International Flavors and Fragrances, February 2012[1]

International Flavors and Fragrances (*Ticker: IFF*) is a 113-year old US company that develops and manufactures a wide variety of flavor and fragrance products. With operations in 33 countries and 5,600 employees worldwide, IFF's 36,000 products are used by a variety of buyers to impart or improve flavor or fragrance in a wide range of consumer products.

IFF's Fragrance products are sold to makers of perfumes, cosmetics, personal care products, hair care products, deodorants, soaps, detergents, fabric care, and air care products. The company's customer base in Fragrances – which includes 'functional fragrance' purchasers such as P&G, Unilever and L'Oréal, and 'fine fragrance' purchasers such as Estée Lauder, Clinique and Elizabeth Arden – is concentrated, with sales to the top five accounting for approximately 55% of Fragrance sales in 2011.

The company's Flavor products are sold to makers of beverages, prepared foods, dairy and confectionary products, pharmaceuticals, as well as firms in the food service industry. IFF's customer base in Flavors – which includes most major global food and beverages companies – is somewhat fragmented, with sales to the top ten accounting for about two-fifth of business unit sales.

In the fiscal year ended December 2011, with 4,000 customers globally, IFF produced sales of $2.79B, reported operating income (i.e., earnings before income taxes, or 'EBIT') of $441M[2] and net income of $267M (see *Exhibit 1* for IFF's summary financials). Compounded annual growth rate (CAGR) in sales has been 5.8% during the prior five years.

Segment-wise, 52% of IFF's sales (and 46% of operating income) came from Fragrances, while 48% of sales (and 54% of operating income) came from Flavors (see *Exhibit 2* for data by business unit). In the recent past, revenue from the Flavors segment has grown faster than from fragrances: 3-year CAGR in Flavors sales was 7%, while it was 5% in Fragrances.

IFF's sales comes from a diversified geographic base. In 2011, North America accounted for 24% of sales, but the largest revenue base, accounting for 34%, was the Europe/Africa/Middle East (EAME) geographic segment. Greater Asia, including India, accounted for 27%, and the remaining 15% came from Latin America. The split between 'developed' and 'emerging' markets was 56% and 44%, respectively, in 2011. However, IFF's management expected over half of all revenue to come from emerging markets by the year 2015.[3]

The company's major publicly-traded global competitors are Swiss-based Givaudan ($4,161M in 2011 sales), and the German company Symrise ($2,052M in 2011 sales. Together, these three companies

---

[1] This case was developed by **Professor Anant K. Sundaram** as a basis for class discussion. Case data are based on publicly available information. Some facts may have been simplified for pedagogic purposes. I am grateful to Kevin Berryman, CFO and Richard O'Leary, Controller for their comments. Any remaining errors are attributable solely to the casewriter. *Contact:* anant.sundaram@dartmouth.edu (T: 603-646-6248). © 2012.

[2] The 2011 'Reported' Operating Income includes a $33.5M charge related to patent litigation settlement. Excluding this, as well as $13M in restructuring charges incurred in 2011, *Adjusted* Operating Income in 2011 was $474M. Similar adjustments result in $364M and $426M for 2009 and 2010, respectively.

[3] Looking ahead to the next few years, IFF's management forecasts sales growth rates in developed markets to be 1% - 3% per year, and in emerging markets, 4% - 6%, averaging approximately 4% across both geographic segments. Achieving this growth would require 5% of sales to be spent on capital expenditure.

account for 51% of an estimated global market of $9B for Flavors, and 55% of an $8B market for Fragrances. (See *Exhibit 3* for comparative data on IFF and the two key competitors).[4]

Of the 13 analysts covering the company, in February 2012, seven had a 'buy' or 'outperform' rating for IFF, and the remaining six rated it a 'hold.'

The view expressed by Jeffrey Zekauskas of J. P. Morgan was typical: he saw IFF as a 'high return-on-invested-capital business with an excellent balance sheet and good emerging market exposure' whose 'long-term sales and operating growth characteristics' were appealing. However, he expressed strong concerns about the slowing growth in fragrances and 'raw material headwinds' pressuring gross margins that, along with a strengthening dollar, could lower forecasted operating profits and growth.

Notwithstanding these caveats, Zekauskas rated IFF an 'overweight,' with a $60 price target (IFF's stock was trading at $57 per share in mid-February 2012; see *Exhibit 3* also for some relevant stock price and capital markets data for the company).[5]

In conjunction with a comprehensive review of its strategic plan, IFF's management recently instituted 'economic profit' as a fundamental operating metric within IFF, with the goal of '...instilling financial discipline to understand where value is being created or destroyed.' In addition to the typical focus on return on invested capital (ROIC), the metric attempts to focus managers' attention on the 'cost of capital' of a business activity: it asks managers to adopt the investors' view that assets used to produce operating income in a business do not come free, but rather, use up capital that could be deployed elsewhere. In other words, there is a not-easily-visible 'opportunity cost' to the use of capital that managers must be aware of, in every major decision they make.[6]

This economic profit analysis was done at a fairly detailed level, all the way down to customers, regions, and categories. With the improvement opportunities identified in IFF's worldwide operations at that level of granularity, management hoped that the result would be the addition of $50M in operating income from underperforming businesses in the next 3 to 5 years.

---

[4] If a large privately-held competitor – Firmenich of Switzerland – were also included, the top four firms would account for over two-thirds of the worldwide business in Flavors and Fragrances. As a privately-held firm, however, no public financial data are available for Firmenich.

[5] In mid-February 2012, 30-year US treasury bonds yield 3.1%, and equity market risk premium ('MRP') in US markets is estimated to be 6%.

[6] In general terms, 'economic profit' (also sometimes called 'economic value added' or *EVA*) is defined as $[(EBIT)\times(1-T)] - [(WACC)\times(IC)]$, where *EBIT* is the operating income, *T* the tax rate, *WACC* the cost of capital associated with an activity, and *IC* the invested capital in that particular activity.

Exhibit 1
IFF: Key Financial Items
(US$M, unless otherwise noted; rounding errors possible)

	2009	*2010*	*2011*
Net Sales	2326	2623	2788
Cost of goods sold	1392	1530	1683
R&D	185	219	220
SG&A	391	447	444*
Other operating expense	18	11	13
Operating income (EBIT) – Reported	340	416	428
*Adjusted operating income***	*364*	*426*	*474*
Interest expense	62	49	45
Non-operating expense	2	8	10
Income before taxes	277	360	374
Taxes	81	96	107
Net income	196	264	267
Dividends	79	81	90
Cash & marketable securities	80	131	88
Receivables	444	452	472
Inventories	445	532	544
Other current assets	214	210	212
Property, plant & equipment	501	538	608
Goodwill & other intangibles	721	714	708
Other assets	295	295	332
Total assets	2645	2872	2966
Payables	161	200	209
Short-term debt	77	134	117
Other current liabilities	246	327	239
Long-term (LT) debt	935	788	778
Other long-term liabilities	453	420	515
Book equity	772	1003	1106
Total Liabilities and Equity	2645	2872	2966
Capital expenditure	67	106	128
Depreciation & amortization	79	79	75
No. of shares outstanding (*M*)	79.1	80.4	81.5
Earnings per share ($; *diluted*)	2.46	3.26	3.26
Adjusted earnings per share	*2.68*	*3.37*	*3.74*

* *The $33.5M in patent litigation charge is included in the SG&A for 2011.*

** *'Adjusted Operating Income' is a Non-GAAP measure, but one that analysts sometimes also consider. See Footnote 2 for an explanation.*

*** *'Adjusted EPS' is a Non-GAAP measure that reflects Net Income based on the Adjusted Operating Income.*

Exhibit 2
IFF: Business Unit Data
(US$M, unless otherwise noted; rounding errors possible)

	2010	*2011*
Flavors		
Sales	1203.0	1338.2
Operating profit – Reported	242.5	249.3
*Operating profit – Adjusted**	*242.5*	*284.2*
Operating margin (%)**	20.2%	18.6%
Growth in sales: 2010-11	-	+11.2%
Growth in operating profit: 2010-11**	-	+ 2.8%
Fragrances		
Sales	1420.0	1449.8
Operating profit – Reported	234.9	215.3
*Operating profit – Adjusted**	*245.0*	*226.6*
Operating margin (%)**	17.8%	14.9%
Growth in sales: 2010-11	-	+ 2.1%
Growth in operating profit: 2010-11**	-	– 8.3%

* *Includes restructuring and patent litigation settlement charges.*

** *Based on 'Reported' operating income.*

Exhibit 3
IFF and Publicly Traded Competitors
(All data as of end-December 2011, unless otherwise noted; all '%' data shown are percent of sales; rounding errors possible)

	IFF	**Givaudan***	**Symrise***
Net sales *($M)*	2788	4161	2052
% Gross margin	41.5%**	42.6%	41.3%
% EBITDA margin	18.5%	20.2%	19.3%***
% Operating (EBIT) margin	15.8%	11.3%	14.2%***
% Profit (net income) margin	9.6%	6.4%	9.3%
% Cash and marketable securities	3.2%	13.9%	7.5%
% Capital expenditure	4.6%	4.8%	3.0%
% Operating net working capital	26.0%	28.5%	25.7%
% Total assets	106.4%	171.5%	132.5%
% Total debt	32.1%	51.0%	37.9%
Profit/Book equity (ROE)	0.241	0.072	0.160
Profit/Sales	0.096	0.064	0.093
Sales/Assets	0.940	0.583	0.754
Assets/Book equity	2.679	1.922	2.296
Stock price *($)*	52.4	956.6	26.7
Market capitalization *($M)*	4272	8697	3157
Market-to-book	3.9x	2.5x	3.5x
Price-to-earnings	16.0x	34.5x	21.5x
Equity beta	0.88	NA	NA
Credit rating	Baa1****	NA	NA

** Givaudan is a Swiss company (currency: CHF), and Symrise is German (currency: €). Comparable US$ numbers derived using end-of-2011 exchange rates of CHF1 = US$1.0629 and €1 = US$1.2955. Some figures may not be directly comparable given differences between US GAAP and IFRS reporting rules and requirements.*

*** Adjusts for freight charges (currently included in CGS) moved to SG&A, for comparability.*

**** Adjusts for interest cost of unfunded pension liability added to Operating Expenses, for comparability.*

***** Moody's. Bonds rated **Baa1** yield 270 basis points (2.7%) over long-term treasury bond yields.*

NA = Not Available.