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 September 30, 2019

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
(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
6.00% Tangible Equity Units	IFFT	New York Stock Exchange
0.500% Senior Notes due 2021	IFF 21	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 outstanding as of October 23, 2019: 106,776,222

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

(DOLLARS IN THOUSANDS)	September 30, 2019	December 31, 2018
ASSETS		
Current Assets:		
Cash and cash equivalents	$ 494,897	$ 634,897
Restricted cash	9,157	13,625
Trade receivables (net of allowances of $8,489 and $9,173, respectively)	942,705	937,765
Inventories: Raw materials	570,426	568,916
Work in process	52,119	48,819
Finished goods	503,844	460,802
Total Inventories	1,126,389	1,078,537
Prepaid expenses and other current assets	325,410	277,036
Total Current Assets	2,898,558	2,941,860
Property, plant and equipment, at cost	2,616,321	2,492,938
Accumulated depreciation	(1,302,782)	(1,251,786)
	1,313,539	1,241,152
Goodwill	5,381,447	5,378,388
Other intangible assets, net	2,829,931	3,039,322
Other assets	561,249	288,673
Total Assets	$ 12,984,724	$ 12,889,395
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current Liabilities:		
Bank borrowings, overdrafts, and current portion of long-term debt	$ 384,823	$ 48,642
Accounts payable	416,563	471,382
Accrued payroll and bonus	111,669	121,080
Dividends payable	80,032	77,779
Other current liabilities	419,362	409,428
Total Current Liabilities	1,412,449	1,128,311
Long-term debt	4,008,134	4,504,417
Retirement liabilities	217,604	227,172
Deferred income taxes	634,030	655,879
Other liabilities	530,974	248,436
Total Other Liabilities	5,390,742	5,635,904
Commitments and Contingencies (Note 15)		
Redeemable noncontrolling interests	114,545	81,806
Shareholders' Equity:		
Common stock 12 1/2¢ par value; 500,000,000 shares authorized; 128,526,137 shares issued as of September 30, 2019 and December 31, 2018; and 106,775,922 and 106,619,202 shares outstanding as of September 30, 2019 and December 31, 2018, respectively	16,066	16,066
Capital in excess of par value	3,816,352	3,793,609
Retained earnings	4,114,299	3,956,221
Accumulated other comprehensive loss	(867,552)	(702,227)
Treasury stock, at cost (21,750,215 and 21,906,935 shares as of September 30, 2019 and December 31, 2018, respectively)	(1,023,346)	(1,030,718)
Total Shareholders' Equity	6,055,819	6,032,951
Noncontrolling interest	11,169	10,423
Total Shareholders' Equity including Noncontrolling interest	6,066,988	6,043,374
Total Liabilities and Shareholders' Equity	$ 12,984,724	$ 12,889,395

See Notes to Consolidated Financial Statements

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
(AMOUNTS IN THOUSANDS EXCEPT PER SHARE AMOUNTS)	**2019**	**2018**	**2019**	**2018**
Net sales	$ 1,267,345	$ 907,548	$ 3,856,315	$ 2,758,492
Cost of goods sold	734,257	506,882	2,245,729	1,553,300
Gross profit	533,088	400,666	1,610,586	1,205,192
Research and development expenses	85,077	75,302	260,489	228,545
Selling and administrative expenses	210,829	157,796	634,111	457,847
Amortization of acquisition-related intangibles	48,430	9,003	143,964	27,772
Restructuring and other charges, net	3,716	927	22,415	2,830
Losses (gains) on sales of fixed assets	372	(1,630)	1,136	(435)
Operating profit	184,664	159,268	548,471	488,633
Interest expense	33,497	23,914	102,662	93,755
Loss on extinguishment of debt	—	38,810	—	38,810
Other income, net	(5,699)	(4,158)	(15,114)	(25,389)
Income before taxes	156,866	100,702	460,923	381,457
Taxes on income	27,059	4,986	81,033	57,176
Net income	129,807	95,716	379,890	324,281
Net income attributable to noncontrolling interests	2,683	—	7,560	—
Net income attributable to IFF stockholders	127,124	95,716	372,330	324,281
Other comprehensive loss, after tax:				
Foreign currency translation adjustments	(204,853)	(27,587)	(176,490)	(98,048)
Gains on derivatives qualifying as hedges	2,939	2,421	3,257	12,347
Pension and postretirement net liability	2,721	2,559	7,908	8,078
Other comprehensive loss	(199,193)	(22,607)	(165,325)	(77,623)
Comprehensive (loss) income attributable to IFF stockholders	$ (72,069)	$ 73,109	$ 207,005	$ 246,658
Net income per share - basic	$ 1.15	$ 1.18	$ 3.34	$ 4.06
Net income per share - diluted	$ 1.13	$ 1.17	$ 3.30	$ 4.04
Average number of shares outstanding - basic	111,998	81,263	111,953	79,783
Average number of shares outstanding - diluted	113,493	81,647	113,133	80,115

See Notes to Consolidated Financial Statements

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

	Nine Months Ended September 30,	
(DOLLARS IN THOUSANDS)	**2019**	**2018**
Cash flows from operating activities:		
Net income	$ 379,890	$ 324,281
Adjustments to reconcile to net cash provided by operating activities		
Depreciation and amortization	235,429	95,994
Deferred income taxes	(35,134)	20,623
Losses (gains) on sale of assets	1,136	(435)
Stock-based compensation	26,426	22,041
Pension contributions	(16,390)	(15,983)
Loss on extinguishment of debt	—	38,810
Gain on deal contingent derivatives	—	(12,505)
Product recall claim settlement, net of insurance proceeds received	—	(3,090)
Changes in assets and liabilities, net of acquisitions:		
Trade receivables	(22,878)	(93,198)
Inventories	(84,140)	(92,705)
Accounts payable	(39,332)	(17,198)
Accruals for incentive compensation	(20,726)	(10,753)
Other current payables and accrued expenses	(12,161)	386
Other assets	(58,016)	(61,597)
Other liabilities	28,931	7,287
Net cash provided by operating activities	383,035	201,958
Cash flows from investing activities:		
Cash paid for acquisitions, net of cash received	(49,065)	(22)
Additions to property, plant and equipment	(160,449)	(102,421)
Additions to intangible assets	(6,070)	—
Proceeds from life insurance contracts	1,890	1,837
Maturity of net investment hedges	—	(2,642)
Proceeds from disposal of assets	34,607	961
Proceeds from unwinding of cross currency swap derivative instruments	25,900	—
Contingent consideration paid	(4,655)	—
Net cash used in investing activities	(157,842)	(102,287)
Cash flows from financing activities:		
Cash dividends paid to shareholders	(233,477)	(163,318)
Increase in revolving credit facility and short term borrowings	11	112,483
Deferred financing costs	—	(21,944)
Repayments on debt	(100,785)	(288,810)
Proceeds from issuance of long-term debt	—	2,926,414
Contingent consideration paid	(21,791)	—
Proceeds from sales of equity securities, net of issuance costs	—	2,268,965
Proceeds from pre-issuance hedges	—	12,505
Proceeds from issuance of stock in connection with stock options	200	—
Employee withholding taxes paid	(9,966)	(9,725)
Purchase of treasury stock	—	(15,475)
Net cash (used in) provided by financing activities	(365,808)	4,821,095
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(3,853)	(14,353)

See Notes to Consolidated Financial Statements

Net change in cash, cash equivalents and restricted cash	(144,468)	4,906,413
Cash, cash equivalents and restricted cash at beginning of year	648,522	368,046
Cash, cash equivalents and restricted cash at end of period	$ 504,054	$ 5,274,459
Supplemental Disclosures:		
Interest paid, net of amounts capitalized	$ 122,121	$ 91,874
Income taxes paid	98,819	86,672
Accrued capital expenditures	15,826	18,247

See Notes to Consolidated Financial Statements

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

(DOLLARS IN THOUSANDS)	Common stock	Capital in excess of par value	Retained earnings	Accumulated other comprehensive (loss) income	Treasury stock		Non-controlling interest	Total
					Shares	Cost		
Balance at June 30, 2018	$ 14,470	$ 167,432	$ 3,992,452	$ (692,498)	(36,811,973)	$ (1,732,001)	$ 6,348	$ 1,756,203
Net income			95,716				(213)	95,503
Adoption of ASC 2014-09			(90)					(90)
Cumulative translation adjustment				(27,587)				(27,587)
Gains on derivatives qualifying as hedges; net of tax $(315)				2,421				2,421
Pension liability and postretirement adjustment; net of tax $(297)				2,559				2,559
Cash dividends declared ($0.73 per share)			(66,906)					(66,906)
Stock options/SSARs		1,065				1		1,066
Treasury share repurchases								—
Vested restricted stock units and awards		(204)			3,213	151		(53)
Stock-based compensation		6,867						6,867
Issuance of equity	1,596	2,266,370						2,267,966
Balance at September 30, 2018	$ 16,066	$ 2,441,530	$ 4,021,172	$ (715,105)	(36,808,760)	$ (1,731,849)	$ 6,135	$ 4,037,949

(DOLLARS IN THOUSANDS)	Common stock	Capital in excess of par value	Retained earnings	Accumulated other comprehensive (loss) income	Treasury stock		Non-controlling interest	Total
					Shares	Cost		
Balance at June 30, 2019	$ 16,066	$ 3,805,883	$ 4,069,211	$ (668,359)	(21,751,837)	$ (1,023,422)	$ 10,608	$ 6,209,987
Net income			127,124				657	127,781
Adoption of ASU 2017-12			(1,962)					(1,962)
Cumulative translation adjustment				(204,853)				(204,853)
Gains on derivatives qualifying as hedges; net of tax $(348)				2,939				2,939
Pension liability and postretirement adjustment; net of tax $(1,937)				2,721				2,721
Cash dividends declared ($0.75 per share)			(80,027)					(80,027)
Stock options/SSARs		579			212	9		588
Vested restricted stock units and awards		28			1,410	67		95
Stock-based compensation		8,126						8,126
Redeemable NCI		1,736						1,736
Dividends paid on noncontrolling interest and other			(47)				(96)	(143)
Balance at September 30, 2019	$ 16,066	$ 3,816,352	$ 4,114,299	$ (867,552)	(21,750,215)	$ (1,023,346)	$ 11,169	$ 6,066,988

See Notes to Consolidated Financial Statements

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

(DOLLARS IN THOUSANDS)	Common stock	Capital in excess of par value	Retained earnings	Accumulated other comprehensive (loss) income	Treasury stock Shares	Treasury stock Cost	Non-controlling interest	Total
Balance at January 1, 2018	$ 14,470	$ 162,827	$ 3,870,621	$ (637,482)	(36,910,809)	$ (1,726,234)	$ 5,092	$ 1,689,294
Net income			324,281				1,043	325,324
Adoption of ASU 2014-09			2,068					2,068
Cumulative translation adjustment				(98,048)				(98,048)
Gains on derivatives qualifying as hedges; net of tax $(1,672)				12,347				12,347
Pension liability and postretirement adjustment; net of tax $(2,902)				8,078				8,078
Cash dividends declared ($2.11 per share)			(175,798)					(175,798)
Stock options/SSARs		1,188			46,018	2,167		3,355
Treasury share repurchases					(108,109)	(15,475)		(15,475)
Vested restricted stock units and awards		(10,896)			164,140	7,693		(3,203)
Stock-based compensation		22,041						22,041
Issuance of equity	1,596	2,266,370						2,267,966
Balance at September 30, 2018	$ 16,066	$ 2,441,530	$ 4,021,172	$ (715,105)	(36,808,760)	$ (1,731,849)	$ 6,135	$ 4,037,949

(DOLLARS IN THOUSANDS)	Common stock	Capital in excess of par value	Retained earnings	Accumulated other comprehensive (loss) income	Treasury stock Shares	Treasury stock Cost	Non-controlling interest	Total
Balance at January 1, 2019	$ 16,066	$ 3,793,609	$ 3,956,221	$ (702,227)	(21,906,935)	$ (1,030,718)	$ 10,423	$ 6,043,374
Net income			372,330				2,163	374,493
Adoption of ASU 2016-02			23,094					23,094
Adoption of ASU 2017-12			(981)					(981)
Cumulative translation adjustment				(176,490)				(176,490)
Gains on derivatives qualifying as hedges; net of tax $39				3,257				3,257
Pension liability and postretirement adjustment; net of tax $(3,038)				7,908				7,908
Cash dividends declared ($2.21 per share)			(235,730)					(235,730)
Stock options/SSARs		5,664			14,214	670		6,334
Vested restricted stock units and awards		(10,940)			142,506	6,702		(4,238)
Stock-based compensation		26,426						26,426
Redeemable NCI		1,593						1,593
Dividends paid on noncontrolling interest and other			(635)				(1,417)	(2,052)
Balance at September 30, 2019	$ 16,066	$ 3,816,352	$ 4,114,299	$ (867,552)	(21,750,215)	$ (1,023,346)	$ 11,169	$ 6,066,988

See Notes to Consolidated Financial Statements

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

Basis of Presentation

These interim statements and related management’s discussion and analysis should be read in conjunction with the Consolidated Financial Statements and the related notes and management’s discussion and analysis of results of operations, liquidity and capital resources included in our 2018 Annual Report on Form 10-K (“2018 Form 10-K”). These interim statements are unaudited. The year-end balance sheet data included in this Form 10-Q was derived from audited financial statements, but does not include all disclosures required by generally accepted accounting principles in the United States of America. We have historically operated and continue to operate on a 52/53 week fiscal year ending on the Friday closest to the last day of the quarter. For ease of presentation, September 30 and December 31 are used consistently throughout this Form 10-Q and these interim financial statements and related notes to represent the period-end dates. For the 2019 and 2018 quarters, the actual closing dates were September 27 and September 28 respectively. The unaudited interim financial statements include all adjustments (consisting only of normal recurring adjustments) and accruals necessary in the judgment of management for a fair statement of the results for the periods presented. When used herein, the terms “IFF,” the “Company,” “we,” “us” and “our” mean International Flavors & Fragrances Inc. and its consolidated subsidiaries.

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. Actual results could differ from those estimates.

Accounts Receivable

During 2019, the Company entered into certain factoring agreements in the U.S. and The Netherlands under which it can factor up to approximately $100 million in receivables. The new factoring agreements supplement the Company's existing factoring programs that are 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 Sheet when the cash proceeds are received by the Company. As of September 30, 2019 and December 31, 2018, the Company had removed approximately $204 million and $128 million of receivables, respectively. The impact on cash provided by operations from participating in these programs increased approximately $76 million for the nine months ended September 30, 2019 compared to a decrease of approximately$11 million for the nine months ended September 30, 2018. The cost of participating in these programs was approximately $1.7 million and $0.8 million for the three months ended September 30, 2019 and 2018, respectively, and $4.7 million and $2.7 million for the nine months ended September 30, 2019 and 2018, respectively.

Contract Assets

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.

The following table reflects the balances in our contract assets and accounts receivable for the periods ended September 30, 2019 and December 31, 2018:

(DOLLARS IN THOUSANDS)	**September 30, 2019**	**December 31, 2018**
Receivables (included in Trade receivables)	$ 951,194	$ 946,938
Contract asset - Short term	3,342	487

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.

The following table presents the Company's revenues disaggregated by product categories:

(DOLLARS IN THOUSANDS)	Three Months Ended September 30, 2019	Three Months Ended September 30, 2018	Nine Months Ended September 30, 2019	Nine Months Ended September 30, 2018
Flavor Compounds	$ 716,169	$ 436,214	$ 2,165,650	$ 1,335,773
Fragrance Compounds	389,757	379,359	1,154,564	1,130,028
Ingredients	161,419	91,975	536,101	292,691
Total revenues	$ 1,267,345	$ 907,548	$ 3,856,315	$ 2,758,492

Recent Accounting Pronouncements

In October 2018, the FASB issued Accounting Standards Update ("ASU") 2018-16, "Derivatives and Hedging (Topic 815): Inclusion of the Secured Overnight Financing Rate ("SOFR") Overnight Index Swap ("OIS") Rate as a Benchmark Interest Rate for Hedge Accounting Purposes." The ASU allows for the use of the OIS rate based on the SOFR as a U.S. benchmark interest rate for purposes of applying hedge accounting under ASC 815, Derivatives and Hedging. The Company applied this new guidance as of December 29, 2018, the first day of the Company's 2019 fiscal year. The adoption of the guidance did not have a material impact on the Consolidated Financial Statements.

In August 2018, the FASB issued ASU 2018-15, "Intangibles - Goodwill and Other - Internal - Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract (a consensus of the FASB Emerging Issues Task Force)." The ASU aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal-use software license). This guidance is effective for fiscal years beginning after December 15, 2019, and for interim periods within those fiscal years, with early adoption permitted. The Company is currently evaluating the impact this guidance will have on its Consolidated Financial Statements.

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

In August 2018, the FASB issued ASU 2018-13, "Fair Value Measurement (Topic 820)", which modifies, removes and adds certain disclosure requirements on fair value measurements. The ASU is effective for all entities for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. The amendments on changes in unrealized gains and losses, the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements and the narrative description of measurement uncertainty should be applied prospectively for only the most recent interim or annual period presented in the initial fiscal year of adoption. All other amendments should be applied retrospectively to all periods presented upon their effective date. Early adoption is permitted. The Company has determined that this guidance will not have an impact on its Consolidated Financial Statements, as the Company has no applicable fair value measurements that are affected by the guidance.

In June 2018, the FASB issued ASU 2018-07, "Compensation - Stock Compensation (Topic 718)" intended to reduce cost and complexity and to improve financial reporting for nonemployee share-based payments. This guidance expands the scope of Topic 718, Compensation-Stock Compensation which currently only includes share-based payments to employees to include share-based payments issued to nonemployees for goods or services. The Company applied this new guidance as of December 29, 2018, the first day of the Company's 2019 fiscal year. The adoption of the guidance did not have a material impact on the Consolidated Financial Statements.

In February 2018, FASB issued ASU 2018-02, "Income Statement - Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income" which allows for a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the Tax Act, in addition to requiring certain disclosures about stranded tax effects. The guidance was effective as of December 29, 2018, the first day of the Company's fiscal year. The Company elected to not reclassify any stranded tax effects to retained earnings.

In August 2017, FASB issued ASU 2017-12, "Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities" which eliminates the requirement to separately measure and present hedge ineffectiveness and aligns the presentation of hedge gains and losses with the underlying hedge item. This guidance is effective, and as required, has been applied on a modified retrospective basis. The impact of the adoption of this standard on December 29, 2018 was an increase in the beginning balance of the currency translation adjustment component of Accumulated other comprehensive loss of $1.0 million, and a decrease in Retained Earnings, as presented in the Company's Consolidated Balance Sheet. See Note 13 of the Consolidated Financial Statements for further details.

In June 2016, the FASB issued ASU 2016-13, "Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments", with subsequent amendments, which requires issuers to measure expected credit losses for financial assets based on historical experience, current conditions and reasonable and supportable forecasts. As such, an entity will use forward-looking information to estimate credit losses. The guidance is effective for financial statements issued for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. Early adoption is permitted. The Company is currently evaluating the impact this guidance will have on its Consolidated Financial Statements.

In February 2016, the FASB issued ASU 2016-02, "Leases (Topic 842)", with subsequent amendments, which requires changes to the accounting for leases and supersedes existing lease guidance, including ASC 840 - Leases. See Note 8 for further details.

NOTE 2. NET INCOME PER SHARE

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
(SHARES IN THOUSANDS)	2019	2018	2019	2018
Net Income				
Net income attributable to IFF stockholders	$ 127,124	$ 95,716	$ 372,330	$ 324,281
Add: Reduction in redemption value of redeemable noncontrolling interests in excess of earnings allocated	1,736	—	1,593	—
Net income available to IFF stockholders	$ 128,860	$ 95,716	$ 373,923	$ 324,281
Shares				
Weighted average common shares outstanding (basic)(1)	111,998	81,263	111,953	79,783
Adjustment for assumed dilution(2):				
Stock options and restricted stock awards	332	267	372	293
SPC portion of TEUs	1,163	117	808	39
Weighted average shares assuming dilution (diluted)	113,493	81,647	113,133	80,115
Net Income per Share				
Net income per share - basic	$ 1.15	$ 1.18	$ 3.34	$ 4.06
Net income per share - diluted	1.13	1.17	3.30	4.04

(1) For the three and nine months ended September 30, 2019, the tangible equity units (“TEUs”) were assumed to be outstanding at the minimum settlement amount for weighted-average shares for basic earnings per share. See below for details.

(2) Effect of dilutive securities includes dilution under stock plans and incremental impact of TEUs. See below for details.

The Company declared a quarterly dividend to its shareholders of $0.75 and $0.73 for the three months ended September 30, 2019 and 2018, respectively. For the nine months ended September 30, 2019 and 2018, the Company declared quarterly dividends to its shareholders totaling $2.21 and $2.11, 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 nine months ended September 30, 2019 and 2018.

The Company issued 16,500,000 TEUs, consisting of a prepaid stock purchase contract ("SPC") and a senior amortizing note, for net proceeds of $800.2 million on September 17, 2018. For the periods outstanding, the SPC portion of the TEUs was assumed to be settled at the minimum settlement amount of 0.3134 shares per SPC for purposes of calculating weighted-average shares for the basic earnings per share calculation. For purposes of calculating diluted earnings per share, the SPCs were assumed to be settled at a conversion factor based on the 20 day volume-weighted average price (“VWAP”) per share of the Company’s common stock not to exceed 0.3839 shares per SPC.

The Company has issued shares of purchased restricted common stock and purchased restricted common stock units (collectively “PRSUs”) which contain rights to nonforfeitable dividends while these shares are outstanding and thus are considered participating securities. Such securities are required to be included in the computation of basic and diluted earnings per share pursuant to the two-class method. The Company did not present the two-class method since the difference between basic and diluted net income per share for both unrestricted common shareholders and PRSU shareholders was less than $0.01 per share for each period presented, and the number of PRSUs outstanding as of September 30, 2019 and 2018 was immaterial. Net income allocated to such PRSUs was $0.2 million and $0.1 million for the three months ended September 30, 2019 and 2018, respectively, and $0.5 million and $0.6 million for the nine months ended September 30, 2019 and 2018, respectively.

NOTE 3. ACQUISITIONS

2019 Acquisition Activity

During the second quarter of 2019, the Company acquired the remaining 50% interest in an equity method investee located in Canada. The Company previously held an investment of $33 million in the entity and recognized a gain of approximately $3 million on the transaction within Other income, net in the Consolidated Statement of Income and Comprehensive (Loss) Income representing the adjustment of its historical investment to its fair value. The goodwill is not deductible for income tax purposes. The purchase of the additional interest increased the Company's ownership of the investee to 100%, and the acquired entity is managed under the Frutarom segment. The purchase price for the remaining 50% was approximately $37 million, including cash and an accrual for the amount expected to be paid in contingent consideration. The Company began to consolidate the results of the acquired entity from the date on which it acquired the remaining 50% interest during the second quarter of 2019. Goodwill of approximately $33 million and intangible assets of $24 million were recorded in connection with the acquisition. The purchase price allocation is preliminary and is expected to be completed within the measurement period.

During the first quarter of 2019, the Company acquired 70% of a company in Europe and increased its ownership of an Asian company from 49% to 60% after receipt of previously pending regulatory approvals. The two acquired entities, which manufacture flavor products, are managed under the Frutarom segment. The total purchase price for the acquisitions was $52 million, excluding cash acquired and including $19 million of contingent consideration and deferred payments. The preliminary purchase price allocations have been performed and resulted in goodwill of approximately $56 million and intangible assets of $18 million. The purchase price allocations are preliminary and are expected to be completed within the measurement period.

Pro forma information has not been presented as the entities acquired in 2019 are not material.

Frutarom

On October 4, 2018, the Company completed its acquisition of 100% of the equity of Frutarom Industries Ltd. (“Frutarom”).

Purchase Price Allocation

The Company allocated the purchase consideration to the tangible net assets and identifiable intangible assets acquired based on estimated fair values at the acquisition date, and recorded the excess of consideration over the fair values of net assets acquired as goodwill.

The purchase price allocation was finalized as of the end of the third quarter of 2019. This involved finalizing the valuation of fixed assets, goodwill and intangible assets (trade names, product formulas, customer relationships and favorable/unfavorable leases and the related estimated useful lives). Additionally, this also involved finalizing the projected combined future tax rate applied to the valuation of assets, which impacted the valuation of goodwill and intangible assets.

The following table summarizes the fair values of the assets acquired and liabilities assumed as of October 4, 2018, showing both the preliminary and final purchase price allocations:

(IN THOUSANDS)	As reported in the fourth quarter of 2018	Measurement period adjustments	As reported in the third quarter of 2019
Cash and cash equivalents	$ 140,747		$ 140,747
Other current assets	699,627	$ (25,706)	673,921
Identifiable intangible assets	2,690,000	(21,700)	2,668,300
Other non-current assets	353,710	58,401	412,111
Equity method investments	25,791	10,439	36,230
Current liabilities	(311,325)	(7,190)	(318,515)
Debt assumed	(77,037)		(77,037)
Other liabilities	(632,488)	(39,730)	(672,218)
Redeemable noncontrolling interest	(97,510)	(5,392)	(102,902)
Noncontrolling interest	(3,700)		(3,700)
Goodwill	4,243,079	30,878	4,273,957
Total Purchase Consideration	$ 7,030,894		$ 7,030,894

The fair value purchase price allocation of the assets and liabilities acquired in the acquisition of Frutarom as reported in the fourth quarter of 2018 was updated during the nine months ended September 30, 2019 primarily due to: (i) a $19.0 million decrease in inventory, (ii) a $7.4 million decrease in trade receivables, (iii) a $21.7 million decrease in the fair value of identifiable intangible assets (principally customer relationships and product formulas and arising from the updated valuations of fixed assets), (iv) a $58.4 million increase primarily related to property, plant and equipment (related to certain entities), (v) a $10.4 million increase in the fair value of equity method investments, (vi) a $1.5 million increase to the noncurrent portion of earn-outs, (vii) a $14.4 million increase to deferred income tax liabilities, (viii) an $18.9 million increase to reserves for uncertain tax positions, (ix) a $5.0 million increase to environmental remediation liabilities, and (x) a $5.4 million increase to redeemable noncontrolling interest. The cumulative impact of the adjustments resulted in a $30.9 million increase to goodwill.

The measurement period adjustments did not have a material impact on the Company's Net income attributable to IFF stockholders for the first, second, or third quarters of 2019.

The components of acquired intangible assets with finite lives that have been recorded are as follows:

(IN THOUSANDS)	Estimated Amounts	Estimated Useful Life
Product formula	$ 290,000	10 years
Customer relationships	2,230,000	18 to 20 years
Trade names	140,000	23 years
Favorable/Unfavorable Leases, net	8,300	5 to 15 years
Total	$ 2,668,300	

During the third quarter of 2019, in connection with the determination of the final purchase price allocation, the Company also finalized its determination of the reporting units for the Frutarom operating segment. The reporting units identified were as follows: (i) Taste; (ii) Savory Solutions; (iii) Inclusions; (iv) Fine Ingredients; and (v) Natural Product Solutions.

In connection with the purchase price allocation, numerous assumptions were made including those related to future revenue growth, the achievement of synergy targets and the applicable rate to use in the discounted cash flows that form a key part of the valuation. The recoverability of the goodwill is principally dependent on future growth in revenues and from synergies related to plant and supply chain consolidation. The goodwill may be impaired if the Company fails to achieve the anticipated growth in revenues, the expected synergies or if applicable interest rates increase.

Pro forma financial information

The following unaudited pro forma financial information presents the combined results of operations of IFF and Frutarom as if the acquisition had been completed as of the beginning of the prior fiscal year, or January 1, 2018. 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 acquisition and related borrowings had taken place on January 1, 2018, nor are they indicative of future results. The unaudited pro forma financial information for the three and nine months ended September 30, 2018 included the pre-acquisition results of Frutarom for that period.

The unaudited pro forma results were as follows:

(IN THOUSANDS)	Three Months Ended September 30, 2018	Nine Months Ended September 30, 2018
Unaudited pro forma net sales	$ 1,269,452	$ 3,906,506
Unaudited pro forma net income attributable to the Company	51,602	266,491

The unaudited pro forma results for all periods presented include adjustments made to account for certain costs and transactions that would have been incurred had the acquisition been completed as of January 1, 2018, including amortization charges for acquired intangibles assets, amortization of inventory step-up, adjustments for depreciation expense for property, plant, and equipment, 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, NET

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

Frutarom Integration Initiative

In connection with the acquisition of Frutarom, the Company began to execute an integration plan that, among other initiatives, seeks to optimize its manufacturing network. As part of the Frutarom Integration Initiative, the Company expects to close approximately 35 manufacturing sites over the next two years with most of the closures targeted to occur before the end of fiscal 2020. During the nine months ended September 30, 2019, the Company announced the closure of eight facilities, of which five facilities are in Europe, Africa and Middle East, one facility in each North America, Greater Asia and Latin America regions. Since the inception of the initiative, the Company has expensed $7.6 million to date. Total costs for the program are expected to be approximately $60 million including cash and non-cash items.

2019 Severance Charges

During the nine months ended September 30, 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 $14.8 million to date. Total costs for the program are expected to be approximately $20 million.

2017 Productivity Program

In connection with 2017 Productivity Program, the Company recorded $24.5 million of charges related to personnel costs and lease termination costs since the program's inception through 2019 to date. Total costs for the program are expected to be approximately $25 million.

Changes in Restructuring Liabilities

Changes in restructuring liabilities by program during the nine months ended September 30, 2019 were as follows:

(DOLLARS IN THOUSANDS)	Balance at December 31, 2018	Additional Charges (Reversals), Net	Non-Cash Charges	Cash Payments	Balance at September 30, 2019
Frutarom Integration Initiative					
Severance	$ —	$ 3,772	$ —	$ (2,285)	$ 1,487
Fixed asset write down	—	1,182	(1,182)	—	—
Other	—	2,666	—	(1,088)	1,578
2019 Severance Plan					
Severance	—	14,430	—	(5,924)	8,506
Other	—	365	—	(365)	—
2017 Productivity Program					
Severance	4,125	—	—	(795)	3,330
Other	1,075	—	—	—	1,075
Total restructuring	$ 5,200	$ 22,415	$ (1,182)	$ (10,457)	$ 15,976

Other includes supplier contract termination costs, consulting and advisory fees, and other.

Charges by Segment

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
(DOLLARS IN THOUSANDS)	2019	2018	2019	2018
Taste	$ 88	$ —	$ 328	$ 1,646
Scent	803	927	11,703	1,184
Frutarom	2,453	—	7,290	—
Shared IT & Corporate Costs	372	—	3,094	—
Total Restructuring and other charges, net	$ 3,716	$ 927	$ 22,415	$ 2,830

NOTE 5. GOODWILL AND OTHER INTANGIBLE ASSETS, NET

Goodwill

Movements in goodwill during 2019 were as follows:

(DOLLARS IN THOUSANDS)	Goodwill
Balance at December 31, 2018	$ 5,378,388
Acquisitions[(1)]	98,094
Frutarom measurement period adjustment	30,878
Foreign exchange	(125,913)
Balance at September 30, 2019	$ 5,381,447

(1) Additions relate to the 2019 Acquisition Activity. See Note 3 for details.

Other Intangible Assets

Other intangible assets, net consisted of the following amounts:

(DOLLARS IN THOUSANDS)	September 30, 2019	December 31, 2018
Asset Type		
Customer relationships	$ 2,584,701	$ 2,658,659
Trade names & patents	173,319	177,770
Technological know-how	462,113	451,016
Other	36,325	43,766
Total carrying value	3,256,458	3,331,211
Accumulated Amortization		
Customer relationships	(265,396)	(156,906)
Trade names & patents	(25,288)	(19,593)
Technological know-how	(125,100)	(93,051)
Other	(10,743)	(22,339)
Total accumulated amortization	(426,527)	(291,889)
Other intangible assets, net	$ 2,829,931	$ 3,039,322

Amortization

Amortization expense was $48,430 and $9,003 for the three months ended September 30, 2019 and 2018, respectively and $143,964 and $27,772 for the nine months ended September 30, 2019 and 2018, respectively.

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

(DOLLARS IN THOUSANDS)	2019	2020	2021	2022	2023
Estimated future intangible amortization expense	$ 48,127	$ 186,272	$ 181,441	$ 177,583	$ 177,473

NOTE 6. OTHER ASSETS

Other assets consisted of the following amounts:

(DOLLARS IN THOUSANDS)	September 30, 2019	December 31, 2018
Operating lease right-of-use assets	$ 299,790	$ —
Deferred income taxes	76,863	89,000
Overfunded pension plans	85,735	75,158
Cash surrender value of life insurance contracts	46,347	43,179
Other[(a)]	52,514	81,336
Total	$ 561,249	$ 288,673

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

NOTE 7. DEBT

Debt consisted of the following:

(DOLLARS IN THOUSANDS)	Effective Interest Rate	September 30, 2019	December 31, 2018
2020 Notes(1)	3.69%	$ 299,167	$ 298,499
2021 Euro Notes(1)	0.82%	325,993	337,704
2023 Notes(1)	3.30%	298,928	298,698
2024 Euro Notes(1)	1.88%	544,389	564,034
2026 Euro Notes(1)	1.93%	868,289	899,886
2028 Notes(1)	4.57%	396,611	396,377
2047 Notes(1)	4.44%	493,466	493,151
2048 Notes(1)	5.12%	785,943	785,788
Term Loan(1)	3.65%	282,493	349,163
Amortizing Notes(1)	6.09%	93,106	125,007
Bank overdrafts and other		4,515	4,695
Deferred realized gains on interest rate swaps		57	57
Total debt		4,392,957	4,553,059
Less: Short-term borrowings(2)		(384,823)	(48,642)
Total Long-term debt		$ 4,008,134	$ 4,504,417

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

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

Term Loan Repayments

During the third quarter of 2019, the Company made a payment of $42 million on the Term Loan.

NOTE 8. LEASES

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

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

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

Certain leases contain variable payments which are periodically adjusted for changes in an index or rate. Such payments are initially measured using the index or rate at the commencement date and are included in the measurement of the lease liability. Subsequent changes in variable payments are not included in the lease liability, but are recognized in profit and loss during the period in which the obligation for those payments is incurred.

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

Upon adoption of the new guidance, the Company recorded a right-of-use asset of $308.3 million and total operating lease liabilities of $313.3 million. Additionally, the Company recorded a net increase to retained earnings of $23.1 million related to the elimination of deferred gains on certain sale-leaseback transactions that occurred in prior years.

The components of lease expense were as follows:

(DOLLARS IN THOUSANDS)	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2019
Operating lease cost	$ 12,422	$ 38,228

Supplemental cash flow information related to leases was as follows:

(DOLLARS IN THOUSANDS)	Nine Months Ended September 30, 2019
Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash flows from operating leases	$ 36,932

Supplemental balance sheet information related to leases was as follows:

(DOLLARS IN THOUSANDS)	September 30, 2019
Operating Leases	
Operating lease right-of-use assets[1]	$ 299,790
Other current liabilities[2]	37,029
Operating lease liabilities[3]	267,704
Total operating lease liabilities	$ 304,733

(1) Presented in Other assets in the Consolidated Balance Sheet.

(2) Presented in Other current liabilities in the Consolidated Balance Sheet.

(3) Presented in Other liabilities in the Consolidated Balance Sheet.

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

	Weighted Average Remaining Lease Term (in years)	Weighted Average Discount Rate
Operating leases	11.7	3.21%

Maturities of lease liabilities were as follows:

(DOLLARS IN THOUSANDS)	September 30, 2019
Less than 1 Year	$ 23,523
1-3 Years	86,017
3-5 Years	67,132
After 5 years	209,048
Less: Imputed Interest	(80,987)
Total	$ 304,733

Maturities of lease liabilities, as calculated prior to the adoption of ASU 2016-02, were as follows:

(DOLLARS IN THOUSANDS)	December 31, 2018
Less than 1 Year	$ 49,350
1-3 Years	78,600
3-5 Years	60,672
After 5 years	201,079
Total	$ 389,701

Right-of-use assets by region were as follows:

(DOLLARS IN THOUSANDS)	September 30, 2019
North America	$ 148,188
Europe, Africa and Middle East	116,579
Greater Asia	21,439
Latin America	13,584
Consolidated	$ 299,790

NOTE 9. INCOME TAXES

Uncertain Tax Positions

As of September 30, 2019, the Company had $61.7 million of unrecognized tax benefits recorded in Other liabilities. The balance has been updated for $12.3 million associated with Frutarom uncertain tax positions recorded within the purchase accounting measurement period ending in the third quarter of 2019. If these unrecognized tax benefits were recognized, the effective tax rate would be affected.

At September 30, 2019, the Company had accrued interest and penalties of $11.2 million classified in Other liabilities. The balance has been updated for $6.6 million associated with Frutarom uncertain tax positions recorded within the purchase accounting measurement period ending in the third quarter of 2019.

As of September 30, 2019, the Company's aggregate provisions for uncertain tax positions, including interest and penalties, was $72.9 million associated with tax positions asserted in various jurisdictions, none of which is individually material. The balance has been updated for $18.9 million associated with Frutarom uncertain tax positions recorded within the purchase accounting measurement period ending in the third quarter of 2019.

The Company regularly repatriates earnings from non-U.S. subsidiaries. In the fourth quarter of 2018, the Company changed its assertion as part of its final analysis under SAB 118, consistent with the Company's need to repatriate funds for debt repayment purposes. 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 September 30, 2019, the Company had a deferred tax liability of $43.9 million for the effect of repatriating the funds to the U.S. This balance consisted of $43.9 million attributable to IFF non-U.S. subsidiaries. We reversed the $43.7 million associated with Frutarom in the purchase accounting measurement period as we intend to indefinitely reinvest the earnings in the Frutarom subsidiaries to fund local operations and/or capital projects.

The Company has ongoing income tax audits and legal proceedings which are at various stages of administrative or judicial review. In addition, the Company has open tax years with various taxing jurisdictions that range primarily from 2009 to 2018. 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 September 30, 2019 was 17.2% compared with 5.0% for the three months ended September 30, 2018. The quarter-over-quarter increase was largely due to higher repatriation costs, the absence of the release of a state valuation allowance which benefited 2018 and an $8.0 million benefit recorded in the third quarter of 2018 to adjust the provisional “toll charge” associated with the transition to the new territorial tax system under U.S. tax reform, partially offset by a more favorable mix of earnings (including the impact of acquisition related costs).

The effective tax rate for the nine months ended September 30, 2019 was 17.6% compared with 15.0% for the nine months ended September 30, 2018. The year-over-year increase was largely due to higher repatriation costs, the absence of the remeasurement of loss provisions which benefited 2018 and an $8.0 million benefit recorded in the third quarter of 2018 to adjust the provisional “toll charge” associated with the transition to the new territorial tax system under U.S. tax reform, partially offset by a more favorable mix of earnings (including the impact of integration relates costs, restructuring charges and acquisition related costs).

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, restricted stock units (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 September 30,		Nine Months Ended September 30,	
(DOLLARS IN THOUSANDS)	2019	2018	2019	2018
Equity-based awards	$ 8,126	$ 6,867	$ 26,426	$ 22,041
Liability-based awards	39	1,545	2,830	1,942
Total stock-based compensation expense	8,165	8,412	29,256	23,983
Less: Tax benefit	(1,143)	(1,422)	(4,666)	(4,320)
Total stock-based compensation expense, after tax	$ 7,022	$ 6,990	$ 24,590	$ 19,663

NOTE 11. SEGMENT INFORMATION

The Company is currently organized into three reportable operating segments, Taste, Scent and Frutarom; these segments align with the internal structure used to manage these businesses.

Taste is comprised of Flavor Compounds which are sold to the food and beverage industries for use in consumer products such as prepared foods, beverages, dairy, food and sweet products.

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 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.

Frutarom creates and manufactures a naturals-focused suite of flavor compounds, functional foods and specialty fine ingredients, largely targeting small, local and regional customers. Frutarom’s products are focused on the following principal areas: Taste, Savory Solutions, Inclusions, Fine Ingredients, and Natural Product Solutions.

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

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

Reportable segment information was as follows:

(DOLLARS IN THOUSANDS)	Three Months Ended September 30, 2019	Three Months Ended September 30, 2018	Nine Months Ended September 30, 2019	Nine Months Ended September 30, 2018
Net sales:				
Taste	$ 423,269	$ 436,214	$ 1,302,050	$ 1,335,773
Scent	480,384	471,334	1,444,407	1,422,719
Frutarom	363,692	—	1,109,858	—
Consolidated	$ 1,267,345	$ 907,548	$ 3,856,315	$ 2,758,492
Segment profit:				
Taste	$ 97,526	$ 96,497	$ 304,062	$ 317,666
Scent	83,484	87,488	260,543	261,545
Frutarom	28,257	—	94,841	—
Global expenses	(8,333)	(19,578)	(39,892)	(63,975)
Operational Improvement Initiatives (a)	(712)	(344)	(1,652)	(1,773)
Acquisition Related Costs (b)	—	1	—	519
Integration Related Costs (c)	(10,511)	(958)	(36,825)	(1,951)
Restructuring and Other Charges, net (d)	(3,716)	(927)	(22,415)	(1,837)
(Losses) Gains on Sale of Assets	(372)	1,630	(1,136)	435
FDA Mandated Product Recall (e)	(250)	9,800	(250)	4,800
Frutarom Acquisition Related Costs (f)	2,914	(14,341)	(5,182)	(26,796)
Compliance Review & Legal Defense Costs (g)	(3,623)	—	(3,623)	—
Operating profit	184,664	159,268	548,471	488,633
Interest expense	(33,497)	(23,914)	(102,662)	(93,755)
Loss on extinguishment of debt	—	(38,810)	—	(38,810)
Other income (expense)	5,699	4,158	15,114	25,389
Income before taxes	$ 156,866	$ 100,702	$ 460,923	$ 381,457

(a) For 2019, represents accelerated depreciation related to a plant relocation in India and China. For 2018, represents accelerated depreciation related to a plant relocation in India and Taiwan.

(b) For 2018, represents adjustments to the contingent consideration payable for PowderPure, and transaction costs related to Fragrance Resources and PowderPure within Selling and administrative expenses.

(c) For 2019, represents costs related to the integration of the Frutarom acquisition, principally advisory services. For 2018, represents costs related to the integration of David Michael and Frutarom.

(d) For 2019, represents costs primarily related to the Frutarom Integration Initiative and the 2019 Severance Charges program. For 2018, represents severance costs related to the 2017 Productivity Program.

(e) For 2019, represents additional claims that management will pay to co-packers. For 2018, represents recoveries from the supplier for the third quarter, partially offset by final payments to the customer made for the affected product in the first quarter.

(f) Represents transaction-related costs and expenses related to the acquisition of Frutarom. For the three months ended September 30, 2019, amount primarily relates to a measurement period adjustment to the amount of the inventory "step-up" recorded. For the nine months ended September 30, 2019, amount primarily includes amortization for inventory "step-up" costs and transaction costs. For 2018, amount represents transaction-related administrative costs and expenses related to the acquisition of Frutarom.

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

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

(SHARES IN THOUSANDS)	Three Months Ended September 30, 2019	Three Months Ended September 30, 2018	Nine Months Ended September 30, 2019	Nine Months Ended September 30, 2018
Europe, Africa and Middle East	$ 512,715	$ 285,519	$ 1,570,415	$ 887,680
Greater Asia	281,461	237,415	862,680	723,194
North America	286,741	248,661	881,718	738,857
Latin America	186,428	135,953	541,502	408,761
Consolidated	$ 1,267,345	$ 907,548	$ 3,856,315	$ 2,758,492

(SHARES IN THOUSANDS)	Three Months Ended September 30, 2019	Three Months Ended September 30, 2018	Nine Months Ended September 30, 2019	Nine Months Ended September 30, 2018
Net sales related to the U.S.	$ 254,438	$ 238,342	$ 796,488	$ 702,653
Net sales attributed to all foreign countries	1,012,907	669,206	3,059,827	2,055,839

No non-U.S. country had net sales in any period presented greater than 6% of total consolidated net sales.

Pending change in Reportable Operating Segments and Reporting Units

During the second quarter of 2019, the Company announced that it will be reorganizing its business unit structure into three segments: Taste, Scent and Nutrition & Ingredients. Under the new organization, two parts of the existing Frutarom segment will be included within the existing Taste business unit and a third business unit, Nutrition & Ingredients, will be created that will contain substantially all of the remaining parts of the existing Frutarom business unit. The Company expects to implement the new organizational structure by the end of the first quarter of 2020.

NOTE 12. EMPLOYEE BENEFITS

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

	U.S. Plans			
	Three Months Ended September 30,		Nine Months Ended September 30,	
(DOLLARS IN THOUSANDS)	2019	2018	2019	2018
Service cost for benefits earned[1]	$ 474	$ 596	$ 1,422	$ 1,788
Interest cost on projected benefit obligation[2]	5,453	4,790	16,359	14,370
Expected return on plan assets[2]	(6,983)	(7,740)	(20,949)	(23,219)
Net amortization and deferrals[2]	1,276	1,549	3,827	4,647
Net periodic benefit (income) cost	$ 220	$ (805)	$ 659	$ (2,414)

	Non-U.S. Plans			
	Three Months Ended September 30,		Nine Months Ended September 30,	
(DOLLARS IN THOUSANDS)	2019	2018	2019	2018
Service cost for benefits earned[1]	$ 4,873	$ 4,470	$ 14,619	$ 13,410
Interest cost on projected benefit obligation[2]	4,435	4,338	13,305	13,014
Expected return on plan assets[2]	(10,904)	(12,032)	(32,712)	(36,096)
Net amortization and deferrals[2]	2,922	2,972	8,766	8,916
Net periodic benefit (income) cost	$ 1,326	$ (252)	$ 3,978	$ (756)

(1) Included as a component of Operating Profit.

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

The Company expects to contribute a total of $4.2 million to its U.S. pension plans and a total of $19.3 million to its Non-U.S. Plans during 2019. During the nine months ended September 30, 2019, no contributions were made to the qualified U.S. pension plans, $13.0 million of contributions were made to the non-U.S. pension plans, and $3.4 million of benefit payments were made with respect to the Company's non-qualified U.S. pension plan.

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
(DOLLARS IN THOUSANDS)	**2019**	**2018**	**2019**	**2018**
Service cost for benefits earned	$ 148	$ 196	$ 444	$ 587
Interest cost on projected benefit obligation	578	654	1,734	1,962
Net amortization and deferrals	(1,195)	(1,189)	(3,584)	(3,567)
Total postretirement benefit income	$ (469)	$ (339)	$ (1,406)	$ (1,018)

The Company expects to contribute $3.9 million to its postretirement benefits other than pension plans during 2019. In the nine months ended September 30, 2019, $2.2 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 16 of our 2018 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 immaterial as of September 30, 2019.

The carrying values and the estimated fair values of financial instruments at September 30, 2019 and December 31, 2018 consisted of the following:

(DOLLARS IN THOUSANDS)	September 30, 2019 Carrying Value	September 30, 2019 Fair Value	December 31, 2018 Carrying Value	December 31, 2018 Fair Value
LEVEL 1				
Cash and cash equivalents[1]	$ 494,897	$ 494,897	$ 634,897	$ 634,897
LEVEL 2				
Credit facilities and bank overdrafts[2]	4,515	4,515	4,695	4,695
Derivatives				
Derivative assets	—	11,555	—	7,229
Derivative liabilities	—	1,149	—	6,907
Long-term debt:[3]				
2020 Notes	299,167	303,360	298,499	300,356
2021 Euro Notes	325,993	331,248	337,704	341,094
2023 Notes	298,928	305,439	298,698	293,017
2024 Euro Notes	544,389	579,027	564,034	584,129
2026 Euro Notes	868,289	929,034	899,886	909,439
2028 Notes	396,611	442,000	396,377	401,231
2047 Notes	493,466	515,700	493,151	446,725
2048 Notes	785,943	907,008	785,788	783,925
Term Loan[2]	282,493	283,000	349,163	350,000
Amortizing Notes[4]	93,106	95,985	125,007	127,879

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

(2) The carrying amount approximates fair value as the interest rate is reset frequently based on current market rates as well as the short maturity of those instruments.

(3) The fair value of the Company's long-term debt was calculated using discounted cash flows applying current interest rates and current credit spreads based on its own credit risk.

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

Derivatives

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

In prior years, the Company entered into several forward currency contracts which qualified as cash flow hedges. The objective of these hedges is to protect against the currency risk associated with forecasted U.S. dollar ("USD") denominated raw material purchases made by Euro ("EUR") functional currency entities which result from changes in the EUR/USD exchange rate. The change in the value of the cash flow hedges is recorded in OCI as a component of gains/(losses) on derivatives qualifying as hedges in the accompanying Consolidated Statement of Income and Comprehensive (Loss) Income. Realized gains/(losses) in AOCI related to cash flow hedges of raw material purchases are recognized as a component of Cost of goods sold in the accompanying Consolidated Statement of Income and Comprehensive (Loss) Income in the same period as the related costs are recognized.

In prior years, the Company designated the 2021 Euro Notes, 2024 Euro Notes and 2026 Euro Notes as a hedge of a portion of its net investment in Euro functional currency subsidiaries. Accordingly, the change in the value of the debt that is attributable to foreign exchange movements is recorded in OCI as a component of Foreign currency translation adjustments in the accompanying Consolidated Statement of Income and Comprehensive (Loss) Income.

In prior years, the Company entered into interest rate swap agreements to hedge the anticipated issuance of fixed-rate debt, which are designated as cash flow hedges. The amount of gains and losses realized upon termination of these agreements is amortized over the life of the corresponding debt issuance.

In prior years, the Company entered into certain cross currency swaps which qualified as net investment hedges in order to mitigate a portion of its net European investments from foreign currency risk. Changes in fair value related to cross currency swaps are recorded in OCI as a component of the Foreign currency translation adjustments.

During the third quarter of 2019, the Company entered into a transaction to unwind the four cross currency swaps designated as net investment hedges issued in the fourth quarter of 2018 and received proceeds of $33.6 million, including interest income. The gain arising from the termination of the swaps has been included as a component of Accumulated other comprehensive loss. Following the termination of the existing swaps, the Company entered into four new EUR/USD cross currency swaps that mature through May 2023 covering the same notional amounts of debt. The new swaps qualified as net investment hedges in order to mitigate a portion of the Company's net European investments from foreign currency risk. As of September 30, 2019, these swaps were in a net asset position with an aggregate fair value of $5.7 million which was classified as other current assets. 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 September 30, 2019 and December 31, 2018:

(DOLLARS IN THOUSANDS)	September 30, 2019	December 31, 2018
Foreign currency contracts	$ 411,436	$ 585,581
Cross currency swaps	600,000	600,000

The following tables show the Company’s derivative instruments measured at fair value (Level 2 of the fair value hierarchy), as reflected in the Consolidated Balance Sheet as of September 30, 2019 and December 31, 2018:

	September 30, 2019		
(DOLLARS IN THOUSANDS)	Fair Value of Derivatives Designated as Hedging Instruments	Fair Value of Derivatives Not Designated as Hedging Instruments	Total Fair Value
Derivative assets[(a)]			
Foreign currency contracts	$ 4,326	$ 1,501	$ 5,827
Cross currency swaps	5,728	—	5,728
	$ 10,054	$ 1,501	$ 11,555
Derivative liabilities[(b)]			
Foreign currency contract	$ 119	$ 1,030	$ 1,149

	December 31, 2018		
(DOLLARS IN THOUSANDS)	Fair Value of Derivatives Designated as Hedging Instruments	Fair Value of Derivatives Not Designated as Hedging Instruments	Total Fair Value
Derivative assets[(a)]			
Foreign currency contracts	$ 4,122	$ 2,020	$ 6,142
Cross currency swaps	1,087	—	1,087
	$ 5,209	$ 2,020	$ 7,229
Derivative liabilities[(b)]			
Foreign currency contracts	$ 205	$ 6,702	$ 6,907

(a) Derivative assets are recorded to Prepaid expenses and Other assets in the Consolidated Balance Sheet.

(b) Derivative liabilities are recorded as Other current liabilities in the Consolidated Balance Sheet.

The following table shows the effect of the Company's derivative instruments which were not designated as hedging instruments in the Consolidated Statement of Income and Comprehensive (Loss) Income for the three and nine months ended September 30, 2019 and 2018 (in thousands):

	Amount of Gain (Loss) Three Months Ended September 30,		Location of Gain (Loss) Recognized in Income on Derivative
(DOLLARS IN THOUSANDS)	2019	2018	
Foreign currency contracts[1]	$ (4,392)	$ 8,277	Other (income) expense, net
Deal contingent swaps[2]			
Foreign currency contracts	—	1,175	Other income, net
Interest rate swaps	—	25,289	Interest expense
Total	(4,392)	34,741	

	Amount of Gain (Loss) Nine Months Ended September 30,		Location of Gain (Loss) Recognized in Income on Derivative
(DOLLARS IN THOUSANDS)	2019	2018	
Foreign currency contracts[1]	$ (7,398)	$ 9,347	Other income, net
Deal contingent swaps[2]			
Foreign currency contracts	—	12,154	Other income, net
Interest rate swaps	—	352	Interest expense
Total	$ (7,398)	$ 21,853	

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(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.

(2) In the second quarter of 2018, the Company entered into a foreign currency contract and two interest rate swap agreements, which were contingent upon the closing of the Frutarom acquisition.

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 Statement of Income and Comprehensive (Loss) Income for the three and nine months ended September 30, 2019 and 2018 (in thousands):

	Amount of Gain (Loss) Recognized in OCI on Derivative		Location of Gain (Loss) Reclassified from AOCI into Income	Amount of Gain (Loss) Reclassified from Accumulated OCI into Income	
	Three Months Ended September 30,			Three Months Ended September 30,	
	2019	2018		2019	2018
Derivatives in Cash Flow Hedging Relationships:					
Foreign currency contracts	$ 2,438	$ 2,206	Cost of goods sold	$ 1,924	$ 1,815
Interest rate swaps (1)	216	216	Interest expense	(216)	(216)
Derivatives in Net Investment Hedging Relationships:					
Foreign currency contracts	—	—	N/A	—	—
Cross currency swaps	17,803	—	N/A	—	—
Non-Derivatives in Net Investment Hedging Relationships:					
2024 Euro Notes	16,437	(7,104)	N/A	—	—
2021 Euro Notes & 2026 Euro Notes	36,162	705	N/A	—	—
Total	$ 73,056	$ (3,977)		$ 1,708	$ 1,599

	Amount of (Loss) Gain Recognized in OCI on Derivative (Effective Portion)		Location of (Loss) Gain Reclassified from AOCI into Income (Effective Portion)	Amount of (Loss) Gain Reclassified from Accumulated OCI into Income (Effective Portion)	
	Nine Months Ended September 30,			Nine Months Ended September 30,	
	2019	2018		2019	2018
Derivatives in Cash Flow Hedging Relationships:					
Foreign currency contracts	$ (265)	$ 11,704	Cost of goods sold	$ 6,619	$ (7,371)
Interest rate swaps (1)	644	648	Interest expense	(644)	(648)
Derivatives in Net Investment Hedging Relationships:					
Foreign currency contracts	—	(518)	N/A	—	—
Cross currency swaps	24,408	—	N/A	—	—
Non-Derivatives in Net Investment Hedging Relationships:					
2024 Euro Notes	15,820	5,601	N/A	—	—
2021 Euro Notes & 2026 Euro Notes	34,804	705	N/A	—	—
Total	$ 75,411	$ 18,140		$ 5,975	$ (8,019)

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

The ineffective portion of the above noted cash flow hedges were not material during the three and nine months ended September 30, 2018.

The Company expects that $4.3 million (net of tax) of derivative gain included in AOCI at September 30, 2019, based on current market rates, will be reclassified into earnings within the next 12 months. The majority of this amount will vary due to fluctuations in foreign currency exchange rates.

NOTE 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 THOUSANDS)	Foreign Currency Translation Adjustments	Gains on Derivatives Qualifying as Hedges	Pension and Postretirement Liability Adjustment	Total
Accumulated other comprehensive (loss) income, net of tax, as of December 31, 2018	$ (396,996)	$ 4,746	$ (309,977)	$ (702,227)
OCI before reclassifications	(176,490)	9,232	179	(167,079)
Amounts reclassified from AOCI	—	(5,975)	7,729	1,754
Net current period other comprehensive income (loss)	(176,490)	3,257	7,908	(165,325)
Accumulated other comprehensive (loss) income, net of tax, as of September 30, 2019	$ (573,486)	$ 8,003	$ (302,069)	$ (867,552)

(DOLLARS IN THOUSANDS)	Foreign Currency Translation Adjustments	Losses on Derivatives Qualifying as Hedges	Pension and Postretirement Liability Adjustment	Total
Accumulated other comprehensive (loss) income, net of tax, as of December 31, 2017	$ (297,416)	$ (10,332)	$ (329,734)	$ (637,482)
OCI before reclassifications	(98,048)	4,328	185	(93,535)
Amounts reclassified from AOCI	—	8,019	7,893	15,912
Net current period other comprehensive income (loss)	(98,048)	12,347	8,078	(77,623)
Accumulated other comprehensive (loss) income, net of tax, as of September 30, 2018	$ (395,464)	$ 2,015	$ (321,656)	$ (715,105)

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

	Nine Months Ended September 30,		Affected Line Item in the Consolidated Statement of Income and Comprehensive Income
(DOLLARS IN THOUSANDS)	2019	2018	
Gains (losses) on derivatives qualifying as hedges			
Foreign currency contracts	$ 7,565	$ (8,424)	Cost of goods sold
Interest rate swaps	(644)	(648)	Interest expense
Tax	(946)	1,053	Provision for income taxes
Total	$ 5,975	$ (8,019)	Total, net of income taxes
Losses on pension and postretirement liability adjustments			
Prior service cost	$ 4,991	$ 5,315	(a)
Actuarial losses	(14,003)	(15,309)	(a)
Tax	1,283	2,101	Provision for income taxes
Total	$ (7,729)	$ (7,893)	Total, net of income taxes

(a) The amortization of prior service cost and actuarial loss is included in the computation of net periodic benefit cost. Refer to Note 16 of our 2018 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 and letters of credit which are available for use to support its ongoing business operations and to satisfy governmental requirements associated with pending litigation in various jurisdictions.

At September 30, 2019, the Company had total bank guarantees and standby letters of credit of $60.2 million with various financial institutions. Included in the above aggregate amount was a total of $17.0 million for other assessments in Brazil for various income tax and indirect tax disputes related to fiscal years 1998-2011. There were no material amounts utilized under the standby letters of credit as of September 30, 2019.

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 $9.7 million as of September 30, 2019.

Lines of Credit

The Company has various lines of credit which are available to support its ongoing business operations. As of September 30, 2019, the Company had available lines of credit of $103.4 million with various financial institutions, in addition to the $948.0 million of capacity under the Amended Credit Facility. There were no material amounts drawn down pursuant to these lines of credit as of September 30, 2019.

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 will be 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 will be 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.

During the third quarter of 2019, in connection with the completion of the measurement period for finalizing the opening balance of Frutarom, the Company recorded an immaterial amount of reserves related to certain legal cases. The reserves were based on the determination that the loss was probable as of October 4, 2018 and updated as of September 30, 2019. The amount of future exposure is included in the estimate within the section "Other" below.

Securities Class Action

On August 12, 2019, Marc Jansen filed a putative securities class action against IFF, its Chairman and CEO, and its CFO, in the United States District Court for the Southern District of New York. The lawsuit, which 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, alleges that defendants made materially false and misleading statements or omissions concerning IFF’s acquisition of Frutarom, the integration of the two companies, and IFF’s financial reporting and results. The lawsuit brings claims under Section 10(b) of the Securities Exchange Act of 1934 and SEC Rule 10b-5 against all defendants, and under Section 20(a) of the Securities Exchange Act of 1934 against the individual defendants, and was filed on behalf of a putative class of persons and entities who purchased or otherwise acquired IFF securities between May 7, 2018 and August 5, 2019. The complaint seeks an award of unspecified compensatory damages, costs, and expenses. On October 11, 2019, four lead plaintiff motions were filed. On October 24 and 25, 2019, two movants withdrew their motions for appointment as lead plaintiff. On October 25, 2019, the other two movants filed oppositions to the competing lead plaintiff motions.

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. Both assert claims under the U.S. federal securities laws against IFF, its Chairman and CEO, and its CFO. One also asserts claims under the Israeli Securities Act-1968 against IFF, as well as against Frutarom and certain former Frutarom officers and directors, and asserts claims under the Israeli Companies Act-1999 against certain former Frutarom officers and directors.

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.

Environmental

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

The Company has been identified as a PRP at seven facilities operated by third parties at which investigation and/or remediation activities may be ongoing. The Company analyzes potential liability on at least a quarterly basis and accrues for environmental liabilities when they are probable and estimable. The Company estimates its share of the total future cost for these sites to be less than $3 million.

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

During the third quarter of 2019, in connection with the completion of the measurement period for finalizing the opening balance of Frutarom, the Company recorded approximately $5 million in reserves related to certain environmental liabilities. The reserves were based on the determination that the loss was probable as of October 4, 2018 and updated as of September 30, 2019. The amount of future exposure is included the estimate within the section "Other" below.

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 begun to move production from the Guangzhou Taste plant to a newly built facility in Zhangjiagang.

The net book value of the plant in Guangzhou was approximately $61 million as of September 30, 2019.

Guangzhou Scent plant

During the second quarter of 2019, the Company was notified that certain governmental authorities had changed the zoning where the Guangzhou Scent plant is located. The zoning change did not affect the current operations but prevents expansions or other increases in the operating capacity of the plant. The Company believes that it is possible that the zoning may be enforced in the future such that it would not be able to continue manufacturing at the existing site. The ultimate outcome of any change that the governmental authorities may propose, the timing of such a change, and the nature of any compensation arrangements that might be provided to the Company are uncertain.

The net book value of the existing plant was approximately $9 million as of September 30, 2019.

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 2021. The Company received a payment of $15 million in both the fourth quarter of 2017 and the second quarter of 2019. The next payment of $15 million is expected in the first quarter of 2020.

The net book value of the current plant was approximately $18 million as of September 30, 2019. The Company relocated approximately half of the production capacity of the facility during the first half of 2019 and the remainder of the production capacity is expected to be relocated by the end of 2019.

Total China Operations

The total net book value of all eight plants in China was approximately $196 million as of September 30, 2019.

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 $26.7 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.

During 2018, the Company received an unfavorable ruling with respect to a claim related to potentially unpaid excise taxes from 1993. Based on the revised ruling, the Company has determined that it is now probable that it will have to pay the original claim in addition to penalties and interest. The total amount of the claim that has been recorded was $4.8 million.

Ongoing Investigations

IFF’s investigation of allegations that improper payments to representatives of customers were made in Russia and Ukraine has been substantiated, and IFF has confirmed that key members of Frutarom’s senior management at the time were aware of such payments. IFF has taken appropriate remedial actions, including replacing senior management in relevant locations, and believes that such improper customer payments have stopped. IFF has also confirmed that the estimated affected sales represented less than 1% of IFF’s and Frutarom’s combined net sales for 2018. The impact of the improper payments in Russia and Ukraine, including the costs resulting from the ensuing investigations, to date, have not been and are not anticipated to be material to IFF’s results of operations or financial condition. No evidence has been uncovered suggesting that any of these compliance matters had any connection to the United States

FDA-Mandated Product Recall

The Company periodically incurs product liability claims based on product that is sold to customers that may be defective or otherwise not in accordance with the customer’s requirements. In the first quarter of 2017, the Company was made aware of a claim for product that was subject to an FDA-mandated product recall. As of September 30, 2019, the Company had recorded total charges of $17.5 million with respect to this claim, of which $5.0 million was recorded in the three months ended March 31, 2018. The Company settled the claim with the customer in the first quarter of 2018 for a total of $16.0 million, of which $3.0 million was paid in the fourth quarter of 2017 and $13.0 million was paid during the three months ended March 31, 2018. The settlement of the claim did not have a material impact on the Company's financial condition.

In the third quarter of 2018, the Company received $13.1 million for the full and final settlement of its claim from the supplier and insurer for the affected product.

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 $25 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 Frutarom, 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 identical price and conditions of exercise, and will be settled based on the 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 THOUSANDS)		**Redeemable Noncontrolling Interests**
Balance at December 31, 2018	$	81,806
Acquired through acquisitions during 2019		23,594
Impact of foreign exchange translation		923
Share of profit or loss attributable to redeemable noncontrolling interests		5,397
Redemption value adjustment for the current period		(1,593)
Measurement period adjustments		5,392
Dividends paid		(432)
Exercises of redeemable noncontrolling interests		(542)
Balance at September 30, 2019	$	114,545

The increase in redeemable noncontrolling interests is primarily due to the interests acquired through acquisitions during the period, as discussed in Note 3.

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

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

Overview

Company background

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

Flavors are the key building blocks that impart taste experiences in food and beverage products and, as such, play a significant role in determining consumer preference for the end products in which they are used. As a leading creator of Flavor Compounds, we help our customers deliver on the promise of delicious and healthy foods and drinks that appeal to consumers. While we are a global leader, our flavors business is more regional in nature, with different formulas that reflect local taste preferences. Consequently, we manage our flavors business geographically, creating Flavor Compounds in our regional creative centers which allow us to satisfy local taste preferences, while also helping to ensure regulatory compliance and production standards. We develop thousands of different flavors and taste offerings for our customers, most of which are tailor-made. We continually develop new formulas to meet changing consumer preferences and customer needs. Our Flavor Compounds are ultimately used by our customers in the following four end-use categories of consumer goods: (1) Savory, (2) Beverages, (3) Sweet and (4) Dairy.

Our Frutarom business creates and manufactures a naturals-focused suite of Flavor Compounds and specialty fine ingredients, largely targeting small, local and regional customers. Our Frutarom business seeks to capitalize on the health and wellness emphasis of consumers and deliver growth by offering customers natural flavor products that combine solutions to create natural colors, extending shelf life and natural functional food ingredients. Frutarom's products are focused on the following principal areas: Taste, Savory Solutions, Inclusions, Fine Ingredients, and Natural Product Solutions. Frutarom's operating results have been included in our operating results from October 4, 2018, the date we completed the acquisition.

Vision 2021 and Frutarom Integration Initiative

Following the implementation of our Vision 2020 strategy and the acquisition of Frutarom, we have now launched a new strategy, Vision 2021, to target revenue and profitability goals. Vision 2021 has four "pillars":

1) Unlocking growth opportunities – capitalizing on our expanded product portfolio, broader customer base and extensive geographic presence; plus cross-selling and integrated solutions

2) Driving innovation – investing in high-growth and high-return platforms to continue to drive our R&D pipeline and accelerate long-term growth

3) Managing the Portfolio – focusing on optimizing our portfolio to maximize value creation

4) Accelerating Business Transformation – successfully integrating Frutarom while delivering on synergy targets and achieving productivity gains across the business base.

With respect to our Frutarom Integration Initiative, we are executing on our integration plan to simplify and harmonize our go-to-market business models, clarify roles and responsibilities and accelerate decision-making through a series of organizational changes. We expect to achieve $145 million of synergy targets, including approximately $50 million of cost synergies by the end of 2019. As of the third quarter 2019, we have realized approximately $30 million of cost synergies year-to-date and approximately $15 million of cost synergies quarter-to-date. To achieve expected savings, we will incur certain costs such as advisory, personnel or facility related costs. Additionally, we expect to close approximately 35 manufacturing sites over the next two years with most of the closures targeted to occur before the end of fiscal 2020.

While organizational moves are the first step, we expect it will take 9-15 months from September 30, 2019 to fully complete the integration efforts including associated process, systems and governance changes. Organizational changes include a reorganization of our business unit structure into three segments effective in the first quarter of 2020: Taste, Scent and Nutrition & Ingredients. Under the new organization, two parts of the existing Frutarom business will combine with our existing Taste business and a third business unit, Nutrition & Ingredients, will be created that will contain substantially all of the remaining parts of the existing Frutarom business.

FINANCIAL PERFORMANCE OVERVIEW

Sales

Sales in the third quarter of 2019 increased 40% on a reported basis and 41% on a currency neutral basis (which excludes the effects of changes in currency), with the effects of the Frutarom acquisition contributing 40% to both reported growth rates and currency neutral growth rates. Taste sales declined 3% on a reported basis and 2% on a currency neutral basis. Scent achieved sales growth of 2% on a reported basis and 3% on a currency neutral basis in the third quarter of 2019. Consolidated reported and currency neutral sales growth was driven by the additional sales from our acquisition of Frutarom as well as price increases (principally due to increases in raw material input costs) in Scent.

Overall, our third quarter 2019 results continued to be driven by our strong emerging market presence. From a geographic perspective, North America ("NOAM"), Europe, Africa and Middle East ("EAME"), Greater Asia ("GA") and Latin America ("LA") all delivered sales growth on a consolidated basis led by the Frutarom acquisition.

Exchange rate variations had an unfavorable impact on net sales for the third quarter of 2019 of 1.7%. 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 Margin

Gross margins decreased to 42.1% in the third quarter of 2019 from 44.1% in the 2018 period, driven principally by lower margins in our Frutarom business unit and unfavorable price versus input costs (including the net impact of the BASF supply chain disruption), which were partially offset by cost savings and productivity initiatives.

Operating profit

Operating profit increased $25.4 million to $184.7 million (14.6% of sales) in the 2019 third quarter compared to $159.3 million (17.5% of sales) in the comparable 2018 period, while operating profit as a percentage of sales decreased period over period. The third quarter of 2019 included $16.3 million of charges related to operational improvement initiatives, integration related costs, restructuring and other charges, net, losses on sale of assets, FDA mandated product recall, and compliance review costs, partially offset by Frutarom acquisition related costs. The comparable period in 2018 included $5.1 million of charges related to operational improvement initiatives, acquisition related costs, integration related costs, restructuring and other charges, net, FDA mandated product recall, and compliance review, which were partially offset by gains on sale of assets and Frutarom acquisition related costs. Excluding these charges, adjusted operating profit was $200.9 million for the third quarter of 2019, an increase from $164.4 million for the third quarter of 2018, principally driven by the inclusion of Frutarom's operating profit in the third quarter of 2019 and productivity initiatives, partially offset by volume reductions on existing business and price to input costs (including the net impact of the BASF supply chain disruption in 2018).

Foreign currency had a 1% unfavorable impact on operating profit in the third quarter of 2019 compared to a 0.3% favorable impact on operating profit in the 2018 period. Operating profit as a percentage of sales, excluding the above charges, decreased to 15.9% for the third quarter of 2019 compared to 18.1% for the third quarter of 2018, principally driven by lower margins in our Frutarom business, price to input costs (including the net impact of the BASF supply chain disruption in 2018), and lower volumes in IFF's legacy business, partially offset by productivity initiatives.

We believe that for the next two quarters, we will continue to experience pressure on input costs but the impact will be partially offset by cost synergies from our Frutarom Integration Initiative.

Interest Expense

Interest expense increased to $33.5 million in the third quarter of 2019 compared to $23.9 million in the 2018 period. This increase was primarily driven by a full quarter of recognized interest expense in 2019 related to the September 2018 debt issuances. Average cost of debt was 3.0% for the 2019 period compared to 4.6% for the 2018 period.

Loss on extinguishment of debt

Loss on extinguishment of debt was $38.8 million in the third quarter of 2018. The loss on extinguishment of debt was driven by $34.9 million make whole payment on the Senior Notes - 2007 and $3.9 million realized loss on the termination of a fair value hedge.

Cash flows

Cash, cash equivalents and restricted cash decreased $144.5 million in the nine months ended September 30, 2019, as compared to an increase of $4,906.4 million in the nine months ended September 30, 2018.

Cash flows provided by operations for the nine months ended September 30, 2019 was $383.0 million or 9.9% of sales, compared to cash flows provided by operations of $202 million or 7.3% of sales for the nine months ended September 30, 2018. The increase in cash provided by operating activities during 2019 was principally driven by higher earnings.

Overall cash, cash equivalents and restricted cash were also affected by higher capital expenditures in the current year and by the significant amount of proceeds received in 2018 related to the issuance of long-term debt ($2.9 billion) and sales of equity ($2.3 billion).

Results of Operations

(DOLLARS IN THOUSANDS EXCEPT PER SHARE AMOUNTS)	Three Months Ended September 30, 2019	Three Months Ended September 30, 2018	Change	Nine Months Ended September 30, 2019	Nine Months Ended September 30, 2018	Change
Net sales	$ 1,267,345	$ 907,548	40 %	$ 3,856,315	$ 2,758,492	40 %
Cost of goods sold	734,257	506,882	45 %	2,245,729	1,553,300	45 %
Gross profit	533,088	400,666		1,610,586	1,205,192	
Research and development (R&D) expenses	85,077	75,302	13 %	260,489	228,545	14 %
Selling and administrative (S&A) expenses	210,829	157,796	34 %	634,111	457,847	38 %
Amortization of acquisition-related intangibles	48,430	9,003	NMF	143,964	27,772	NMF
Restructuring and other charges, net	3,716	927	NMF	22,415	2,830	NMF
Losses (gains) on sales of fixed assets	372	(1,630)	(123)%	1,136	(435)	NMF
Operating profit	184,664	159,268		548,471	488,633	
Interest expense	33,497	23,914	40 %	102,662	93,755	10 %
Loss on extinguishment of debt	—	38,810	(100)%	—	38,810	(100)%
Other income, net	(5,699)	(4,158)	37 %	(15,114)	(25,389)	(40)%
Income before taxes	156,866	100,702		460,923	381,457	
Taxes on income	27,059	4,986	NMF	81,033	57,176	42 %
Net income	$ 129,807	$ 95,716		$ 379,890	$ 324,281	17 %
Net income attributable to noncontrolling interests	2,683	—	— %	7,560	—	— %
Net income attributable to IFF stockholders	$ 127,124	$ 95,716	33 %	$ 372,330	$ 324,281	15 %
Diluted EPS	$ 1.13	$ 1.17	(3)%	$ 3.30	$ 4.04	(18)%
Gross margin	42.1%	44.1%		41.8%	43.7%	
R&D as a percentage of sales	6.7%	8.3%		6.8%	8.3%	
S&A as a percentage of sales	16.6%	17.4%		16.4%	16.6%	
Operating margin	14.6%	17.5%		14.2%	17.7%	
Adjusted operating margin (1)	*15.9%*	*18.1%*		*16.1%*	*18.7%*	
Effective tax rate	17.2%	5.0%		17.6%	15.0%	
Segment net sales						
Taste	$ 423,269	$ 436,214	(3)%	$ 1,302,050	$ 1,335,773	(3)%
Scent	480,384	471,334	2 %	1,444,407	1,422,719	2 %
Frutarom	363,692	—	— %	1,109,858	—	— %
Consolidated	$ 1,267,345	$ 907,548		$ 3,856,315	$ 2,758,492	

NMF: Not meaningful

(1) Adjusted operating margin excludes $16.3 million of charges related to operational improvement initiatives, integration related costs, restructuring and other charges, net, losses on sale of assets, FDA mandated product recall, Frutarom acquisition related costs, and compliance review costs for the three months ended September 30, 2019, and excludes $5.1 million of charges related to operational improvement initiatives, acquisition related costs, integration related costs, restructuring and other charges, net, losses (gains) on sale of assets, FDA mandated product recall and Frutarom acquisition related costs, for the three months ended September 30, 2018.
For the nine months ended September 30, 2019, adjusted operating margin excludes $71.1 million of charges related to operational improvement initiatives, integration related costs, restructuring and other charges, net, losses on sale of assets, FDA mandated product recall, Frutarom acquisition related costs and compliance review costs, compared to the nine months ended September 30, 2018 adjusted operating margin which excludes $26.6 million consisting of operational improvement initiatives, acquisition related costs, integration related costs, restructuring and other charges, net, losses (gains) on sale of assets, FDA mandated product recall and Frutarom acquisition related costs. See "Non-GAAP Financial Measures" below.

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.

THIRD QUARTER 2019 IN COMPARISON TO THIRD QUARTER 2018

Sales

Sales for the third quarter of 2019 totaled $1.3 billion, an increase of 40% on a reported basis and 41% on a currency neutral basis as compared to the prior year quarter. The Frutarom acquisition contributed 40% on both a reported and currency neutral basis. Sales growth primarily reflected the additional sales from our acquisition of Frutarom, as well as price increases (principally due to increases in raw material input costs) in Scent.

Sales Performance by Segment

	% Change in Sales - Third Quarter 2019 vs. Third Quarter 2018	
	Reported	**Currency Neutral**
Taste	**-3 %**	**-2 %**
Scent	**2 %**	**3 %**
Frutarom	**N/A**	**N/A**
Total	***40 %***	***41 %***

(1) Currency neutral sales growth is calculated by translating prior year sales at the exchange rates for the corresponding 2019 period.

Taste

Taste sales in 2019 decreased 3% on a reported basis and 2% on a currency neutral basis versus the prior year period. Performance was driven by volume reductions on existing business which was partially offset by new wins (net of losses) principally in NA. Sales growth in GA was driven by new wins (net of losses) and volume increases on existing business.

Scent

Scent sales in 2019 increased 2% on a reported basis and 3% on a currency neutral basis. Sales growth primarily reflected price increases (principally due to increases in raw material input costs), which were partially offset by volume reductions on existing business.

Sales growth in the Scent business unit was led by Fine Fragrances followed by Consumer Fragrances, which were both primarily driven by new win performance (net of losses), partially offset by volume reductions on existing business.

Frutarom

Frutarom sales in 2019 were $364 million, which included approximately $293 million in sales of Flavor Compounds and approximately $71 million in sales of Ingredient product categories.

Cost of Goods Sold

Cost of goods sold, as a percentage of sales, increased 200 bps to 57.9% in the third quarter of 2019 compared to 55.9% in the third quarter of 2018, principally driven by unfavorable price versus input costs and lower margins in our Frutarom business unit, which were partially offset by cost savings and productivity initiatives.

Research and Development (R&D) Expenses

Overall R&D expenses, as a percentage of sales, decreased to 6.7% in the third quarter of 2019 versus 8.3% in the third quarter of 2018. The decrease as a percentage of sales in 2019 was principally due to lower R&D expenses in our Frutarom segment as a percentage of sales.

Selling and Administrative (S&A) Expenses

S&A expenses increased $53.0 million to $210.8 million, or 16.6% as a percentage of sales, in the third quarter of 2019 compared to $157.8 million, or 17.4% as a percentage of sales, in the third quarter of 2018.

Included in 2019 was $10.0 million of integration related costs, $0.7 million of Frutarom acquisition related costs and $3.6 million of compliance review & legal defense costs, and included in 2018 was $0.9 million of integration related costs and $14.3 million of Frutarom acquisition related costs. Excluding these costs, adjusted S&A expense increased by $53.9 million, but decreased to 15.5% of sales in 2019 compared to 15.7% of sales in 2018. The slight decrease as a percentage of sales was due to a decline in personnel related costs and the impact of our acquisition of Frutarom.

Restructuring and Other Charges

Frutarom Integration Initiative

In connection with the acquisition of Frutarom, we began to execute an integration plan that, among other initiatives, seeks to optimize its manufacturing network. As part of the Frutarom Integration Initiative, we expect to close approximately 35 manufacturing sites over the next two years with most of the closures targeted to occur before the end of fiscal 2020. During the nine months ended September 30, 2019, we announced the closure of eight facilities, of which five facilities are in Europe, Africa and Middle East, one facility in each North America, Greater Asia and Latin America regions. Since the inception of the initiative, we expensed $7.6 million to date. Total costs for the program are anticipated to be approximately $60 million including cash and non-cash items.

Amortization of Acquisition-Related Intangibles

Amortization expenses increased to $48.4 million in the third quarter of 2019 compared to $9.0 million in the third quarter of 2018 principally due to the acquisition of Frutarom.

Operating Results by Business Unit

We evaluate the performance of business units based on segment profit which is defined as operating profit before Restructuring and other charges, net; Global expenses (as discussed in Note 11 to the Consolidated Financial Statements) and certain non-recurring items, net; Interest expense; Other (expense) income, net; and Taxes on income. See Note 9 to the Consolidated Financial Statements for the reconciliation to Income before taxes.

(DOLLARS IN THOUSANDS)	Three Months Ended September 30, 2019	2018
Segment profit:		
Taste	$ 97,526	$ 96,497
Scent	83,484	87,488
Frutarom	28,257	—
Global expenses	(8,333)	(19,578)
Operational Improvement Initiatives	(712)	(344)
Acquisition Related Costs	—	1
Integration Related Costs	(10,511)	(958)
Restructuring and Other Charges, net	(3,716)	(927)
Losses (Gains) on Sale of Assets	(372)	1,630
FDA Mandated Product Recall	(250)	9,800
Frutarom Acquisition Related Costs	2,914	(14,341)
Compliance Review & Legal Defense Costs	(3,623)	—
Operating profit	$ 184,664	$ 159,268
Profit margin:		
Taste	23.0%	22.1%
Scent	17.4%	18.6%
Frutarom	7.8%	N/A
Consolidated	14.6%	17.5%

Taste Segment Profit

Taste segment profit increased $1.0 million to $97.5 million in the third quarter of 2019 (23.0% of segment sales) from $96.5 million (22.1% of sales) in the comparable 2018 period. The increase principally reflected the impact of cost savings and productivity initiatives partially offset by volume reductions on existing business.

Scent Segment Profit

Scent segment profit decreased $4.0 million to $83.5 million in the third quarter of 2019 (17.4% of segment sales) from $87.5 million (18.6% of sales) in the comparable 2018 period. The decrease principally reflected an increase in unfavorable price to input costs (including the net impact of the BASF supply chain disruption in 2018) and volume reductions on existing business, partially offset by cost savings and productivity initiatives.

Frutarom Segment Profit

Frutarom segment profit was 7.8% of segment sales in the third quarter of 2019.

Global Expenses

Global expenses represent corporate and headquarters-related expenses which include legal, finance, human resources and R&D and other administrative expenses that are not allocated to an individual business unit. In the third quarter of 2019, Global expenses were $8.3 million compared to $19.6 million during the third quarter of 2018. The decrease was principally driven by gains from our currency hedging program, and to a lesser extent, higher incentive compensation expense in 2018.

Interest Expense

Interest expense increased to $33.5 million in the third quarter of 2019 compared to $23.9 million in the 2018 period driven by a full quarter of recognized interest expense in 2019 related to the September 2018 debt issuances.

Loss on extinguishment of debt

Loss on extinguishment of debt was $38.8 million in the third quarter of 2018. The loss on extinguishment of debt was driven by $34.9 million make whole payment on the Senior Notes - 2007 and $3.9 million realized loss on the termination of a fair value hedge.

Income Taxes

The effective tax rate for the three months ended September 30, 2019 was 17.2% compared with 5.0% for the three months ended September 30, 2018. The quarter-over-quarter increase was largely due to higher repatriation costs, the absence of the release of a state valuation allowance which benefited 2018 and an $8.0 million benefit recorded in the third quarter of 2018 to adjust the provisional “toll charge” associated with the transition to the new territorial tax system under U.S. tax reform, partially offset by a more favorable mix of earnings (including the impact of acquisition related costs).

Excluding the $3.7 million tax benefit associated with the pre-tax operational improvement initiatives, acquisition related costs, integration related costs, restructuring and other charges, net, losses (gains) on sale of assets, FDA mandated product recall, Frutarom acquisition related costs, and compliance review & legal defense costs, the adjusted effective tax rate for three months ended September 30, 2019 was 18.1%. Excluding the $15.6 million tax benefit associated with the pre-tax operational improvement initiatives, integration related costs, restructuring and other charges, net, losses (gains) on sale of assets, FDA mandated product recall, U.S. tax reform, and Frutarom acquisition related costs, the adjusted effective tax rate for the third quarter of 2018 was 14.0%. The quarter-over-quarter increase in the adjusted tax rate was largely due to higher repatriation costs and the absence of the release of a state valuation allowance which benefited the third quarter of 2018, partially offset by a more favorable mix of earnings.

FIRST NINE MONTHS 2019 IN COMPARISON TO FIRST NINE MONTHS 2018

Sales

Sales for the first nine months of 2019 totaled $3.9 billion, an increase of 40% from the 2018 period. On a currency neutral basis sales increased 43%. The Frutarom acquisition contributed 40% on a reported basis and 41% on a currency neutral basis. Sales growth reflected the additional sales from our acquisition of Frutarom, as well as new win performance (net of losses) and price increases (principally due to increases in raw material input costs) in Scent.

Sales Performance by Segment

	% Change in Sales - First Nine Months 2019 vs. First Nine Months 2018	
	Reported	**Currency Neutral**
Taste	**-3 %**	**0%**
Scent	**2 %**	**4%**
Frutarom	**N/A**	**N/A**
Total	***40 %***	***43%***

(1) Currency neutral sales growth is calculated by translating prior year sales at the exchange rates for the corresponding 2019 period.

Taste

Taste sales in 2019 decreased 3% on a reported basis and was flat on a currency neutral basis versus the prior year period. Sales declined primarily driven by the effect of foreign currency. Currency neutral sales were flat primarily due to new win performance (net of losses) and price increases (principally due to increases in raw material input costs) offset by volume reductions on existing business.

On a reported and currency neutral basis, sales grew mid-single digit in GA, primarily driven by new win performance (net of losses) and price increases (principally due to increases in raw material input costs).

Scent

Scent sales in 2019 increased 2% on a reported basis and 4% on a currency neutral basis. 2019 sales growth reflected price increases (principally due to increases in raw material input costs).

Sales growth in the Scent business unit was led by Fine Fragrances followed by Consumer Fragrances. Fine and Consumer Fragrances were both primarily driven by new win performance (net of losses), partially offset by volume reductions on existing business, whereas Fragrance Ingredients was principally driven by price increases (principally due to increases in raw material input costs), partially offset by volume reductions on existing business.

Frutarom

Frutarom sales in 2019 were $1,109.9 million, which included approximately $863.6 million in sales of Flavor Compounds and approximately $246.3 million in sales of Ingredient product categories.

Cost of Goods Sold

Cost of goods sold, as a percentage of sales, increased 190 bps to 58.2% in the first nine months of 2019 compared to 56.3% in the 2018 period, principally driven by higher raw material costs as a percentage of sales.

Research and Development (R&D) Expenses

Overall R&D expenses, as a percentage of sales, decreased to 6.8% in the first nine months of 2019 versus 8.3% in the 2018 period. The decrease as a percentage of sales in 2019 was principally due to lower R&D expenses in our Frutarom segment as a percentage of sales.

Selling and Administrative (S&A) Expenses

In the first nine months of 2019, S&A expenses increased to $634.1 million from $457.8 million, and 16.4% as a percentage of sales, in the 2019 period compared to 16.6% in the 2018 period. The $176.3 million increase was principally due to the addition of the Frutarom business as well as expenses of $35.6 million related to the integration of our Frutarom acquisition, $3.6 million in compliance review & legal defense costs, and $0.9 million of Frutarom acquisition related costs in 2019. Excluding these expenses as well as $27.2 million of acquisition and Frutarom acquisition related costs in 2018, adjusted S&A expenses increased by $163.2 million, which was 15.4% as a percentage of sales in the 2019 period compared to 15.6% as a percentage of sales in 2018.

Restructuring and Other Charges

Frutarom Integration Initiative

In connection with the acquisition of Frutarom, we began to execute an integration plan that, among other initiatives, seeks to optimize its manufacturing network. As part of the Frutarom Integration Initiative, we expect to close approximately 35 manufacturing sites over the next two years with most of the closures targeted to occur before the end of fiscal 2020. During the nine months ended September 30, 2019, we announced the closure of eight facilities, of which five facilities are in Europe, Africa and Middle East, one facility in each North America, Greater Asia and Latin America regions. Since the inception of the initiative, we expensed $7.6 million to date. Total costs for the program are anticipated to be approximately $60 million including cash and non-cash items.

2019 Severance Charges

During the nine months ended September 30, 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 $14.8 million to date. Total costs for the program are anticipated to be approximately $20 million.

2017 Productivity Program

In connection with 2017 Productivity Program, the Company recorded $24.5 million of charges related to personnel costs and lease termination costs since the program's inception through 2019 to date. Total costs for the program are anticipated to be approximately $25 million.

Amortization of Acquisition-Related Intangibles

Amortization expenses increased to $144.0 million in the first nine months of 2019 compared to $27.8 million in the 2018 period. The increase was principally driven by the impact of the Frutarom acquisition in 2018.

Operating Results by Business Unit

We evaluate the performance of business units based on segment profit which is defined as operating profit before Restructuring and other charges, net, Global expenses (as discussed in Note 11 to the Consolidated Financial Statements) and certain non-recurring items, net, Interest expense, Other (expense) income, net and Taxes on income. See Note 11 to the Consolidated Financial Statements for the reconciliation to Income before taxes.

(DOLLARS IN THOUSANDS)	Nine Months Ended September 30, 2019	Nine Months Ended September 30, 2018
Segment profit:		
Taste	$ 304,062	$ 317,666
Scent	260,543	261,545
Frutarom	94,841	—
Global expenses	(39,892)	(63,975)
Operational Improvement Initiatives	(1,652)	(1,773)
Acquisition Related Costs	—	519
Integration Related Costs	(36,825)	(1,951)
Restructuring and Other Charges, net	(22,415)	(1,837)
Losses (Gains) on Sale of Assets	(1,136)	435
FDA Mandated Product Recall	(250)	4,800
Frutarom Acquisition Related Costs	(5,182)	(26,796)
Compliance Review & Legal Defense Costs	(3,623)	—
Operating profit	$ 548,471	$ 488,633
Profit margin:		
Taste	23.4%	23.8%
Scent	18.0%	18.4%
Frutarom	8.5%	N/A
Consolidated	14.2%	17.7%

Taste Segment Profit

Taste segment profit decreased to $304.1 million in the first nine months of 2019, or 23.4% as a percentage of sales, compared to $317.7 million, or 23.8% as a percentage of sales, in the comparable 2018 period. The decrease in segment profit principally reflected lower volumes net of new business wins and unfavorable price versus input costs and mix, partially offset by the benefit of cost savings and productivity initiatives.

Scent Segment Profit

Scent segment profit decreased to $260.5 million in the first nine months of 2019 compared to $261.5 million in the comparable 2018 period. Scent segment profit as a percentage of sales decreased to 18.0% in the first nine months of 2019 compared to 18.4% in the comparable 2018 period. Segment profit as a percentage of sales included the impact of unfavorable price versus input costs, partially offset by the benefit of cost savings and productivity initiatives.

Global Expenses

Global expenses represent corporate and headquarters-related expenses which include legal, finance, human resources and R&D and other administrative expenses that are not allocated to an individual business unit. In the first nine months of 2019, Global expenses were $39.9 million compared to $64.0 million during the first nine months of 2018. The decrease was principally driven by gains from our currency hedging program, and to a lesser extent, lower incentive compensation expense in 2019.

Interest Expense

Interest expense increased to $102.7 million in the first nine months of 2019 compared to $93.8 million in the 2018 period, primarily driven by a full quarter of recognized interest expense in 2019 related to the September 2018 debt issuances, partially offset by $47.1 million of fees and interest incurred in the third quarter of 2018 in connection with the acquisition of Frutarom. Average cost of debt was 2.9% for the 2019 period compared to 3.9% for the 2018 period.

Loss on extinguishment of debt

Loss on extinguishment of debt was $38.8 million in the first nine months of 2018. The loss on extinguishment of debt is driven by $34.9 million make whole payment on the Senior Notes - 2007 and $3.9 million realized loss on the termination of a fair value hedge.

Other (Income) Expense, Net

Other (income) expense, net decreased by $10.3 million to $15.1 million of income in the first nine months of 2019 versus $25.4 million of income in the comparable 2018 period. The decrease was primarily driven by less gains on our pension assets year-over-year.

Income Taxes

The effective tax rate for the nine months ended September 30, 2019 was 17.6% compared with 15.0% for the nine months ended September 30, 2018. The year-over-year increase was largely due to higher repatriation costs, the absence of the remeasurement of loss provisions which benefited 2018 and an $8 million benefit recorded in the third quarter of 2018 to adjust the provisional “toll charge” associated with the transition to the new territorial tax system under U.S. tax reform, partially offset by a more favorable mix of earnings (including the impact of integration relates costs, restructuring charges and acquisition related costs).

Excluding the $16.1 million tax benefit associated with the pre-tax operational improvement initiatives, integration related costs, restructuring and other charges, net, losses (gains) on sale of assets, FDA mandated product recall, Frutarom acquisition related costs, and compliance review & legal defense costs, the adjusted effective tax rate for the nine months ended September 30, 2019 was 18.4%. For the nine months ended September 30, 2018, the adjusted effective tax rate was 17.0% excluding the $23.4 million tax benefit associated with the pre-tax restructuring, operational improvement initiatives, losses on sales of fixed assets, FDA mandated product recall costs, U.S. tax reform, and Frutarom acquisition related costs, which were partially offset by the tax charge associated with acquisition-related costs and the impact of the U.S. tax reform. The year-over-year increase was largely due to higher repatriation costs and the absence of the remeasurement of loss provisions which benefited 2018, partially offset by a more favorable mix of earnings.

Liquidity and Capital Resources

Cash and Cash Equivalents

We had cash and cash equivalents of $494.9 million at September 30, 2019 compared to $634.9 million at December 31, 2018, of which $400.1 million of the balance at September 30, 2019 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 September 30, 2019, we have a deferred tax liability of $43.9 million for the effect of repatriating the funds to the U.S. This balance consists of $43.9 million attributable to IFF non-U.S. subsidiaries.

Restricted Cash

Restricted cash of $9.2 million relates, principally, to amounts escrowed related to certain payments to be made to former Frutarom option holders in future periods.

Cash Flows Provided By Operating Activities

Cash flows provided by operations for the nine months ended September 30, 2019 was $383.0 million or 9.9% of sales, compared to cash provided by operations of $202.0 million or 7.3% of sales for the nine months ended September 30, 2018. The increase in cash provided by operating activities during 2019 was principally driven by higher earnings.

Working capital (current assets less current liabilities) totaled $1.5 billion at September 30, 2019 and $1.8 billion at December 31, 2018.

We entered into certain factoring agreements in the U.S. and The Netherlands under which we can factor up to approximately $100 million in receivables. The new factoring agreements supplement our existing factoring programs that are sponsored by certain customers. Under all of the arrangements, we sell the receivables on a non-recourse basis to unrelated financial institutions and account for the transactions as a sale of receivables. The applicable receivables are removed from our Consolidated Balance Sheet when the cash proceeds are received. As of September 30, 2019 and December 31, 2018, we had removed approximately $204 million and $128 million of receivables, respectively. The impact on cash provided by operations from participating in these programs increased approximately $76 million for the nine months ended September 30, 2019 compared to a decrease of approximately $11 million for the nine months ended September 30, 2018. The cost of participating in these programs was approximately $1.7 million and $0.8 million for the three months ended September 30, 2019 and 2018, respectively, and $4.7 million and $2.7 million for the nine months ended September 30, 2019 and 2018, respectively.

Cash Flows Used In Investing Activities

Net investing activities during the first nine months of 2019 used $157.8 million compared to $102.3 million in the prior year period. Additions to property, plant and equipment were $160.4 million during the first nine months of 2019 compared to $102.4 million in the first nine months of 2018. The increase in cash used in investing activities during 2019 was further driven by acquisition activities in the current year, which were offset by proceeds from the disposal of assets and proceeds from the termination of existing cross currency swap instruments.

In light of our requirement to relocate one of our Fragrance Ingredients facilities in China, the ongoing construction of new facilities in India and Indonesia, and capital requirements to integrate our recently acquired Frutarom business, we expect that capital spending in 2019 will be about 4-5% of sales (net of potential grants and other reimbursements from government authorities).

Frutarom Integration Initiative

We expect to incur costs related to the Frutarom Integration Initiative. Initially, integration projects will primarily be focused on driving cost synergies in the manufacturing and creative networks, procurement and overhead functions. Restructuring costs associated with these initiatives are expected to include employee-related cash costs, including severance, retirement and other termination benefits, fixed asset write-downs and contract termination and other costs. In addition, other costs associated with the Frutarom Integration Initiative are expected to include advisory and personnel costs for managing and implementing integration projects.

Total restructuring costs for the program are expected to be approximately $60 million including cash and non-cash items. During the first nine months of 2019, we incurred $7.6 million in costs related to the closure of eight sites. The costs principally related to severance and fixed asset write-downs, with the remainder comprising costs such as contract termination and relocation.

Additionally, during the first nine months of 2019, we recorded $36.8 million in advisory services, retention bonuses and performance stock awards costs related to the integration of the Frutarom acquisition.

We expect to achieve $145 million of synergy targets, including approximately $50 million of cost synergies by the end of 2019. As of the third quarter 2019, we have realized approximately $30 million of cost synergies year-to-date and approximately $15 million of cost synergies quarter-to-date. Additionally, we expect to close approximately 35 manufacturing sites over the next two years with most of the closures targeted to occur before the end of fiscal 2020.

Cash Flows Used In Financing Activities

Cash used in financing activities in the first nine months of 2019 was $365.8 million compared to a $4,821.1 million inflow in the comparable 2018 period, principally driven by proceeds from equity sales and borrowings in the prior year and higher dividends paid in the current year, partially offset by lower repayments on debt in the current year.

We paid dividends totaling $233.5 million in the 2019 period. We declared a cash dividend per share of $0.75 in the third quarter of 2019 that was paid on October 4, 2019 to all shareholders of record as of September 23, 2019.

Our capital allocation strategy is primarily focused on debt repayment to maintain our investment grade rating. We will also prioritize capital investment in our businesses to support the strategic long term plans. The company is also committed to maintaining its history of paying a dividend to investors determined by our Board of Directors (“Board”) at its discretion based on various factors, and finally will be very selective in pursuing value creating strategic M&A over the near term.

We currently have a board approved stock repurchase program with a total remaining value of $279.7 million. On May 7, 2018, we announced that we were suspending our share repurchases until our deleveraging target is met following our acquisition of Frutarom.

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.

We supplement short-term liquidity with access to capital markets, mainly through bank credit facilities. The revolving credit facility is used as a backstop for our commercial paper program.

We expect to contribute a total of $4.2 million to our U.S. pension plans and a total of $19.3 million to our Non-U.S. plans during 2019. During the nine months ended September 30, 2019, there were no contributions made to the qualified U.S. pension plans, $13.0 million of contributions were made to the non-U.S. pension plans, and $3.4 million of benefit payments were made with respect to our non-qualified U.S. pension plan. We also expect to contribute $3.9 million to our postretirement benefits other than pension plans during 2019. During the nine months ended September 30, 2019, $2.2 million of contributions were made to postretirement benefits other than pension plans.

The Amended Credit Facility and Term Loan contain various covenants, limitations and events of default customary for similar facilities for similarly rated borrowers, including the requirement for us to maintain, at the end of each fiscal quarter, a ratio of net debt for borrowed money to adjusted EBITDA in respect of the previous 12-month period, including the pro forma effect of the acquisition of Frutarom, of not more than 4.5 to 1.0, which was reduced to 4.25 to 1.0 as of the end of September 30, 2019, and will be reduced to 4.0 to 1.0 as of the end of March 31, 2020 and to 3.5 to 1.0 as of the end of March 31, 2021.

As of September 30, 2019 we had no outstanding borrowings under our $1 billion Amended Credit Facility and $283 million outstanding for the Term Loan. The amount that we are able to draw down under the Amended Credit Facility is limited by financial covenants as described in more detail below. As of September 30, 2019, our draw down capacity was $948.0 million under the Amended Credit Facility.

At September 30, 2019, we were in compliance with all financial and other covenants, including the net debt to adjusted EBITDA ratio. At September 30, 2019 our Net Debt/adjusted EBITDA[1] ratio was 3.42 to 1.0 as defined by the credit facility agreements, well below the financial covenants of existing outstanding debt. Failure to comply with the financial and other covenants under our debt agreements would constitute default and would allow the lenders to accelerate the maturity of all indebtedness under the related agreement. If such acceleration were to occur, we would not have sufficient liquidity available to repay the indebtedness. We would likely have to seek amendments under the agreements for relief from the financial covenants or repay the debt with proceeds from the issuance of new debt or equity, and/or asset sales, if necessary. We may be unable to amend the agreements or raise sufficient capital to repay such obligations in the event the maturities are accelerated.

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(1) Adjusted EBITDA and Net Debt, which are non-GAAP measures used for these covenants, are calculated in accordance with the definition in the debt agreements. In this context, these measures are used solely to provide information on the extent to which we are in compliance with debt covenants and may not be comparable to adjusted EBITDA and Net Debt used by other companies. Reconciliations of adjusted EBITDA to net income and net debt to total debt are as follows:

(DOLLARS IN MILLIONS)	**Twelve Months Ended September 30, 2019**
Net income	*$ 385.3*
Interest expense	*141.5*
Income taxes	*131.9*
Depreciation and amortization	*313.3*
Specified items [1]	*134.0*
Non-cash items [2]	*34.3*
Adjusted EBITDA	*$ 1,140.3*

(1) Specified items for the 12 months ended September 30, 2019 of $134.0 million, consisted of operational improvement initiatives, acquisition related costs, integration related costs, restructuring and other charges, net, FDA mandated product recall, Frutarom acquisition related costs, and compliance review & legal defense costs.
(2) Non-cash items represent all other adjustments to reconcile net income to net cash provided by operations as presented on the Statement of Cash Flows, including gain on disposal of assets and stock-based compensation.

(DOLLARS IN MILLIONS)		**September 30, 2019**
Total debt	$	*4,393.0*
Adjustments:		
Cash and cash equivalents		*494.9*
Net debt	$	*3,898.1*

As discussed in Note 15 to the Consolidated Financial Statements, at September 30, 2019, 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.

Critical Accounting Policies and Use of Estimates

In connection with the purchase price allocation for our acquisition of Frutarom, numerous assumptions were made including those related to future revenue growth, the achievement of synergy targets and the applicable rate to use in the discounted cash flows that form a key part of the valuation. The recoverability of the goodwill is principally dependent on future growth in revenues and from synergies related to plant and supply chain consolidation. The goodwill may be impaired if the Company fails to achieve the anticipated growth in revenues or the expected synergies or if applicable interest rates increase.

New Accounting Standards

Please 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, (ii) adjusted gross margin, (iii) adjusted operating profit and adjusted operating margin, (iv) adjusted selling and administrative expenses, and (v) adjusted effective tax rate. We also provide the non-GAAP measures adjusted EBITDA and 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.

Currency neutral metrics eliminate the effects that result from translating international currency to U.S. dollars. We calculate currency neutral numbers by comparing current year results to the prior year results restated at exchange rates in effect for the current year based on the currency of the underlying transaction.

Adjusted gross margin exclude operational improvement initiatives, integration related costs, FDA mandated product recall, and Frutarom acquisition related costs.

Adjusted operating profit and adjusted operating margin exclude operational improvement initiatives, acquisition related costs, integration related costs, restructuring and other charges, net, losses (gains) on sale of assets, FDA mandated product recall, Frutarom acquisition related costs, and compliance review & legal defense costs.

Adjusted selling and administrative expenses exclude acquisition related costs, integration related costs, Frutarom acquisition related costs, and compliance review & legal defense costs.

Adjusted effective tax rate exclude operational improvement initiatives, acquisition related costs, restructuring and other charges, net, Frutarom acquisition related costs, integration related costs, gains on sales of assets, FDA mandated product recall, and U.S. tax reform.

Net Debt to Combined Adjusted EBITDA is the leverage ratio used in our credit agreement and defined as Net Debt (which is long-term debt less cash and cash equivalents) divided by Combined Adjusted EBITDA. However, as Adjusted EBITDA for these purposes was calculated in accordance with the provisions of the credit agreement, it may differ from the calculation used for other purposes.

A. Reconciliation of Non-GAAP Metrics

Reconciliation of Gross Profit

	Three Months Ended September 30,	
(DOLLARS IN THOUSANDS)	**2019**	**2018**
Reported (GAAP)	$ 533,088	$ 400,666
Operational Improvement Initiatives (a)	711	398
Integration Related Costs (c)	187	18
FDA Mandated Product Recall (e)	250	(9,800)
Frutarom Acquisition Related Costs (g)	(3,603)	—
Adjusted (Non-GAAP)	$ 530,633	$ 391,282

Reconciliation of Selling and Administrative Expenses

	Three Months Ended September 30,	
(DOLLARS IN THOUSANDS)	**2019**	**2018**
Reported (GAAP)	$ 210,829	$ 157,796
Acquisition Related Costs (b)	—	1
Integration Related Costs (c)	(10,047)	(915)
Frutarom Acquisition Related Costs (g)	(691)	(14,341)
Compliance Review & Legal Defense Costs (h)	(3,623)	—
Adjusted (Non-GAAP)	$ 196,468	$ 142,541

Reconciliation of Operating Profit

	Three Months Ended September 30,	
(DOLLARS IN THOUSANDS)	**2019**	**2018**
Reported (GAAP)	$ 184,664	$ 159,268
Operational Improvement Initiatives (a)	712	344
Acquisition Related Costs (b)	—	(1)
Integration Related Costs (c)	10,511	958
Restructuring and Other Charges, net (d)	3,716	927
Losses (Gains) on Sale of Assets	372	(1,630)
FDA Mandated Product Recall (e)	250	(9,800)
Frutarom Acquisition Related Costs (g)	(2,914)	14,341
Compliance Review & Legal Defense Costs (h)	3,623	—
Adjusted (Non-GAAP)	$ 200,934	$ 164,407

Reconciliation of Net Income

	Three Months Ended September 30,							
	2019				2018			
	Income before taxes	Taxes on income (j)	Net Income Attributable to IFF (k)	Diluted EPS (l)	Income before taxes	Taxes on income (j)	Net Income Attributable to IFF	Diluted EPS
Reported (GAAP)	$ 156,866	$ 27,059	$ 127,124	$ 1.13	$ 100,702	$ 4,986	$ 95,716	$ 1.17
Operational Improvement Initiatives (a)	712	243	469	—	345	125	220	—
Acquisition Related Costs (b)	(3,371)	—	(3,371)	(0.03)	(1)	1	(2)	—
Integration Related Costs (c)	10,511	2,347	8,164	0.07	959	237	722	0.01
Restructuring and Other Charges, net (d)	3,716	811	2,905	0.03	927	228	699	0.01
Losses (Gains) on Sale of Assets	372	98	274	—	(1,630)	(387)	(1,243)	(0.02)
FDA Mandated Product Recall (e)	250	57	193	—	(9,800)	(2,344)	(7,456)	(0.09)
U.S. Tax Reform (f)	—	—	—	—	—	8,151	(8,151)	(0.10)
Frutarom Acquisition Related Costs (g)	(2,914)	(715)	(2,199)	(0.02)	54,994	9,561	45,433	0.56
Compliance Review & Legal Defense Costs (h)	3,623	827	2,796	0.02	—	—	—	—
Redemption value adjustment to EPS (i)	—	—	—	(0.02)	—	—	—	—
Adjusted (Non-GAAP)	$ 169,765	$ 30,727	$ 136,355	$ 1.20	$ 146,496	$ 20,558	$ 125,938	$ 1.54

(a) For 2019, represents accelerated depreciation related to a plant relocation in India and China. For 2018, represents accelerated depreciation related to a plant relocation in India and Taiwan.

(b) For 2019, represents adjustments to the fair value for an equity method investment in Canada which we began consolidating in the second quarter.

(c) For 2019, represents costs related to the integration of the Frutarom acquisition, principally advisory services. For 2018, represents costs related to the integration of David Michael and Frutarom.

(d) For 2019, represents costs primarily related to the Frutarom Integration Initiative and the 2019 Severance Charges program. For 2018, represents severance costs related to the 2017 Productivity Program.

(e) For 2019, represents additional claims that management will pay to co-packers. For 2018, represents recoveries from the supplier for the third quarter, partially offset by final payments to the customer made for the affected product in the first quarter.

(f) Represents charges incurred related to enactment of certain U.S. tax legislation changes in December 2017.

(g) Represents transaction-related costs and expenses related to the acquisition of Frutarom. For 2019, amount primarily relates to a measurement period adjustment to the amount of the inventory "step-up" recorded. For 2018, amount primarily includes $28.8 million of bridge loan commitment fees partially offset by $25.3 million net mark-to-market gains on deal-contingent interest rate derivatives included in Interest expense; $34.9 million make whole payment on the Senior Notes - 2007 and $3.9 million realized loss on a fair value hedge included in Loss on extinguishment of debt; $1.9 million realized gain on a foreign currency derivative included in Other income; and $14.3 million of transaction costs included in administrative expenses.

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

(i) Represents the adjustment to EPS related to the excess of the redemption value of certain redeemable noncontrolling interests over their existing carrying value.

(j) The income tax expense (benefit) on non-GAAP adjustments is computed in accordance with ASC 740 using the same methodology as the GAAP provision of income taxes. Income tax effects of non-GAAP adjustments are calculated based on the applicable statutory tax rate for each jurisdiction in which such charges were incurred, except for those items which are non-taxable for which the tax expense (benefit) was calculated at 0%. For fiscal year 2019, these non-GAAP adjustments were not subject to foreign tax credits or valuation allowances, but to the extent that such factors are applicable to any future non-GAAP adjustments we will take such factors into consideration in calculating the tax expense (benefit). For amortization, the tax benefit has been calculated based on the statutory rate on a country by country basis.

(k) For 2019, net income is reduced by income attributable to noncontrolling interest of $2.7M.

(l) The sum of these items does not foot due to rounding.

Reconciliation of Gross Profit

(DOLLARS IN THOUSANDS)	Nine Months Ended September 30, 2019	2018
Reported (GAAP)	$ 1,610,586	$ 1,205,192
Operational Improvement Initiatives (a)	1,651	1,254
Integration Related Costs (c)	508	18
FDA Mandated Product Recall (e)	250	(4,800)
Frutarom Acquisition Related Costs (g)	4,247	—
Adjusted (Non-GAAP)	$ 1,617,242	$ 1,201,664

Reconciliation of Selling and Administrative Expenses

(DOLLARS IN THOUSANDS)	Nine Months Ended September 30, 2019	2018
Reported (GAAP)	$ 634,111	$ 457,847
Acquisition Related Costs (b)	—	519
Integration Related Costs (c)	(35,647)	(915)
Frutarom Acquisition Related Costs (g)	(937)	(26,796)
Compliance Review & Legal Defense Costs (h)	(3,623)	
Adjusted (Non-GAAP)	$ 593,904	$ 430,655

Reconciliation of Operating Profit

(DOLLARS IN THOUSANDS)	Nine Months Ended September 30, 2019	2018
Reported (GAAP)	$ 548,471	$ 488,633
Operational Improvement Initiatives (a)	1,652	1,773
Acquisition Related Costs (b)	—	(519)
Integration Related Costs (c)	36,825	1,951
Restructuring and Other Charges, net (d)	22,415	1,837
Losses (Gains) on Sale of Assets	1,136	(435)
FDA Mandated Product Recall (e)	250	(4,800)
Frutarom Acquisition Related Costs (g)	5,182	26,796
Compliance Review & Legal Defense Costs (h)	3,623	—
Adjusted (Non-GAAP)	$ 619,554	$ 515,236

Reconciliation of Net Income

(DOLLARS IN THOUSANDS)	Nine Months Ended September 30, 2019				2018			
	Income before taxes	Taxes on income (j)	Net Income Attributable to IFF (k)	Diluted EPS	Income before taxes	Taxes on income (j)	Net Income Attributable to IFF	Diluted EPS (l)
Reported (GAAP)	$ 460,923	$ 81,033	$ 372,330	$ 3.30	$ 381,457	$ 57,176	$ 324,281	$ 4.04
Operational Improvement Initiatives (a)	1,652	561	1,091	0.01	1,774	561	1,213	0.02
Acquisition Related Costs (b)	(3,371)	—	(3,371)	(0.03)	(519)	(134)	(385)	—
Integration Related Costs (c)	36,825	8,270	28,555	0.25	1,952	237	1,715	0.02
Restructuring and Other Charges, net (d)	22,415	5,394	17,021	0.16	1,837	443	1,394	0.02
Losses (Gains) on Sale of Assets	1,136	290	846	0.01	(435)	(141)	(294)	—
FDA Mandated Product Recall (e)	250	57	193	—	(4,800)	(1,148)	(3,652)	(0.05)
U.S. Tax Reform (f)	—	—	—	—	—	7,502	(7,502)	(0.09)
Frutarom Acquisition Related Costs (g)	5,182	672	4,510	0.04	91,983	16,104	75,879	0.95
Compliance Review & Legal Defense Costs (h)	3,623	827	2,796	0.02	—	—	—	—
Redemption value adjustment to EPS (i)	—	—	—	(0.02)	—	—	—	—
Adjusted (Non-GAAP)	$ 528,635	$ 97,104	$ 423,971	$ 3.74	$ 473,249	$ 80,600	$ 392,649	$ 4.89

(a) For 2019, represents accelerated depreciation related to a plant relocation in India and China. For 2018, represents accelerated depreciation related to a plant relocation in India and Taiwan.

(b) For 2019, represents adjustments to the fair value for an equity method investment in Canada which we began consolidating in the second quarter. For 2018, represents adjustments to the contingent consideration payable for PowderPure, and transaction costs related to Fragrance Resources and PowderPure within Selling and administrative expenses.

(c) For 2019, represents costs related to the integration of the Frutarom acquisition, principally advisory services. For 2018, represents costs related to the integration of David Michael and Frutarom.

(d) For 2019, represents costs primarily related to the Frutarom Integration Initiative and the 2019 Severance Charges program. For 2018, represents severance costs related to the 2017 Productivity Program.

(e) For 2019, represents additional claims that management will pay to co-packers. For 2018, represents recoveries from the supplier for the third quarter, partially offset by final payments to the customer made for the affected product in the first quarter.

(f) Represents charges incurred related to enactment of certain U.S. tax legislation changes in December 2017.

(g) Represents transaction-related costs and expenses related to the acquisition of Frutarom. For 2019, amount primarily includes amortization for inventory "step-up" costs and transaction costs. For 2018, amount primarily includes $39.4 million of bridge loan commitment fees included in Interest expense; $34.9 million make whole payment on the Senior Notes - 2007 and $3.9 million realized loss on a fair value hedge included in Loss on extinguishment of debt; $12.5 million realized gain on a foreign currency derivative included in Other income; and $26.8 million of transaction costs included in administrative expenses.

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

(i) Represents the adjustment to EPS related to the excess of the redemption value of certain redeemable noncontrolling interests over their existing carrying value.

(j) The income tax expense (benefit) on non-GAAP adjustments is computed in accordance with ASC 740 using the same methodology as the GAAP provision of income taxes. Income tax effects of non-GAAP adjustments are calculated based on the applicable statutory tax rate for each jurisdiction in which such charges were incurred, except for those items which are non-taxable for which the tax expense (benefit) was calculated at 0%. For fiscal year 2019, these non-GAAP adjustments were not subject to foreign tax credits or valuation allowances, but to the extent that such factors are applicable to any future non-GAAP adjustments we will take such factors into consideration in calculating the tax expense (benefit). For amortization, the tax benefit has been calculated based on the statutory rate on a country by country basis.

(k) For 2019, net income is reduced by income attributable to noncontrolling interest of $7.6M.

(l) The sum of these items does not foot due to rounding.

B. Foreign Currency Reconciliation

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Operating Profit:				
% Change - Reported (GAAP)	**15.9%**	**6.9%**	**12.2%**	**13.4%**
Items impacting comparability [(1)]	6.3%	(3.3)%	8.0%	(5.9)%
% Change - Adjusted (Non-GAAP)	**22.2%**	**3.6%**	**20.2%**	**7.5%**
Currency Impact	1.1%	(0.3)%	1.9%	(3.3)%
% Change Year-over-Year - Currency Neutral Adjusted (Non-GAAP)*	**23.3%**	**3.3%**	**22.1%**	**4.2%**

[(1)] Includes items impacting comparability of $16.3 million and $5.1 million for the three months ended September 30, 2019 and September 30, 2018, respectively, and $26.6 million and $48.4 million for the nine months ended September 30, 2019 and September 30, 2018, respectively.
* Currency neutral amount is calculated by translating prior year amounts at the exchange rates used for the corresponding 2019 period. Currency neutral operating profit also eliminates the year-over-year impact of cash flow hedging.

Cautionary Statement Under the Private Securities Litigation Reform Act of 1995

Statements in this Form 10-Q, that are not historical facts or information, are “forward-looking statements” within the meaning of The Private Securities Litigation Reform Act of 1995. Such forward-looking statements are based on management’s current assumptions, estimates and expectations and include statements concerning (i) expected cost synergies from the integration of Frutarom of approximately $50 million by the end of 2019, (ii) the status and preliminary results of our ongoing investigations regarding improper payments made in Frutarom businesses operating principally in Russia and the Ukraine and the expected impact of such investigations and legal proceedings on our results of operations or financial condition, (iii) expected capital expenditures in 2019, (iv) expected costs associated with our various restructuring activities, (v) our margin expectations for 2019, (vi) expected cash flow and availability of capital resources to fund our operations and meet our debt service requirements, (vii) our ability to continue to generate value for, and return cash to, our shareholders, and (viii) anticipated contributions to our pension plans and other post-retirement programs in 2019. These forward-looking statements should be evaluated with consideration given to the many risks and uncertainties inherent in our business that could cause actual results and events to differ materially from those in the forward-looking statements. Certain of such forward-looking information may be identified by such terms as “expect”, “anticipate”, “believe”, “intend”, “outlook”, “may”, “estimate”, “should”, “predict” and similar terms or variations thereof. Such forward-looking statements are based on a series of expectations, assumptions, estimates and projections about the Company, are not guarantees of future results or performance, and involve significant risks, uncertainties and other factors, including assumptions and projections, for all forward periods. Our actual results may differ materially from any future results expressed or implied by such forward-looking statements. Such factors include, among others, the following:

- risks related to the integration of the Frutarom business, including whether we will realize the benefits anticipated from the acquisition in the expected time frame;
- unanticipated costs, liabilities, charges or expenses resulting from the Frutarom acquisition;
- risks relating to the Company’s ongoing investigations into improper payments made in Frutarom businesses principally operating in Russia and the Ukraine, including expenses incurred with respect to the investigations, the cost of any remedial measures or compliance programs arising out of the investigations, legal proceedings or government investigations that may arise relating to the subject of the Company’s investigations, and the outcome of any such legal or government investigations, such as the imposition of fines, penalties, orders, or injunctions;
- the impact of the failure to comply with U.S. or foreign anti-corruption and anti-bribery laws and regulations, including with respect to the Company’s ongoing investigations into improper payments made in Frutarom businesses principally operating in Russia and the Ukraine;
- the impact of the outcome of legal claims, regulatory investigations and litigation, including any that may arise out of the Company’s ongoing investigations into improper payments made in Frutarom businesses principally operating in Russia and the Ukraine;
- the increase in our leverage resulting from the additional debt incurred to pay a portion of the consideration for Frutarom and its impact on our liquidity and ability to return capital to its shareholders;

- our ability to successfully market to its expanded and decentralized Taste and Frutarom customer base;
- our ability to effectively compete in its market and develop and introduce new products that meet customers' needs;
- our ability to successfully develop innovative and cost-effective products that allow customers to achieve their own profitability expectations;
- the impact of the disruption in our manufacturing operations;
- the impact of a disruption in our supply chain, including the inability to obtain ingredients and raw materials from third parties;
- volatility and increases in the price of raw materials, energy and transportation;
- 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;
- the impact of any failure or interruption of our key information technology systems or a breach of information security;
- our ability to react in a timely and cost-effective manner to changes in consumer preferences and demands;
- our ability to establish and manage collaborations, joint ventures or partnership that lead to development or commercialization of products;
- our ability to benefit from its investments and expansion in emerging markets;
- the impact of currency fluctuations or devaluations in the principal foreign markets in which it operates;
- economic, regulatory and political risks associated with our international operations;
- the impact of global economic uncertainty on demand for consumer products;
- the inability to retain key personnel;
- our ability to comply with, and the costs associated with compliance with, U.S. and foreign environmental protection laws;
- our ability to realize the benefits of its cost and productivity initiatives;
- our ability to successfully manage its 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;
- our ability to protect its 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 future impairment of our tangible or intangible long-lived assets;
- the impact of changes in federal, state, local and international tax legislation or policies, including the enacted Tax Cuts and Jobs Act, with respect to transfer pricing and state aid, and adverse results of tax audits, assessments, or disputes;
- the effect of potential government regulation on certain product development initiatives, and restrictions or costs that may be imposed on the Company or its operations as a result; and
- the impact of the United Kingdom's expected departure from the European Union.

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.

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 2018 Form 10-K for additional information regarding factors that could affect our results of operations, financial condition and cash flow.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

There are no material changes in market risk from the information provided in our 2018 Form 10-K.

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 September 30, 2019 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

On October 4, 2018, we completed the acquisition of Frutarom. We are in the process of integrating Frutarom into our systems and control environment. As a result of these integration activities, certain controls will be evaluated and may be changed.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS.

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

Ongoing Investigations

IFF's investigation of allegations that improper payments to representatives of customers were made in Russia and Ukraine has been substantially completed. Such allegations have been substantiated, and IFF has confirmed that key members of Frutarom's senior management at the time were aware of such payments. IFF has taken appropriate remedial actions, including replacing senior management in relevant locations, and believes that such improper customer payments have stopped.

In addition to IFF's standard compliance integration activities, IFF has also conducted a robust secondary review of Frutarom's operations in certain other jurisdictions, including those that it deems "high risk". These reviews supplement IFF's existing global compliance initiatives that were implemented at Frutarom in connection with the closing of the Frutarom transaction. These secondary reviews were conducted with the assistance of outside legal and accounting firms. These reviews are substantially complete.

IFF has confirmed in these investigations that total affected sales represented less than 1% of IFF's and Frutarom's combined net sales for 2018. The impact of the reviews including the costs associated with them, to date, have not been and are not anticipated to be material to IFF's results of operations or financial condition. In addition, no evidence has been uncovered suggesting that any of these compliance matters had any connection to the United States.

IFF is committed to the highest standards of ethics and integrity and has strict compliance policies in place that are regularly reviewed and updated.

Securities Class Action

On August 12, 2019, Marc Jansen filed a putative securities class action against IFF, its Chairman and CEO, and its CFO, in the United States District Court for the Southern District of New York. The lawsuit, which 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, alleges that defendants made materially false and misleading statements or omissions concerning IFF's acquisition of Frutarom, the integration of the two companies, and IFF's financial reporting and results. The lawsuit brings claims under Section 10(b) of the Securities Exchange Act of 1934 and SEC Rule 10b-5 against all defendants, and under Section 20(a) of the Securities Exchange Act of 1934 against the individual defendants, and was filed on behalf of a putative class of persons and entities who purchased or otherwise acquired IFF securities between May 7, 2018 and August 5, 2019. The complaint seeks an award of unspecified compensatory damages, costs, and expenses. On October 11, 2019, four lead plaintiff motions were filed. On October 24 and 25, 2019, two movants withdrew their motions for appointment as lead plaintiff. On October 25, 2019, the other two movants filed oppositions to the competing lead plaintiff motions.

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. Both assert claims under the U.S. federal securities laws against IFF, its Chairman and CEO, and its CFO. One also asserts claims under the Israeli Securities Act-1968 against IFF, as well as against Frutarom and certain former Frutarom officers and directors, and asserts claims under the Israeli Companies Act-1999 against certain former Frutarom officers and directors.

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.

Environmental

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

We have been identified as a PRP at seven facilities operated by third parties at which investigation and/or remediation activities may be ongoing. We analyze our potential liability on at least a quarterly basis. We accrue for environmental liabilities when they are probable and estimable. We estimate our share of the total future cost for these sites to be less than $3 million.

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

During the third quarter of 2019, in connection with the completion of the measurement period for finalizing the opening balance of Frutarom, the Company recorded approximately $5 million in reserves related to certain environmental liabilities. The reserves were based on the determination that the loss was probable as of October 4, 2018 and updated as of September 30, 2019.

Other

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

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

None.

ITEM 6. EXHIBITS.

31.1	Certification of Andreas Fibig pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Richard A. O'Leary pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32	Certification of Andreas Fibig and Richard A. O'Leary pursuant to 18 U.S.C. Section 1350 as adopted pursuant to the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extensions Schema
101.CAL	XBRL Taxonomy Extension Calculation Linkbase
101.DEF	XBRL Taxonomy Extension Definition Linkbase
101.LAB	XBRL Taxonomy Extension Label Linkbase
101.PRE	XBRL Taxonomy Extension Presentation Linkbase
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:	November 4, 2019	By:	/s/ Andreas Fibig
			Andreas Fibig
			Chairman of the Board and Chief Executive Officer
Dated:	November 4, 2019	By:	/s/ Richard A. O'Leary
			Richard A. O'Leary
			Executive Vice President and Chief Financial Officer

Exhibit 31.1

CERTIFICATION

I, Andreas Fibig, 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: November 4, 2019

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

Exhibit 31.2

CERTIFICATION

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

1. I have reviewed this 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: November 4, 2019

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

Exhibit 32

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

In connection with the Quarterly Report on Form 10-Q of International Flavors & Fragrances Inc. (the "Company") for the quarterly period ended September 30, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Andreas Fibig, as Chief Executive Officer, and Richard A. O'Leary, as Chief Financial Officer, each hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of his knowledge:

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

and

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

By:	/s/ Andreas Fibig
Name:	Andreas Fibig
Title:	Chairman of the Board and Chief Executive Officer
Dated:	November 4, 2019

By:	/s/ Richard A. O'Leary
Name:	Richard A. O'Leary
Title:	Executive Vice President and Chief Financial Officer
Dated:	November 4, 2019