Net amortization and deferrals	(1)	(1)	(2)	(2)
Total postretirement benefit (income) expense	$ —	$ —	$ (1)	$ (1)

The Company expects to contribute $4 million to its postretirement benefits other than pension plans during 2022. In the six months ended June 30, 2022, $1 million of contributions were made.

NOTE 13. 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 as discussed in Note 15 of the Company's 2021 Form 10-K.

These valuations take into consideration the Company's credit risk and its counterparties’ credit risk. The estimated change in the fair value of these instruments due to such changes in its own credit risk (or instrument-specific credit risk) was not material as of June 30, 2022.

The carrying values and the estimated fair values of financial instruments at June 30, 2022 and December 31, 2021 consisted of the following:

	June 30, 2022		December 31, 2021	
(DOLLARS IN MILLIONS)	**Carrying Value**	**Fair Value**	**Carrying Value**	**Fair Value**
LEVEL 1				
Cash and cash equivalents[1]	$ 569	$ 569	$ 711	$ 711
2025 Notes[2]	1,000	896	1,001	968
2027 Notes[2]	1,217	1,023	1,218	1,180
2030 Notes[2]	1,510	1,215	1,511	1,466
2040 Notes[2]	774	562	775	762
2050 Notes[2]	1,572	1,074	1,572	1,556
LEVEL 2				
Credit facilities and bank overdrafts[3]	354	354	7	7
Derivatives				
Derivative assets[4]	68	68	—	—
Derivative liabilities[4]	7	7	7	7
Commercial paper[3]	792	792	324	324
Long-term debt:[5]				
2022 Notes	300	298	300	300
2023 Notes	300	299	300	308
2024 Euro Notes	526	522	565	585
2026 Euro Notes	837	788	900	960
2028 Notes	398	387	397	452
2047 Notes	495	416	494	585
2048 Notes	787	733	786	1,026
2024 Term Loan Facility[6]	625	625	625	625
2026 Term Loan Facility[6]	625	625	625	625

(1) The carrying amount of cash and cash equivalents approximates fair value due to the short maturity of those instruments.
(2) The fair value of the Notes is based on market quoted price as there is an active market for the Notes and observable market data and inputs.
(3) 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.
(4) The carrying amount approximates fair value as the instruments are marked-to-market and held at fair value on the Consolidated Balance Sheets.
(5) 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.
(6) 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

Foreign 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 maintains 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 other comprehensive income (“OCI”) as a component of Gains on derivatives qualifying as hedges in the accompanying Consolidated Statements of Income (Loss) and Comprehensive (Loss) Income. Realized gains/(losses) in accumulated other comprehensive income (“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 (Loss) and Comprehensive (Loss) Income in the same period as the related costs are recognized.

Hedges Related to Issuances of Debt

As of June 30, 2022, the Company designated approximately $1.363 billion of Euro Notes 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 (Loss) and Comprehensive (Loss) Income.

Cross Currency Swaps

During the first quarter of 2022, the Company entered into twelve EUR/USD cross currency swaps, with a notional value of $1.400 billion that mature through November 2030. 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. As of June 30, 2022, the fourteen remaining swaps were in a net asset position with an aggregate fair value of $57 million, which were classified as Prepaid expenses and other current assets and Other assets on the Consolidated Balance Sheets based on their respective maturity dates. 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 June 30, 2022 and December 31, 2021:

(DOLLARS IN MILLIONS)	June 30, 2022	December 31, 2021
Foreign currency contracts	$ 55	$ 46
Commodity contracts	3	10
Cross currency swaps	1,700	300

The following tables show the Company’s derivative instruments measured at fair value (Level 2 of the fair value hierarchy), as reflected on the Consolidated Balance Sheets as of June 30, 2022 and December 31, 2021:

	June 30, 2022		
(DOLLARS IN MILLIONS)	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	$ —	$ 5	$ 5
Cross currency swaps	63	—	63
Total derivative assets	$ 63	$ 5	$ 68
Derivative liabilities(2)			
Foreign currency contract	$ —	$ 1	$ 1
Cross currency swaps	6	—	6
Total derivative liabilities	$ 6	$ 1	$ 7

(DOLLARS IN MILLIONS)	December 31, 2021 Fair Value of Derivatives Designated as Hedging Instruments	Fair Value of Derivatives Not Designated as Hedging Instruments	Total Fair Value
Derivative liabilities[2]			
Foreign currency contracts	$ —	$ 2	$ 2
Cross currency swaps	5	—	5
Total derivative liabilities	$ 5	$ 2	$ 7

(1) Derivative assets are recorded to Prepaid expenses and other current assets and Other assets on the Consolidated Balance Sheets based on their respective maturity dates.
(2) Derivative liabilities are recorded to Other current liabilities on 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 (Loss) and Comprehensive (Loss) Income for the three and six months ended June 30, 2022 and 2021:

(DOLLARS IN MILLIONS)	Amount of Gain (Loss) Three Months Ended June 30, 2022	2021	Location of Gain (Loss) Recognized in Income on Derivative
Foreign currency contracts[1]	$ —	$ 8	Other expense (income), net

(DOLLARS IN MILLIONS)	Amount of Gain (Loss) Six Months Ended June 30, 2022	2021	Location of Gain (Loss) Recognized in Income on Derivative
Foreign currency contracts[1]	$ 2	$ 5	Other expense (income), net

(1) The foreign currency contract net gains (losses) offset any recognized gains (losses) arising from the revaluation of the related intercompany loans during the same respective periods.

The following table shows the effect of the Company's derivative and non-derivative instruments designated as cash flow and net investment hedging instruments, net of tax, in the Consolidated Statements of Income (Loss) and Comprehensive (Loss) Income for the three and six months ended June 30, 2022 and 2021:

(DOLLARS IN MILLIONS)	Amount of Gain (Loss) Recognized in OCI on Derivative — Three Months Ended June 30, 2022	2021	Location of Gain (Loss) Reclassified from AOCI into Income	Amount of Gain (Loss) Reclassified from Accumulated OCI into Income — Three Months Ended June 30, 2022	2021
Derivatives in Cash Flow Hedging Relationships:					
Foreign currency contracts	$ —	$ 2	Cost of goods sold	$ —	$ (2)
Derivatives in Net Investment Hedging Relationships:					
Cross currency swaps	49	(3)	N/A	—	—
Non-Derivatives in Net Investment Hedging Relationships:					
2024 Euro Notes	21	(6)	N/A	—	—
2021 Euro Notes & 2026 Euro Notes	34	(13)	N/A	—	—
Total	$ 104	$ (20)		$ —	$ (2)

	Amount of Gain (Loss) Recognized in OCI on Derivative (Effective Portion) — Six Months Ended June 30, 2022	2021	Location of Gain (Loss) Reclassified from AOCI into Income (Effective Portion)	Amount of Gain (Loss) Reclassified from Accumulated OCI into Income (Effective Portion) — Six Months Ended June 30, 2022	2021
Derivatives in Cash Flow Hedging Relationships:					
Foreign currency contracts	$ —	$ 6	Cost of goods sold	$ —	$ (4)
Derivatives in Net Investment Hedging Relationships:					
Cross currency swaps	48	6	N/A	—	—
Non-Derivatives in Net Investment Hedging Relationships:					
2024 Euro Notes	30	14	N/A	—	—
2021 Euro Notes & 2026 Euro Notes	48	32	N/A	—	—
Total	$ 126	$ 58		$ —	$ (4)

The ineffective portion of the above noted cash flow hedges was not material during the three and six months ended June 30, 2022 and 2021.

At June 30, 2022, 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 14. ACCUMULATED OTHER COMPREHENSIVE LOSS

The following tables present changes in the accumulated balances for each component of other comprehensive (loss) income, including current period other comprehensive (loss) income and reclassifications out of accumulated other comprehensive loss:

(DOLLARS IN MILLIONS)	Foreign Currency Translation Adjustments	Gains (Losses) on Derivatives Qualifying as Hedges	Pension and Postretirement Liability Adjustment	Total
Accumulated other comprehensive (loss) income, net of tax, as of December 31, 2021	$ (1,133)	$ 1	$ (291)	$ (1,423)
OCI before reclassifications	(788)	—	(5)	(793)
Amounts reclassified from AOCI	—	—	6	6
Net current period other comprehensive income (loss)	(788)	—	1	(787)
Accumulated other comprehensive (loss) income, net of tax, as of June 30, 2022	$ (1,921)	$ 1	$ (290)	$ (2,210)

(DOLLARS IN MILLIONS)	Foreign Currency Translation Adjustments	Gains (Losses) on Derivatives Qualifying as Hedges	Pension and Postretirement Liability Adjustment	Total
Accumulated other comprehensive (loss) income, net of tax, as of December 31, 2020	$ (285)	$ (7)	$ (406)	$ (698)
OCI before reclassifications	(154)	2	1	(151)
Amounts reclassified from AOCI	—	4	11	15
Net current period other comprehensive income (loss)	(154)	6	12	(136)
Accumulated other comprehensive (loss) income, net of tax, as of June 30, 2021	$ (439)	$ (1)	$ (394)	$ (834)

The following table provides details about reclassifications out of Accumulated other comprehensive loss to the Consolidated Statements of Income (Loss) and Comprehensive (Loss) Income:

(DOLLARS IN MILLIONS)	Six Months Ended June 30, 2022	Six Months Ended June 30, 2021	Affected Line Item in the Consolidated Statements of Income (Loss) and Comprehensive (Loss) Income
Gains (losses) on derivatives qualifying as hedges			
Foreign currency contracts	$ —	$ (5)	Cost of goods sold
Tax	—	1	Provision for income taxes
Total	$ —	$ (4)	Total, net of income taxes
Losses on pension and postretirement liability adjustments			
Prior service cost	$ 3	$ 3	(1)
Actuarial losses	(10)	(15)	(1)
Tax	1	1	Provision for income taxes
Total	$ (6)	$ (11)	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 of the Company's 2021 Form 10-K for additional information regarding net periodic benefit cost.

NOTE 15. COMMITMENTS AND CONTINGENCIES

Guarantees and Letters of Credit

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

At June 30, 2022, the Company had total bank guarantees, commercial guarantees, standby letters of credit and surety bonds of approximately $415 million with various financial institutions. Included in the above aggregate amount was a total of $14 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 $25 million outstanding under the bank guarantees and standby letters of credit and approximately $103 million outstanding under the commercial guarantees as of June 30, 2022.

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 $8 million as of June 30, 2022.

Lines of Credit

The Company has various lines of credit which are available to support its ongoing business operations. As of June 30, 2022, the Company had available lines of credit of approximately $1.863 billion with various financial institutions, in addition to the $317 million of capacity under the Credit Facility. There were total draw downs of approximately $1.153 billion pursuant to these lines of credit as of June 30, 2022, including approximately $792 million related to the issuance of commercial paper and $350 million related to borrowings under the Amended Revolving Credit Facility. Refer to Note 7 for additional information.

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. The Second Circuit held oral argument on February 10, 2022, and the Court has not yet ruled.

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, January 9, 2022, April 7, 2022 and July 10, 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 former 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. On February 22, 2022, the court denied the motion to dismiss. On July 14, 2022, the court approved the parties' motion to mediate the dispute, which postpones all case deadlines until after the mediation.

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, and a court decision is pending with regard to the order in which this claim 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. On December 9, 2021, the court denied the motions to dismiss. Responses to the class action motion were filed in May 2022.

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

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 Guangzhou Taste plant was approximately $55 million as of June 30, 2022.

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 Guangzhou Scent plant was approximately $8 million as of June 30, 2022.

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.

Total China Operations

The total net book value of all plants in China was approximately $257 million as of June 30, 2022.

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 $22 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 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.

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 June 30, 2022, payments associated with the issue were approximately $33 million, and the Company has a current accrual of approximately $25 million. The total amount of exposure may increase as additional customers present claims or other exposures are identified.

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 $40 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 16. REDEEMABLE NONCONTROLLING INTERESTS

Through certain subsidiaries of the Company's Frutarom acquisition, there are certain noncontrolling interests that carry redemption features. The noncontrolling 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 noncontrolling interests:

(DOLLARS IN MILLIONS)	**Redeemable Noncontrolling Interests**
Balance at December 31, 2020	$ 98
Impact of foreign exchange translation	(1)
Share of profit or loss attributable to redeemable noncontrolling interests	3
Balance at June 30, 2021	$ 100
Balance at December 31, 2021	$ 105
Impact of foreign exchange translation	(1)
Share of profit or loss attributable to redeemable noncontrolling interests	2
Redemption value adjustment for the current period	(2)
Exercises of redeemable noncontrolling interests	(18)
Balance at June 30, 2022	$ 86

NOTE 17. ASSETS AND LIABILITIES 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” and such assets and liabilities were classified as held for sale and are reported on the Consolidated Balance Sheets.

Included in the Company's Consolidated Balance Sheets as of June 30, 2022 are the following carrying amounts of the assets and liabilities held for sale:

(DOLLARS IN MILLIONS)		**June 30, 2022**
Assets		
Cash and cash equivalents	$	49
Trade receivables, net		79
Inventories		134
Property, plant and equipment, net		31
Goodwill		525
Other intangible assets, net		342
Operating lease right-of-use assets		4
Deferred tax assets		3
Other assets		39
Total assets held-for-sale	$	1,206
Liabilities		
Accounts payable	$	50
Deferred tax liability		9
Other liabilities		16
Total liabilities held-for-sale	$	75

In addition to these assets classified as held for sale, the Microbial Control business unit also includes an equity method investment with a carrying value of approximately $74 million, which was sold as part of the divestiture. The equity method investment is presented in Other assets on the Consolidated Balance Sheets as of June 30, 2022.

NOTE 18. SUBSEQUENT EVENT

Sale of Microbial Control

The Company completed the divestiture of the Microbial Control business unit on July 1, 2022.

Upon closing, the Company received net cash proceeds of approximately $1.277 billion, adjusted for the preliminary estimates of certain closing adjustments. Finalization of such closing adjustments may result in additional cash receipt or payment. Approximately $15 million of cash proceeds were held in escrow and will be released to the Company upon satisfaction of certain conditions.

The Company also entered into transition services agreements with the buyer for the Company to provide certain general accounting, information technology and other services up to 19 months following the date of the sale for minimal consideration.

In connection with the proceeds received from the divestiture, on July 6, 2022, the Company repaid the $350 million outstanding borrowings under the Amended Revolving Credit Facility. In addition, as of August 5, 2022, the Company repaid approximately $900 million under the Commercial Paper Program.

Amendment to Existing Debt Agreements

On August 4, 2022, IFF amended its existing Term Loan Credit Agreement and Revolving Credit Agreement, which delays certain step downs from the maximum permitted leverage ratio of 4.50 to 1.0, stepping down to 3.50 to 1.0 over time, with the first step-down now occurring at the end of the third quarter 2023 versus the end of the fourth quarter 2022 previously.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

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

The following management's discussion and analysis should be read in conjunction with the management's discussion and analysis of financial condition and results of operations, liquidity and capital resources included in our 2021 Annual Report on Form 10-K ("2021 Form 10-K").

OVERVIEW

Company Background

On February 1, 2021, the Company completed its Merger with Nutrition & Biosciences, Inc. ("N&B"), a subsidiary of DuPont formed to hold the Nutrition and Biosciences business (the "N&B Business", and such transaction, the "N&B Transaction") pursuant to an Agreement and Plan of Merger (the "Merger Agreement") with DuPont de Nemours, Inc. ("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.

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 organized into four reportable operating segments: Nourish, Health & Biosciences, Scent, and Pharma Solutions. The Company's consolidated financial information for the three and six months ended June 30, 2022 reflect the results of N&B for the full three and six months in the period ended June 30, 2022, respectively, whereas the three and six months ended June 30, 2021 reflect three and five months of results of N&B in the period ended June 30, 2021, respectively.

Our Nourish segment consists of an innovative and broad portfolio of natural-based ingredients to enhance nutritional value, texture and functionality in a wide range of beverage, dairy, bakery, confectionery and culinary applications.

Our Health & Biosciences segment consists of a biotechnology-driven portfolio where enzymes, food cultures, probiotics and specialty ingredients for food and non-food applications are developed and produced. The biotechnology-driven portfolio of this segment produces cultures for use in fermented foods such as yogurt, cheese and fermented beverages. It also uses industrial fermentation to produce enzymes and microorganisms that provide product and process performance benefits to household detergents, animal feed, ethanol production and brewing. 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. 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 cellulosics and seaweed-based pharmaceutical 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.

Financial Measures — Currency Neutral

Changes in our financial results include the impact of changes in foreign currency exchange rates. We provide currency neutral calculations in this report to remove the impact of these items. Our method in calculating currency neutral numbers is conducted by translating current year invoiced sale amounts at the exchange rates used for the corresponding prior year period. We use currency neutral results in our analysis of subsidiary and/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.

We are presenting currency neutral numbers for all operating segments for the three months ended June 30, 2022, but will not be presenting currency neutral numbers for the Nourish, Health & Biosciences and Pharma Solutions operating segments for the six months ended June 30, 2022 as these operating segments include the effects of the Merger with N&B, which closed on February 1, 2021. As a result, the six months ended June 30, 2022 reflect the results of N&B for the full six months in the second quarter of 2022, whereas the six months ended June 30, 2021 reflect five months of results of N&B in the second quarter of 2021, which do not present equally comparable periods.

Impact of the Events in Russia and Ukraine

We maintain operations in both Russia and Ukraine and, additionally, export products to customers in Russia and Ukraine from operations outside the region. In response to the events in Ukraine, we have limited the production and supply of ingredients in and to Russia to only those that meet the essential needs of people, including food, hygiene and medicine.

In 2021, total sales to Russian customers were approximately 2% of total sales. For the three and six months ended June 30, 2022 sales to Russian customers were approximately 1% and 2% of total sales, respectively.

In 2021, total sales to Ukrainian customers were less than 1% of total sales. For the three and six months ended June 30, 2022 sales to Ukrainian customers were also less than 1% of total sales.

For the six months ended June 30, 2022, we recorded a charge of approximately $120 million related to the impairment of certain long-lived assets in Russia. In addition, we recorded a charge of approximately $11 million related to expected credit losses on receivables from customers located in Russia and Ukraine (for export and domestic sales). For additional information, refer to Note 1 to the Consolidated Financial Statements and Part I, Item 1A, "Risk Factors," of our 2021 Form 10-K filed on February 28, 2022 with the SEC.

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 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 Part I, Item 1A, "Risk Factors," of our 2021 Form 10-K filed on February 28, 2022 with the SEC.

Financial Performance Overview

Sales

Sales in the second quarter of 2022 increased $218 million, or 7% on a reported basis, to $3.307 billion compared to $3.089 billion in the 2021 period. The increase in sales was driven by price increases across all businesses. On a currency neutral basis, sales in the second quarter of 2022 increased 11% compared to the 2021 period. Exchange rate variations had an unfavorable impact on net sales for the second quarter of 2022 of 4%. The effect of exchange rates can vary by business and region, depending upon the mix of sales priced in U.S. dollars as compared to other currencies.

Gross Profit

Gross profit in the second quarter of 2022 increased $226 million, or 25% on a reported basis, to $1.136 billion (34.4% of sales) compared to $910 million (29.5% of sales) in the 2021 period. The increase in gross profit was driven by price increases in the overall business and the impact of N&B inventory step-up costs from the prior year period.

Adjusted Operating EBITDA

Adjusted operating EBITDA in the second quarter of 2022 increased $21 million, or 3% on a reported basis, to $700 million (21.2% of sales) compared to $679 million (22.0% of sales) in the comparable 2021 period. The increase in adjusted operating EBITDA was driven by price increases in the overall business. On a currency neutral basis, adjusted operating EBITDA in the second quarter of 2022 increased 7% compared to the 2021 period. Exchange rate variations had an unfavorable impact on adjusted operating EBITDA for the second quarter of 2022 of 4%.

RESULTS OF OPERATIONS

(DOLLARS IN MILLIONS EXCEPT PER SHARE AMOUNTS)	Three Months Ended June 30, 2022	Three Months Ended June 30, 2021	Change	Six Months Ended June 30, 2022	Six Months Ended June 30, 2021	Change
Net sales	$ 3,307	$ 3,089	7 %	$ 6,533	$ 5,554	18 %
Cost of goods sold	2,171	2,179	— %	4,252	3,890	9 %
Gross profit	1,136	910	25 %	2,281	1,664	37 %
Research and development (R&D) expenses	158	164	(4) %	315	307	3 %
Selling and administrative (S&A) expenses	456	412	11 %	915	863	6 %
Amortization of acquisition-related intangibles	184	200	(8) %	370	352	5 %
Impairment of long-lived assets	120	—	NMF	120	—	NMF
Restructuring and other charges	7	24	(71) %	9	28	(68) %
Gains on sales of fixed assets	(2)	—	NMF	(2)	—	NMF
Operating profit	213	110	94 %	554	114	NMF
Interest expense	77	77	— %	149	142	5 %
Other expense (income), net	6	(11)	(155) %	(10)	(18)	(44) %
Income (loss) before taxes	130	44	195 %	415	(10)	NMF
Provision for income taxes	21	14	50 %	60	—	NMF
Net income (loss)	$ 109	$ 30	263 %	$ 355	$ (10)	NMF
Net income attributable to noncontrolling interests	2	2	— %	4	4	— %
Net income (loss) attributable to IFF shareholders	$ 107	$ 28	282 %	$ 351	$ (14)	NMF
Net income (loss) per share - diluted	$ 0.43	$ 0.11	276 %	$ 1.38	$ (0.06)	NMF
Gross margin	34.4 %	29.5 %	490 bps	34.9 %	30.0 %	490 bps
R&D as a percentage of sales	4.8 %	5.3 %	(50)bps	4.8 %	5.5 %	(70)bps
S&A as a percentage of sales	13.8 %	13.3 %	50 bps	14.0 %	15.5 %	(150)bps
Operating margin	6.4 %	3.6 %	280 bps	8.5 %	2.1 %	640 bps
Effective tax rate	16.2 %	31.8 %	NMF	14.5 %	— %	NMF
Segment net sales						
Nourish	$ 1,818	$ 1,668	9 %	$ 3,549	$ 2,976	19 %
Health & Biosciences	665	639	4 %	1,326	1,065	25 %
Scent	580	550	5 %	1,165	1,119	4 %
Pharma Solutions	244	232	5 %	493	394	25 %
Consolidated	$ 3,307	$ 3,089		$ 6,533	$ 5,554	

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.

SECOND QUARTER 2022 IN COMPARISON TO SECOND QUARTER 2021

Sales

Sales for the second quarter of 2022 increased $218 million, or 7% on a reported basis, to $3.307 billion, compared to $3.089 billion in the prior year period. The increase in sales was driven by price increases across all businesses. On a currency neutral basis, sales in the second quarter of 2022 increased 11% compared to the 2021 period. Exchange rate variations had an unfavorable impact on net sales for the second quarter of 2022 of 4%. The effect of exchange rates can vary by business and region, depending upon the mix of sales priced in U.S. dollars as compared to other currencies.

Sales Performance by Segment

	% Change in Sales - Second Quarter 2022 vs. Second Quarter 2021	
	Reported	**Currency Neutral[(1)]**
Nourish	**9 %**	**13 %**
Health & Biosciences	**4 %**	**8 %**
Scent	**5 %**	**9 %**
Pharma Solutions	**5 %**	**10 %**
Total	***7 %***	***11 %***

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

Nourish

Nourish sales in 2022 increased $150 million, or 9% on a reported basis, to $1.818 billion compared to $1.668 billion in the prior year period. On a currency neutral basis, Nourish sales increased 13% in 2022 compared to the prior year period. Performance in the Nourish operating segment was driven by price increases, primarily in the Ingredients and Food Design business units, primarily offset by unfavorable impacts from exchange rate variations.

Health & Biosciences

Health & Biosciences sales in 2022 increased $26 million, or 4% on a reported basis, to $665 million compared to $639 million in the prior year period. On a currency neutral basis, Health & Biosciences sales increased 8% in 2022 compared to the prior year period. Performance in the Health & Biosciences operating segment was primarily driven by $26 million of incremental sales attributable to Health Wright Products, Inc. and price increases across various business units, primarily offset by unfavorable impacts from exchange rate variations.

Scent

Scent sales in 2022 increased $30 million, or 5% on a reported basis, to $580 million, compared to $550 million in the prior year period. On a currency neutral basis, Scent sales increased 9% in 2022 compared to the prior year period. Performance in the Scent operating segment was driven by volume and price increases in both Fragrance Compounds and Fragrance Ingredients, offset by unfavorable impacts from exchange rate variations.

Pharma Solutions

Pharma Solutions sales in 2022 increased $12 million, or 5% on a reported basis, to $244 million compared to $232 million in the prior year period. On a currency neutral basis, Pharma Solutions sales increased 10% in 2022 compared to the prior year period. Performance in the Pharma Solutions operating segment was primarily driven by price increases, primarily offset by unfavorable impacts from exchange rate variations.

Cost of Goods Sold

Cost of goods sold decreased $8 million to $2.171 billion (65.6% of sales) in the second quarter of 2022 compared to $2.179 billion (70.5% of sales) in the second quarter of 2021. Excluding the impact of N&B inventory step-up costs from the prior year period, the increase in cost of goods sold was primarily driven by higher material costs due to higher commodity prices.

Research and Development (R&D) Expenses

R&D expenses decreased $6 million to $158 million (4.8% of sales) in the second quarter of 2022 compared to $164 million (5.3% of sales) in the second quarter of 2021. The decrease was primarily driven by lower Applied R&D expenses, which consisted primarily of lower employee related expenses, including salaries, wages and bonuses, operating expenses for Applied R&D related activities and professional fees, including consulting costs, primarily offset by higher Basic R&D expenses.

Selling and Administrative (S&A) Expenses

S&A expenses increased $44 million to $456 million (13.8% of sales) in the second quarter of 2022 compared to $412 million (13.3% of sales) in the second quarter of 2021. The increase in S&A expenses was driven by higher administrative expenses, which consisted primarily of professional fees, including consulting costs, and higher selling expenses, which consisted primarily of employee related expenses, including salaries, wages and bonuses.

Restructuring and Other Charges

Restructuring and other charges decreased to $7 million in the second quarter of 2022 compared to $24 million in the second quarter of 2021. The decrease was driven by lower severance costs in the second quarter of 2022 (see Note 4 for additional information).

Amortization of Acquisition-Related Intangibles

Amortization expenses decreased to $184 million in the second quarter of 2022 compared to $200 million in the second quarter of 2021. The decrease in amortization expense was primarily driven by the intangible assets of the Microbial Control business unit being classified as “held for sale,” and therefore no longer recognizing amortization expense on those intangible assets (see Notes 3, 5 and 17 for additional information).

Interest Expense

Interest expense remained flat at $77 million between the second quarters of 2022 and 2021 (see Note 7 for additional information). Average cost of debt was 2.6% for the 2022 period compared to 2.9% for the 2021 period.

Other Expense (Income), Net

In the second quarter of 2022, we recognized other expense, net, of $6 million compared to other income, net, of $11 million in the 2021 period. The change of $17 million was primarily due to foreign exchange losses in the second quarter of 2022 compared to foreign exchange gains in the 2021 period.

Income Taxes

The effective tax rate for the three months ended June 30, 2022 was 16.2% compared to 31.8% for the three months ended June 30, 2021. The quarter-over-quarter decrease was primarily due to the release of uncertain tax positions in connection to an audit settlement, a favorable mix of earnings and the impact of a one-time non-cash United Kingdom rate change from the prior year period.

Segment Adjusted Operating EBITDA Results by Business Unit

The Company uses 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. 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.

(DOLLARS IN MILLIONS)	Three Months Ended June 30, 2022	2021
Segment Adjusted Operating EBITDA:		
Nourish	$ 365	$ 324
Health & Biosciences	184	190
Scent	93	117
Pharma Solutions	58	48
Total	700	679
Depreciation & Amortization	(301)	(322)
Interest Expense	(77)	(77)
Other (Expense) Income, net	(6)	11
Acquisition Related Costs	(1)	—
Restructuring and Other Charges	(7)	(24)
Gains on sales of fixed assets	2	—
Impairment of Long-Lived Assets	(120)	—
Business Divestiture Costs	(30)	(5)
Employee Separation Costs	—	(3)
N&B Inventory Step-Up Costs	—	(195)
N&B Transaction Related Costs	—	(2)
Integration Related Costs	(30)	(18)
Income Before Taxes	$ 130	$ 44
Segment Adjusted Operating EBITDA margin:		
Nourish	20.1 %	19.4 %
Health & Biosciences	27.7 %	29.7 %
Scent	16.0 %	21.3 %
Pharma Solutions	23.8 %	20.7 %
Consolidated	21.2 %	22.0 %

Nourish Segment Adjusted Operating EBITDA

Nourish Segment Adjusted Operating EBITDA increased $41 million, or 13% on a reported basis, to $365 million in the second quarter of 2022 (20.1% of segment sales) from $324 million (19.4% of segment sales) in the comparable 2021 period. On a currency neutral basis, Nourish Segment Adjusted Operating EBITDA increased 17% in 2022 compared to the prior year period. The increase was driven by higher prices in the operating segment, primarily offset by unfavorable impacts from exchange rate variations and volume decreases.

Health & Biosciences Segment Adjusted Operating EBITDA

Health & Biosciences Segment Adjusted Operating EBITDA decreased $6 million, or 3% on a reported basis, to $184 million in the second quarter of 2022 (27.7% of segment sales) from $190 million (29.7% of segment sales) in the comparable 2021 period. On a currency neutral basis, Health & Biosciences Segment Adjusted Operating EBITDA decreased 1% in 2022 compared to the prior year period. The decrease was driven by lower volumes, unfavorable impacts from exchange rate variations and unfavorable net pricing in the operating segment.

Scent Segment Adjusted Operating EBITDA

Scent Segment Adjusted Operating EBITDA decreased $24 million, or 21% on reported basis, to $93 million in the second quarter of 2022 (16.0% of segment sales) from $117 million (21.3% of segment sales) in the comparable 2021 period. On a currency neutral basis, Scent Segment Adjusted Operating EBITDA decreased 17% in 2022 compared to the prior year period. The decrease was driven by unfavorable net pricing and impacts from exchange rate variations in the operating segment, offset by volume increases in both Fragrance Compounds and Fragrance Ingredients.

Pharma Solutions Segment Adjusted Operating EBITDA

Pharma Solutions Segment Adjusted Operating EBITDA increased $10 million, or 21% on a reported basis, to $58 million in the second quarter of 2022 (23.8% of segment sales) from $48 million (20.7% of segment sales) in the comparable 2021 period. On a currency neutral basis, Pharma Solutions Segment Adjusted Operating EBITDA increased 25% in 2022 compared to the prior year period. The increase was driven by favorable prices, offset by unfavorable impacts from exchange rate variations in the operating segment.

FIRST SIX MONTHS 2022 IN COMPARISON TO FIRST SIX MONTHS 2021

Sales

Sales for the first six months of 2022 increased $979 million, or 18% on a reported basis, to $6.533 billion, compared to $5.554 billion in the 2021 period. Sales included approximately $568 million of incremental sales attributable to N&B for the month of January in the 2022 period. In addition, sales performance reflected price and volume increases across all businesses.

Sales Performance by Segment

	% Change in Sales - First Six Months 2022 vs. First Six Months 2021	
	Reported	Currency Neutral(1)
Nourish	**19 %**	**NMF**
Health & Biosciences	**25 %**	**NMF**
Scent	**4 %**	**8 %**
Pharma Solutions	**25 %**	**NMF**
Total	***18 %***	***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 2022 increased $573 million, or 19% on a reported basis, to $3.549 billion compared to $2.976 billion in the prior year period. Nourish sales included approximately $293 million of incremental sales attributable to N&B for the month of January in the 2022 period. In addition, performance in the Nourish operating segment was driven by price and volume increases, with price increases primarily in the Ingredients, Food Design and Flavors business units and volume increases primarily in the Flavors and Food Design business units.

Health & Biosciences

Health & Biosciences sales in 2022 increased $261 million, or 25% on a reported basis, to $1.326 billion compared to $1.065 billion in the prior year period. Health & Biosciences sales included approximately $202 million of incremental sales attributable to N&B for the month of January in the 2022 period. In addition, performance in the Health & Biosciences operating segment was primarily driven by $26 million of incremental sales attributable to Health Wright Products, Inc. and price and volume increases across various business units.

Scent

Scent sales in 2022 increased $46 million, or 4% on a reported basis, to $1.165 billion, compared to $1.119 billion in the prior year period. On a currency neutral basis, Scent sales increased 8% in 2022 compared to the prior year period. Performance in the Scent operating segment was driven by volume and price increases in both Fragrance Compounds and Fragrance Ingredients, offset by unfavorable impacts from exchange rate variations.

Pharma Solutions

Pharma Solutions sales in 2022 increased $99 million, or 25% on a reported basis, to $493 million compared to $394 million in the prior year period. Pharma Solutions sales included approximately $73 million of incremental sales attributable to N&B for the month of January in the 2022 period. In addition, performance in the Pharma Solutions operating segment was primarily driven by price increases.

Cost of Goods Sold

Cost of goods sold increased $362 million to $4.252 billion (65.1% of sales) in the first six months of 2022 compared to $3.890 billion (70.0% of sales) in the 2021 period. Cost of goods sold included approximately $389 million of incremental costs attributable to N&B for the month of January in the 2022 period. In addition, excluding the impact of N&B for the month of January in the 2022 period and the N&B inventory step-up costs from the prior year period, the increase in cost of goods sold was primarily driven by higher material costs due to higher commodity prices.

Research and Development (R&D) Expenses

R&D expenses increased $8 million to $315 million (4.8% of sales) in the first six months of 2022 compared to $307 million (5.5% of sales) in the 2021 period. R&D expenses included approximately $20 million of incremental expenses attributable to N&B for the month of January in the 2022 period, which consisted primarily of employee related expenses, including salaries, wages and bonuses and operating expenses for R&D related activities. In addition, excluding the impact of N&B for the month of January in the 2022 period, R&D expenses decreased due to lower Applied R&D expenses, which consisted primarily of lower employee related expenses, including salaries, wages and bonuses, operating expenses for Applied R&D related activities and professional fees, including consulting costs, primarily offset by higher Basic R&D expenses.

Selling and Administrative (S&A) Expenses

S&A expenses increased $52 million to $915 million (14.0% of sales) in the first six months of 2022 compared to $863 million (15.5% of sales) in the 2021 period. S&A expenses included approximately $51 million of incremental expenses attributable to N&B for the month of January in the 2022 period, which consisted primarily of employee related expenses, including salaries, wages and bonuses, primarily offset by lower administrative expenses principally due to lower professional fees, including consulting costs.

Restructuring and Other Charges

Restructuring and other charges decreased to $9 million in the first six months of 2022 compared to $28 million in the first six months of 2021. The decrease was primarily driven by lower severance costs incurred in the first six months of 2022 (see Note 4 for additional information).

Amortization of Acquisition-Related Intangibles

Amortization expenses increased to $370 million in the first six months of 2022 compared to $352 million in the 2021 period. Amortization expense included approximately $47 million attributable to N&B for the month of January in the 2022 period related to the intangible assets acquired through the Merger with N&B. Excluding the impact of N&B for the month of January in the 2022 period, the decrease in amortization expense was primarily due to the intangible assets of the Microbial Control business unit being classified as “held for sale,” and therefore no longer recognizing amortization expense on those intangible assets (see Notes 3, 5 and 17 for additional information).

Interest Expense

Interest expense increased to $149 million in the first six months of 2022 compared to $142 million in the 2021 period. Interest expense included approximately $13 million attributable to N&B for the month of January in the 2022 period, which included the impact of the additional debt assumed in the Merger with N&B (see Note 7 for additional information). Average cost of debt was 2.6% for the 2022 period compared to 3.3% for the 2021 period.

Other Expense (Income), Net

In the first six months of 2022, we recognized other income, net, of $10 million compared to $18 million in the comparable 2021 period. The change of $8 million includes approximately $6 million attributable to N&B for the month of January in the 2022 period. In addition, the change, excluding the impact of N&B for the month of January in the 2022 period, was due to foreign exchange losses in the first six months of 2022 compared to foreign exchange gains in the 2021 period.

Income Taxes

The effective tax rate for the six months ended June 30, 2022 was 14.5% compared to 0.0% for the six months ended June 30, 2021. The year-over-year increase was primarily due to the release of uncertain tax positions in connection to an audit settlement, changes in the mix of earnings and a one-time benefit to record a receivable associated with the proceedings of a bi-lateral advance pricing agreement, partially offset by the impact of a one-time non-cash United Kingdom rate change from the prior year period.

Segment Adjusted Operating EBITDA Results by Business Unit

The Company uses 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. 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.

	Six Months Ended June 30,	
(DOLLARS IN MILLIONS)	2022	2021
Segment Adjusted Operating EBITDA:		
Nourish	$ 694	$ 594
Health & Biosciences	376	318
Scent	209	245
Pharma Solutions	123	91
Total	1,402	1,248
Depreciation & Amortization	(604)	(564)
Interest Expense	(149)	(142)
Other Income, net	10	18
Acquisition Related Costs	(1)	—
Restructuring and Other Charges	(9)	(28)
Gains on sales of fixed assets	2	—
Impairment of Long-Lived Assets	(120)	—
Shareholder Activism Related Costs	(3)	(7)
Business Divestiture Costs	(60)	(5)
Employee Separation Costs	(4)	(6)
Frutarom Acquisition Related Costs	(1)	—
N&B Inventory Step-Up Costs	—	(377)
N&B Transaction Related Costs	—	(91)
Integration Related Costs	(48)	(56)
Income (Loss) Before Taxes	$ 415	$ (10)
Segment Adjusted Operating EBITDA margin:		
Nourish	19.6 %	20.0 %
Health & Biosciences	28.4 %	29.9 %
Scent	17.9 %	21.9 %
Pharma Solutions	24.9 %	23.1 %
Consolidated	21.5 %	22.5 %

Nourish Segment Adjusted Operating EBITDA

Nourish Segment Adjusted Operating EBITDA increased $100 million, or 17% on a reported basis, to $694 million in the first six months of 2022 (19.6% of segment sales) from $594 million (20.0% of segment sales) in the comparable 2021 period. Nourish Segment Adjusted Operating EBITDA included approximately $65 million attributable to N&B for the month of January in the 2022 period. In addition, the increase in Nourish Segment Adjusted Operating EBITDA, excluding the impact of N&B for the month of January in the 2022 period, was driven by price increases. The decrease in Nourish Segment Adjusted Operating EBITDA margin, as a percentage of sales, excluding the impact of N&B for the month of January in the 2022 period, was due to unfavorable net pricing as a result of higher commodity prices.

Health & Biosciences Segment Adjusted Operating EBITDA

Health & Biosciences Segment Adjusted Operating EBITDA increased $58 million, or 18% on a reported basis, to $376 million in the first six months of 2022 (28.4% of segment sales) from $318 million (29.9% of segment sales) in the comparable 2021 period. Health & Biosciences Segment Adjusted Operating EBITDA included approximately $60 million attributable to N&B for the month of January in the 2022 period. The decrease in Health & Biosciences Segment Adjusted Operating EBITDA margin, as a percentage of sales, excluding the impact of N&B for the month of January in the 2022 period, was due to unfavorable net pricing as a result of higher commodity prices.

Scent Segment Adjusted Operating EBITDA

Scent Segment Adjusted Operating EBITDA decreased $36 million, or 15% on a reported basis, to $209 million in the first six months of 2022 (17.9% of segment sales) from $245 million (21.9% of segment sales) in the comparable 2021 period. On a currency neutral basis, Scent Segment Adjusted Operating EBITDA decreased 9% in 2022 compared to the prior year period. The decrease was driven by unfavorable net pricing and impacts from exchange rate variations in the operating segment, offset by volume increases in both Fragrance Compounds and Fragrance Ingredients.

Pharma Solutions Segment Adjusted Operating EBITDA

Pharma Solutions Segment Adjusted Operating EBITDA increased $32 million, or 35% on a reported basis, to $123 million in the first six months of 2022 (24.9% of segment sales) from $91 million (23.1% of segment sales) in the comparable 2021 period. Pharma Solutions Segment Adjusted Operating EBITDA included approximately $12 million attributable to N&B for the month of January in the 2022 period. In addition, the increase in Pharma Solutions Segment Adjusted Operating EBITDA, excluding the impact of N&B for the month of January in the 2022 period, was primarily driven by price increases.

Liquidity

Cash and Cash Equivalents

We had cash and cash equivalents of $569 million at June 30, 2022 compared to $711 million at December 31, 2021 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.

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 June 30, 2022, we had a deferred tax liability of approximately $92 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.

Cash Flows (Used In) Provided By Operating Activities

Cash flows used in operating activities for the six months ended June 30, 2022 was $100 million, or (1.5)% of sales, compared to cash provided by operating activities of $698 million, or 12.6% of sales, for the six months ended June 30, 2021. The decrease in cash flows from operating activities during 2022 was primarily driven by changes related to inventories, accounts receivables, accounts payable, accrued expenses and accrual for incentive compensation, largely offset by higher cash earnings excluding the impact of non-cash adjustments.

Working capital (current assets less current liabilities) totaled $3.010 billion and $3.354 billion at June 30, 2022 and December 31, 2021, respectively.

We have various factoring agreements in the U.S. and The Netherlands under which we can factor up to approximately $250 million in receivables. In addition, we have factoring agreements 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 flows from operating activities from participating in these programs decreased approximately $59 million and increased approximately $46 million for the six months ended June 30, 2022 and 2021, respectively. The cost of participating in these programs was approximately $2 million for the three months ended June 30, 2022 and 2021, and $3 million for the six months ended June 30, 2022 and 2021.

Cash Flows (Used In) Provided By Investing Activities

Cash flows used in investing activities for the six months ended June 30, 2022 was $346 million compared to $30 million provided by investing activities in the prior year period. The decrease in cash flows from investing activities was primarily driven by the change in cash provided by the Merger with N&B in the current year period, which was related to a pension true-up payment received from DuPont and cash paid for acquisitions, net of cash received. Additionally, the decrease was due to higher spending on property, plant and equipment in the current year period.

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), up from 3.4% in 2021.

Cash Flows Provided By (Used In) Financing Activities

Cash flows provided by financing activities for the six months ended June 30, 2022 was $377 million compared to $427 million used in financing activities in the prior year period. The increase in cash flows from financing activities was primarily driven by higher proceeds from issuance of commercial paper, net of repayments, increase in borrowings of short-term debt compared to repayments of short-term debt from the prior year period, less repayments of long-term debt and less contingent considerations paid, largely offset by higher cash dividend payments and higher purchases of redeemable noncontrolling interest and noncontrolling interest.

We paid dividends totaling $402 million in the 2022 period. We declared a cash dividend per share of $0.79 in the second quarter of 2022 that was paid on July 6, 2022 to all shareholders of record as of June 24, 2022.

Our capital allocation strategy seeks to maintain our investment grade rating while investing in the business and continuing to pay dividends and repaying debt. We make capital investments in our businesses to support our operational needs and strategic long-term plans. We are committed to maintaining our history of paying a dividend to investors which is 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.

Refer to Note 7 for additional information.

Amended Revolving Credit Facility and Term Loans

As of June 30, 2022, we had $350 million outstanding borrowings under our $2.000 billion Amended Revolving Credit Facility.

The amount that we are able to draw down under the Amended Revolving Credit Facility is limited by financial covenants as described in more detail below. As of June 30, 2022, our draw down capacity was $317 million under the Amended Revolving Credit Facility.

Refer to Note 7 and Note 18 of this Form 10-Q and Part IV, Item 15, “Exhibits and Financial Statement Schedules,” Note 9 of our 2021 Form 10-K, filed on February 28, 2022, for additional information.

Debt Covenants

At June 30, 2022, we were in compliance with all financial and other covenants, including the net debt to credit adjusted EBITDA ratio. At June 30, 2022, our net debt to credit adjusted EBITDA[(1)] ratio was 4.38 to 1.0 as defined by the credit facility agreements, which is below the financial covenants of existing outstanding debt.

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(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:

(DOLLARS IN MILLIONS)	Twelve Months Ended June 30, 2022
Net income	$ 635
Interest expense	296
Income taxes	135
Depreciation and amortization	1,196
Specified items[1]	346
Non-cash items[2]	36
Credit Adjusted EBITDA	$ 2,644

(1) Specified items for the 12 months ended June 30, 2022 of $346 million consisted of acquisition related costs, restructuring and other charges, impairment of long-lived assets, shareholder activism related costs, business divestiture costs, employee separation costs, pension income adjustment, pension settlement, Frutarom acquisition related costs, N&B inventory step-up costs and integration related costs.

(2) Non-cash items represent all other adjustments to reconcile net income to net cash provided by operations as presented on the Statements of Cash Flows, including gains on disposal of assets, gains on business disposal and stock-based compensation.

(DOLLARS IN MILLIONS)	June 30, 2022
Total debt[1]	$ 12,150
Adjustments:	
Cash and cash equivalents	569
Net debt	$ 11,581

(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 June 30, 2022, we had $9.617 billion aggregate principal amount outstanding in senior unsecured notes, with $1.367 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 2022 to December 1, 2050. See Note 7 for additional information.

Contractual Obligations

We expect to contribute a total of $5 million to our U.S. pension plans and a total of $33 million to our non-U.S. pension plans during 2022. During the six months ended June 30, 2022, there were no contributions made to the qualified U.S. pension plans, $15 million of contributions were made to the non-U.S. pension plans, and $2 million of benefit payments were made with respect to our non-qualified U.S. pension plan. We also expect to contribute $4 million to our postretirement benefits other than pension plans during 2022. During the six months ended June 30, 2022, $1 million of contributions were made to postretirement benefits other than pension plans.

As discussed in Note 15 to the Consolidated Financial Statements, at June 30, 2022, we had entered into various guarantees and had undrawn outstanding letters of credit from financial institutions. These arrangements reflect ongoing business operations, including commercial commitments, and governmental requirements associated with audits or litigation that are in process with various jurisdictions. Based on the current facts and circumstances, these arrangements are not reasonably likely to have a material impact on our consolidated financial condition, results of operations, or cash flows.

New Accounting Standards

Refer to 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-Q, including: (i) currency neutral metrics and (ii) adjusted operating EBITDA and adjusted operating EBITDA margin. 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 operating EBITDA and adjusted operating EBITDA margin exclude depreciation and amortization expense, interest expense, other (expense) income, net, restructuring and other charges and certain non-recurring items such as acquisition related costs, gains on sale of assets, impairment of long-lived assets, shareholder activism related costs, business divestiture costs, employee separation costs, Frutarom acquisition related costs, N&B inventory step-up costs, N&B transaction related costs and integration related costs.

Net debt to credit adjusted EBITDA is the leverage ratio used in our credit agreement 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 agreement, it may differ from the calculation used for adjusted operating EBITDA.

Cautionary Statement Under the Private Securities Litigation Reform Act of 1995

Statements in this Form 10-Q, 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 including those 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; (iv) expectations of the impact of inflationary pressures and the pricing actions to offset exposure to such impacts; (v) the impact of high input costs, including commodities, raw materials, transportation and energy; (vi) our ability to drive cost discipline measures and the ability to recover margin to pre-inflation levels; (vii) the divestiture of our Microbial Control business and the progress of our portfolio optimization strategy, through non-core business divestitures and acquisitions, such as the Health Wright acquisition; (viii) our combination with N&B, including the expected benefits and synergies of the N&B Transaction and future opportunities for the combined company; (ix) the success of our integration efforts and ability to deliver on our synergy commitments as well as future opportunities for the combined company; (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, including the Russia-Ukraine conflict, or climate-change related events (including severe weather 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 consumer, customer, 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 N&B merger and 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 the 2021 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 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

There are no material changes in market risk from the information provided in our 2021 Form 10-K, except for the cross currency swap agreements.

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 June 30, 2022, these swaps were in a net asset position with an aggregate fair value of $57 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 $160 million.

ITEM 4. CONTROLS AND PROCEDURES.

(a) Disclosure Controls and Procedures

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

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

(b) Changes in Internal Control over Financial Reporting

The Chief Executive Officer and Chief Financial Officer have also concluded that there have not been any changes in our internal control over financial reporting during the quarter ended June 30, 2022 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS.

For information that updates the disclosures set forth under Part I, Item 3. “Legal Proceedings” in our 2021 Annual Report on Form 10-K (the “2021 Form 10-K”), refer to Note 15 to the “Consolidated Financial Statements” in this Form 10-Q.

ITEM 1A. RISK FACTORS.

Refer to Part I, Item 1A, “Risk Factors,” of our 2021 Form 10-K, filed on February 28, 2022 with the SEC, and the information contained in this Quarterly Report on Form 10-Q and our other reports and registration statements filed with the SEC. There have been no material changes with respect to the risk factors disclosed in our 2021 Form 10-K.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS.

None.

ITEM 6. EXHIBITS.

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
101.LAB	XBRL Taxonomy Extension Label Linkbase
101.PRE	XBRL Taxonomy Extension Presentation Linkbase
104	Cover Page Interactive File (formatted as Inline XBRL and contained in Exhibit 101)

SIGNATURES

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

Dated:	August 8, 2022	By:	/s/ Frank Clyburn
			Frank Clyburn
			Chief Executive Officer and Director (Principal Executive Officer)
Dated:	August 8, 2022	By:	/s/ Glenn Richter
			Glenn Richter
			Executive Vice President and Chief Financial Officer (Principal Financial Officer)
Dated:	August 8, 2022	By:	/s/ Marc Birenkrant
			Marc Birenkrant
			Vice President, Interim Corporate Controller and Chief Accounting Officer (Principal Accounting Officer)

Exhibit 31.1

CERTIFICATION

I, Frank Clyburn, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of International Flavors & Fragrances Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: August 8, 2022

By:	/s/ Frank Clyburn
Name:	Frank Clyburn
Title:	Chief Executive Officer

Exhibit 31.2

CERTIFICATION

I, Glenn Richter, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of International Flavors & Fragrances Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: August 8, 2022

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

Exhibit 32

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

In connection with the Quarterly Report on Form 10-Q of International Flavors & Fragrances Inc. (the "Company") for the quarterly period ended June 30, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Frank Clyburn, as Chief Executive Officer, and Glenn Richter, as Chief Financial Officer, each hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of his knowledge:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934;

and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By:	/s/ Frank Clyburn
Name:	Frank Clyburn
Title:	Chief Executive Officer
Dated:	August 8, 2022

By:	/s/ Glenn Richter
Name:	Glenn Richter
Title:	Executive Vice President and Chief Financial Officer
Dated:	August 8, 2022