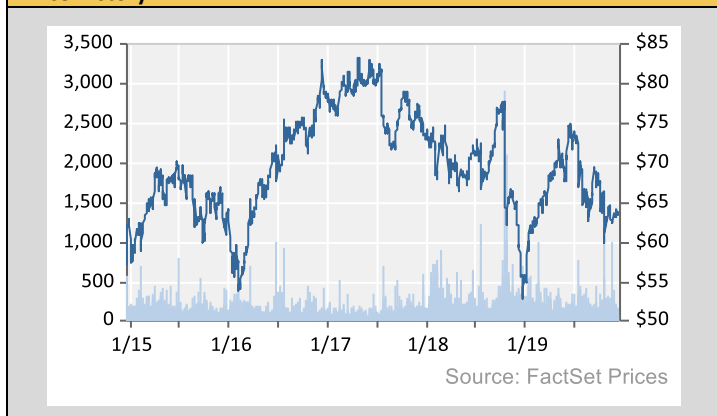


**Recommendation: Hold**

Current Price	\$63.89	---	Ticker	SXT
1 Year Bear	\$62	-2%	Sh. Out.(M)	4.23
1 Year Base	\$79	24%	M.Cap.(\$M)	2704
1 Year Bull	\$92	44%	EV (\$M)	3,334

**Price History**

	5Y	3Y	2Y	LTM	YTD	3M	1M
Return	13%	-18%	-15%	12%	15%	-6%	3%

**Financials**

	2015	2016	2017	2018	2019	2020F	2021F
Sales(\$B)	1.38	1.38	1.36	1.39	1.31	1.33	1.31
Gr. %	-5.0%	0.5%	-1.5%	1.8%	-5.3%	1.0%	-1.0%
Cons.	-	-	-	-	-	-0.4%	6.8%
Ind.	-9.7%	-10.9%	16.8%	36.2%	-29.2%	1.7%	3.5%
EPS	\$2.33	\$2.84	\$2.05	\$3.71	\$3.49	\$3.61	\$3.66
Gr. %	54.3%	21.9%	-27.8%	81.0%	-5.9%	3.4%	1.4%
Cons.	-	-	-	-	-	3.1%	3.4%
Ind.	-6.0%	15.6%	-32.6%	73.5%	-30.3%	12.3%	12.1%

**Ratios**

	2015	2016	2017	2018	2019	2020F	2021F
NPM	7.80%	9.10%	6.60%	11.30%	11.30%	11.30%	11.30%
Ind.	9.2%	11.8%	9.0%	11.3%	8.1%		
ROE	11.3%	15.0%	10.6%	18.4%	17.2%	17.2%	16.8%
Ind.	21.7%	23.5%	7.1%	12.1%	10.2%		
ROA	6.2%	7.50%	5.30%	8.90%	8.10%	8.20%	8.00%
Ind.	6.8%	7.1%	3.3%	6.0%	5.8%		
A T/O	0.79	0.82	0.80	0.78	0.72	0.72	0.71
A/E	2.03	2.01	2.01	2.07	2.12	2.11	2.10

**Valuation**

	2015	2016	2017	2018	2019	2020F	2021F
P/E	27.19	27.87	36.03	15.08	22.30	21.00	18.90
Ind.	14.97	14.46	27.30	11.82	15.30	13.62	12.15
P/S	2.11	2.55	2.36	1.71	2.10		
P/B	3.33	4.16	3.71	2.74	3.00		
P/CF	22.67	15.84	17.84	28.42	15.9		
EV/EBITDA	13.32	15.60	14.84	11.88	15.00		
D/P	1.7%	1.4%	1.7%	2.4%	2.3%		

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## Basic Materials, Specialty Chemicals

**Sensient Technologies Corp.****Summary**

I recommend a hold rating with a target of \$79.30. While Sensient is positioning itself to take advantage of a sizable and increasing natural ingredients market, so are competing firms. Sales growth has been negative or flat in recent years and it is not clear when gains from acquired technologies and cost savings will be realized. The stock is slightly undervalued based on relative and DCF analysis.

**Key Drivers**

- Secular trends toward natural ingredients: Management recognizes potential in the rapidly growing demand for natural ingredients. Sensient seeks to capture more of this market by integrating technologies of its recent natural-focused acquisitions, such as in its “seed to shelf” initiative.
- Divestitures and restructuring: The firm incurred \$189 million in restructuring costs between 2014-2017. Once planned efficiencies and synergies take effect, the firm hopes to realize \$30 million in savings annually, or \$0.71 in EPS.
- Exposure to international market concerns: Nearly half of SXT’s revenue comes from customers outside of North America. This geographic diversification provides some benefit, but also exposes the company to international economic, political, and other risks.
- Competition: SXT is among the smallest players in its highly competitive industry. Companies such as IFF are employing similar acquisition strategies and are similarly poised to take advantage of trends towards natural ingredients.

**Valuation**

Using a relative valuation approach, Sensient appears to be undervalued in comparison to its industry/competitors. DCF analysis implies that the stock is worth \$78. A combination of the approaches suggests that Sensient is somewhat undervalued, as the stock’s value is about \$79 and the shares trade at \$63.89.

**Risks**

- Natural ingredient demand may not meet expectations
- Gains from acquisitions and restructuring may not be realized
- Company faces stiff competition

## Company Overview

Sensient Technologies Corporation (SXT) is an international maker of flavors, fragrances, and colors. Headquartered in Milwaukee, WI, Sensient operates in over 150 countries through its three divisions- the Flavors & Fragrances Group, the Color Group, and the Asia Pacific Group. The company started as a distillery and seller of yeast, but after decades of acquisitions and divestitures has evolved into a supplier of diversified ingredients to food and beverage companies around the world. In addition to having international customers, Sensient has a physical presence in and sources raw materials from many different countries.

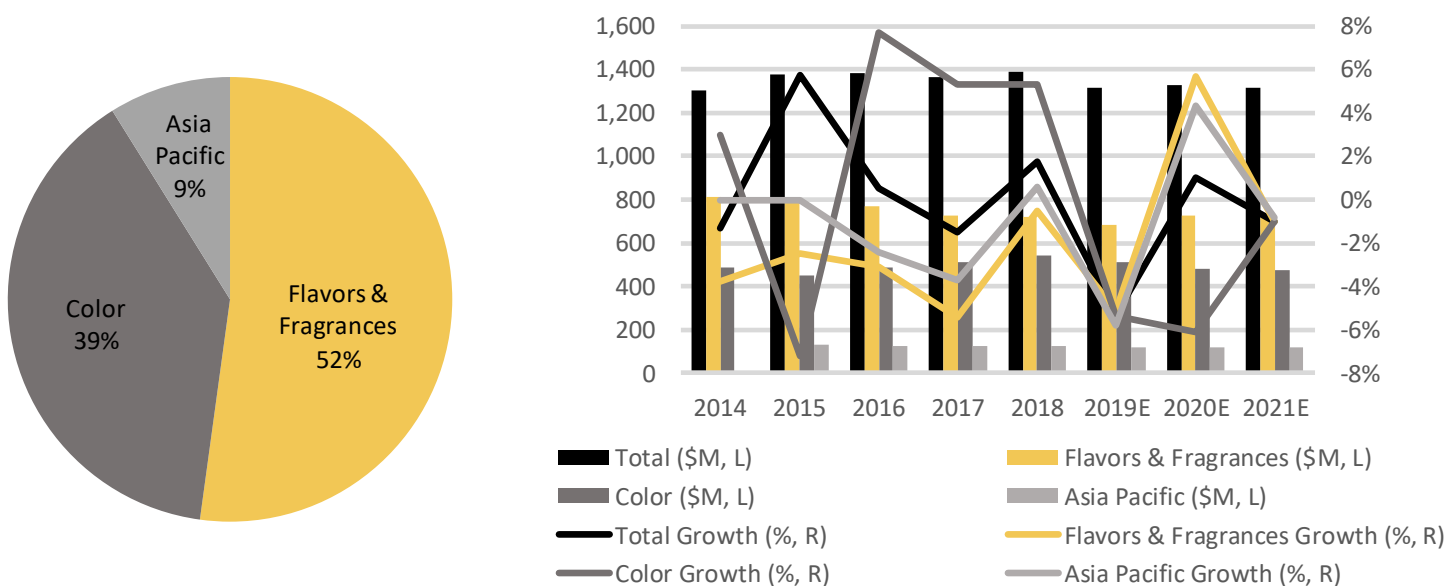
Sensient organizes its operations into three areas. Flavors & Fragrances and the Color Group are managed on a product basis. The Asia Pacific Group is managed on a geographic basis.

- 1) More than half of the company's revenue comes from the Flavors & Fragrances Group. Major product lines of this group include flavor enhancers, extracts, dehydrated vegetables, essential oils, and bionutrients. In 2018, the company broke down group sales into the following business divisions: 23 percent Sweet, 18 percent Savory, 8 percent Beverage, 30 percent Natural Ingredients, 14 percent Fragrance, and 7 percent Bionutrients. Such a food product-focused product mix contributes to SXT's position as a defensive stock. Over the past five years, Flavors & Fragrances revenue growth has been slightly negative to flat.
- 2) The Color Group manufactures both natural and synthetic food and beverage colors, industrial colors, inks, and products for pharmaceutical and cosmetic applications. The Food & Beverage business division accounted for 55 percent of 2018 Color Group revenue. The remaining sales were 28 percent Cosmetic, 12 percent Inks & Industrial, and 5 percent Pharmaceutical Excipients. The Color Group is responsible for 39 percent of Sensient's revenue and has had positive growth for the past three years. It is currently the company's fastest growing group in terms of revenue, growing at a rate of 5.3 percent from 2017 to 2018.
- 3) The Asia Pacific Group concentrates on promoting the firm's offerings from the Flavors & Fragrances and Color Groups in Asia. It accounts for nine percent of the firm's revenue. Sensient started reporting sales for this segment in 2015; its growth rate was negative for the first few years but is flat as of 2018.

The Flavors & Fragrances Group provides more than half of Sensient's revenue.

In an effort to increase efficiencies and cut costs, Sensient Technologies embarked on a restructuring plan in 2014. This has involved the company consolidating business operations where appropriate and divesting itself of businesses and facilities that are unprofitable or otherwise do not fit with the firm's longer-term visions. Management seeks to drive growth through innovation and shifting toward more specialized, proprietary offerings. As part of this movement, Sensient has continued to evolve by acquiring companies. Of particular note are the recent purchases of Mazza Innovation Ltd. and GlobeNatural in 2018. Relative to annual revenue and Sensient's market value, these purchases were not expensive. The acquisition of Mazza Innovation cost \$19.8 million, which in 2018 was 1.43 percent of sales and 0.78 percent of the firm's market capitalization. GlobeNatural cost Sensient \$10.8 million and was 0.84 percent of sales and 0.46 percent of the market cap. By incorporating technology from these companies, management plans to respond to changing consumer tastes by expanding the firm's presence as a supplier of natural ingredients. Plus, the purchases were made at a lower P/S than the existing business and accretive to sales per share right away.

Figures 1 & 2: 2018 Revenue by segment (left); revenue (\$M) vs YoY revenue growth rate since 2014 (right)



Source: FactSet

## Business/Industry Drivers

Though multiple factors may contribute to Sensient Technologies’ future success, the following are the most important business drivers:

- 1) Secular trends toward natural ingredients
- 2) Divestitures and restructuring
- 3) Exposure to international market concerns
- 4) Competitor analysis
- 5) Macroeconomic trends

### Secular Trends Toward Natural Ingredients

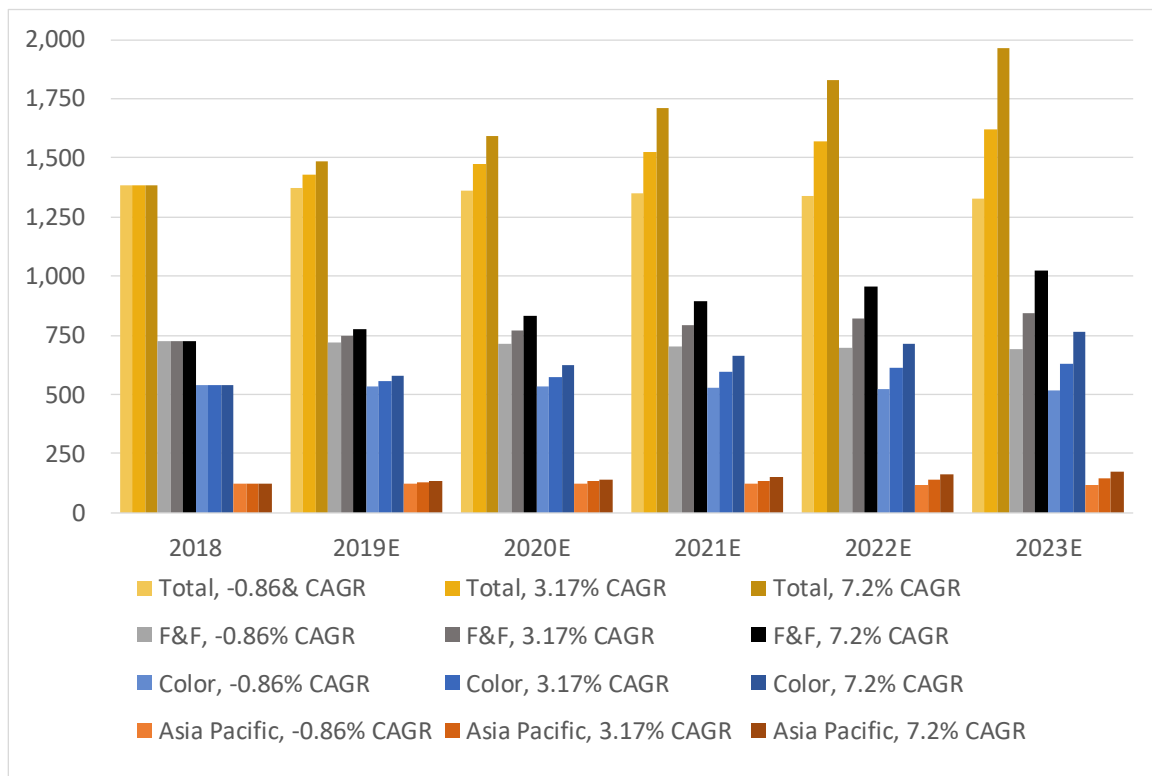
Sensient Technologies’ history has been a story of growth by acquisition; this approach holds true today. Since the markets in which SXT sells its products are very competitive and can only grow so fast themselves, acquiring other companies and implementing their technology has been a key part of management’s strategy for growth. In recent years, the firm has had a specific focus on acquiring natural-focused companies and integrating their competitive advantages into Sensient’s existing businesses. However, it should be noted that the firm’s revenue growth has been flat to negative in recent years, so gains from these acquisitions may have not yet been realized. Sensient’s 2018 sales are down 5.3 percent from the prior year and down 5.5 percent from a peak of \$1.47 billion in 2013.

SXT seeks to innovate by acquiring companies rather than only investing in R&D directly.

In 2018, Sensient paid \$19.8 million to purchase Mazza Innovation Limited. Rather than planning to simply absorb its existing business and revenues, the company acquired Mazza largely for its clean extraction technology called “The PhytoClean™ Method.” This technology promises to allow extraction of a wide range of compounds in an environmentally safe way, sometimes using only water. With recent secular trends towards customers seeking “natural” consumer goods, implementing this “clean” technology across its existing product segment lines could help Sensient Technologies to grow revenues and market share across the board. Proposed uses of The PhytoClean™ Method include extracting ingredients to sell to makers of cosmetics, food products, and even pharmaceuticals.

SXT made another natural-focused acquisition just several months prior to purchasing Mazza. It paid \$10.8 million in cash for the natural color business and certain net assets of Lima, Peru based GlobeNatural. Similar to the acquisition of Mazza Innovation, Sensient made this purchase to further its involvement in the production of natural ingredients. CEO Paul Manning has stated that 80 percent of food products around the world will be made with natural food colorings and that management expects this market to continue to grow. Integrating the GlobeNatural purchase, now called Sensient Natural Colors Peru S.A.C., into existing operations is a strategic part of SXT’s venture deeper into making natural ingredients, in this case specifically in what the firm calls its “seed to shelf” initiative.

**Figure 3: Revenue growth (\$M) by division and projected CAGR, 2018-2023E**



Source: FactSet, Analyst Computations

Because SXT is already established in so many markets and geographic regions, it does not face the same barriers to entry as a new ingredient manufacturer hoping to start its business in making natural ingredients would. A report by Market Research Future proposed that the demand for natural consumer food products with “clean” ingredients is poised to continue to grow rapidly during 2017-2023 at a CAGR of 7.2 percent. While the firm may not realize that same rate of growth in its natural-focused businesses, it is positioning itself well to take advantage of this market trend in many segments. Sensient’s overall sales CAGR from 2014-2018 was -0.86 percent.

The chart above shows projected sales growth by division given different assumed compound annual growth rates: -0.86 percent, the firm’s current CAGR; 7.2 percent, the natural consumer food products market’s proposed growth rate; and 3.17 percent, a growth rate between the two. Even if the company were to achieve the median CAGR instead of its recent relatively flat growth rate, SXT would significantly improve its sales figures. As a mature company in a stable industry, it is unsurprising that Sensient has not had tremendous growth in recent years, but it does still lag behind that of its competitors. For example, from 2014 to 2018, International Flavors and Fragrances (IFF) and Ingredion (INGR), two of Sensient

Even if SXT is only able to realize a fraction of natural consumer goods market growth, the impact could help turn around recent stagnant overall sales growth.

Technologies' direct US-based competitors, had sales CAGR of 5.19 percent and 0.95 percent, respectively.

The proposed doubling of Sensient Natural Extraction Inc. sales would result in a 2.8% increase in overall Color Group revenue.

Sensient's new technologies can be utilized in the cleaner extraction and manufacture of food and beverage flavors and colors, bio nutrients, extracts, cosmetic colors, essential oils, and more. David Rigg, former Director of Global Food Marketing of Sensient Food Colors, put forth that revenues for the Mazza Innovation acquisition, now known as Sensient Natural Extraction Inc., could double in the next few years. At the time of the acquisition in 2018, the segment was only responsible for less than 5 percent of Sensient Food Colors' revenue. Sensient Food Colors itself is a subdivision of the Color Group; it encompasses the manufacture of food and beverage colors. In 2018, the firm reported Food & Beverage Colors sales of \$303.4 million. The Color Group's sales were \$540 million, making the Food Colors subdivision responsible for 56.2 percent of the group's total sales. The Color Group had 39 percent of overall sales in 2018, so growth in the natural colors area may have a noticeable impact on the firm as a whole. Doubling Sensient Natural Extraction's sales alone would grow the Color Group's 2018 revenue by 2.8 percent and SXT's 2018 total revenue by 1.1 percent.

Sensient Natural Extraction Ltd. revenue as 5 percent of Food Colors revenue =  $\$303.4M \times 5\% = \$15.17M$   
 Color Group revenue growth with doubled Natural Extraction revenue =  $\$15.17M / \$540M = 2.8\%$   
 Total revenue growth with doubled Natural Extraction revenue =  $\$15.17M / \$1386.29M = 1.1\%$

However, rather than being limited to food product markets, this subdivision's potential applications and management's hopes reflect the overall firm's strategy for driving future growth. Over the longer term, I anticipate Sensient's investments into natural-related technology to be an integral part of the company's overall sales. In the next few years, it is reasonable to expect that the company could achieve overall sales growth similar to the 1.1 percent proposed above if acquired technology is successfully utilized and growth in demand for naturally derived ingredients continues. Still, the company faces stiff competition and pricing pressure, so these gains may be offset by declines elsewhere.

#### Divestitures and Restructuring

In addition to growing revenues by expanding into natural ingredient markets, Sensient Technologies has also sought to improve its financial position by undergoing restructuring from 2014 to 2017. Through this effort, Sensient hoped to increase efficiencies and cut its costs. Reported after tax restructuring costs, broken down by year, were as follows: in 2014, \$65.5 million/\$1.34 per share; in 2015, \$33.5 million/\$0.73 per share; in 2016, \$21.1 million/\$0.47 per share; and in 2017, \$42.5 million/\$0.96 per share. The company reported no restructuring costs in 2018.

Management projected savings from restructuring of \$30M per year but has fallen short.

Management advises that the intended overall target savings of \$30 million per year has not yet been realized. At the end of the program in 2017, only a total of \$22 million, (\$0.50 in 2017,) was saved since the program's inception in 2014. I believe company leadership is taking a long-term view regarding profitability. The recorded financial costs combined with the opportunity costs of carrying out this initiative may have caused profits to be suppressed in recent years. SXT reported no restructuring related costs in 2018. If the firm does not incur such costs going forward and proposed savings and synergies come to fruition, the company will be positioned to slightly increase profitability. At a time where overall sales have been down or flat, this improvement could at least mean a sustainable higher level of net margin.

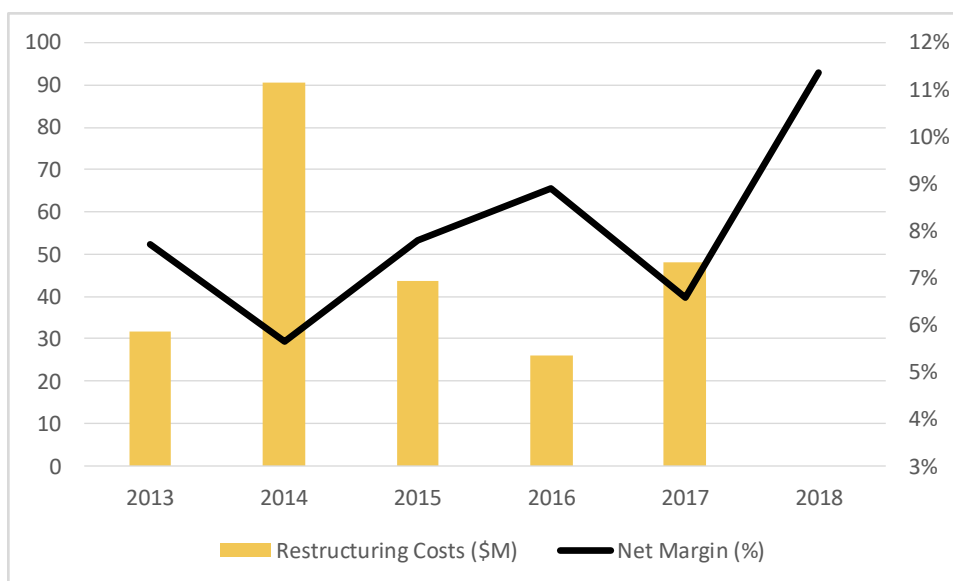
While Sensient is notably active in and optimistic about acquisitions, management also realizes when benefit can be had from divesting business components that are sub-optimal, no longer profitable, or don't generally fit in with the company's future visions. As part of the restructuring plan, SXT closed facilities in several cities both in the United States and abroad. Of particular note is the 2017 sale of its unprofitable European Natural Ingredients business at a loss of \$21.6 million, which is nearly as much as the \$22 million the firm saved during implementation of its restructuring program. Sensient did not give a

breakdown of how little revenue the division generated, but in its 2017 10-K stated, “the Company had concluded that the European Natural Ingredients business had not generated significant profits for several years and did not fit with the Company’s long-term strategic plan.”

From 2014-2017, SXT incurred restructuring costs of \$189M, exceeding the expected \$120-\$130M for that total program period.

The restructuring program sought to save the company money through ridding itself of underperforming operations, consolidation, and other improved efficiencies. At the outset of the restructuring plan, the company expected the total plan cost to be between \$120 and \$130 million and annual operating costs to go down by \$30 million per year upon plan completion, with the full savings benefit realized after 2016. Clearly, management was optimistic as total costs exceeded the estimate, savings have not achieved the proposed level, and the restructuring plan itself took longer to complete than stated. When SXT company started the restructuring program in 2014, net margin was at a low of 5.65 percent, coinciding with peak restructuring costs of \$90.6 million. When there were no restructuring costs reported in 2018, net margin improved to 11.35 percent. While Sensient did not achieve the expectation that it set for itself, I believe this positions the firm to significantly change the perception of its financial health once restructuring savings start to take greater effect.

**Figure 4: Historical restructuring costs (\$M) and net margin (%) by year, 2013-2018**



The company reported no restructuring costs in 2018.

Source: Company Reports, FactSet

Exposure to International Market Concerns

In addition to being distributed across several business segments, Sensient’s revenue sources are spread out geographically, providing it with the advantage of lower exposure to cyclical forces of any one country.

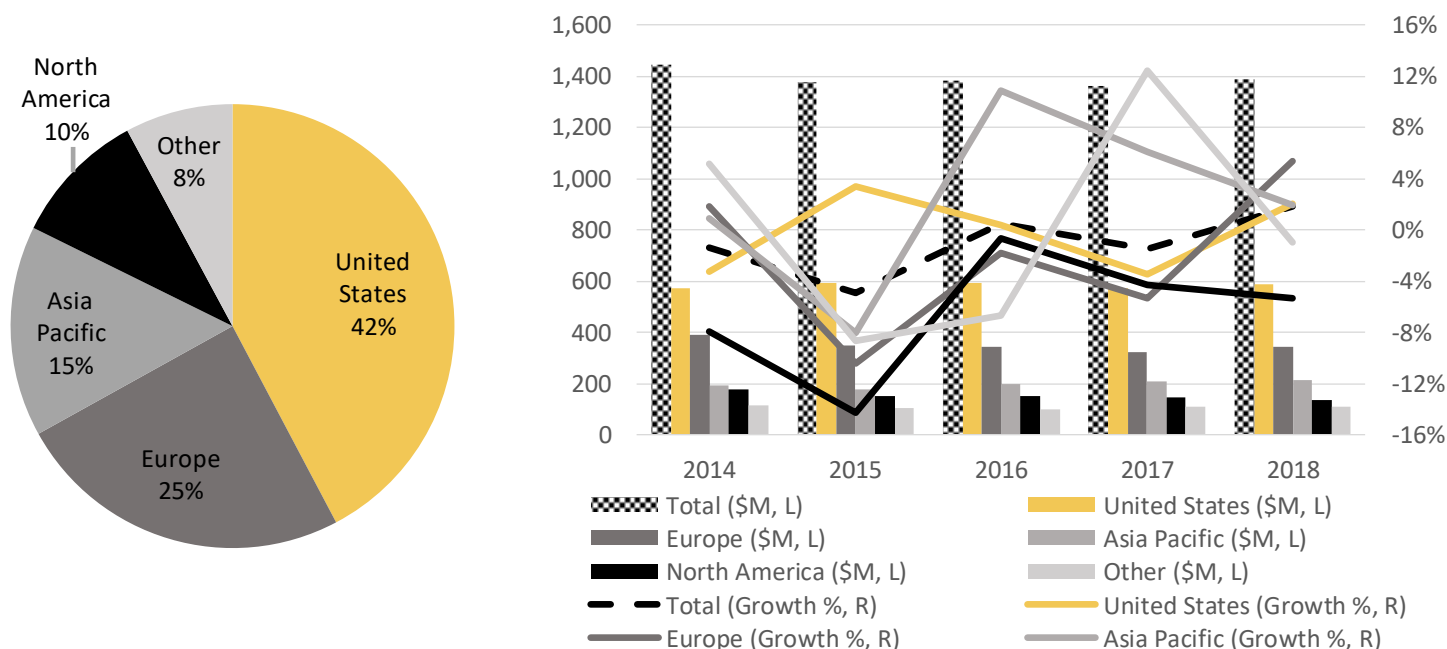
The Asia Pacific region has been SXT’s fastest growing area on a geographic basis.

- In 2018, 42 percent of the firm’s revenue was generated from customers in the United States. In recent years, sales growth has ranged from negative 3.4 percent to positive 3.4 percent.
- 10 percent of company revenue comes from the rest of North America. Growth in this region has been negative for the last five consecutive years.
- Operations in Europe were responsible for 25 percent of 2018 sales. Revenue growth was negative in three of the past five years but reached 5.4 percent in 2018.

- 15 percent of 2018 revenue was from the Asia Pacific region. This has been Sensient’s fastest growing area, with 2 percent growth in 2018, but 6.1 percent growth in 2017 and 10.9 percent growth in 2016.
- The remaining 8 percent of revenue was generated elsewhere, with negative growth of 12 percent in 2017 and approximately negative 1 percent in 2018.

Business involvement in a wide range of countries exposes Sensient to international economic, political, and other factors. These can have a significant negative impact on gross margin when they cause increases in raw material and other costs, as such costs cannot always be passed on to consumers without risking losing market share to competitors. Recent concerns include the potential implications of the United Kingdom’s planned exit from the European Union (“BREXIT”) as well as trade wars and their associated tariffs. Additionally, Sensient is not a large firm, so managing a global business may be challenging.

Figures 5 & 6: 2018 Historic revenue by geographic area (left); segment revenue (\$M); YoY segment revenue growth (right)



Source: FactSet

The company has major manufacturing facilities in the UK for both its Flavors & Fragrances and Color Group.

Some of the possible outcomes of the United Kingdom’s withdrawal from the European Union would have adverse effects on Sensient Technologies’ business operations. The company has sales in the region tied to the movement of goods between the UK and the EU. If the United Kingdom is unable to come to agreements with other EU members before the withdrawal deadline, business activity between the UK and bordering countries will be impeded with far reaching consequences for residents and businesses alike. A “no-deal BREXIT” is likely to lead to delays in the movement of goods across UK borders and increased costs related to the movement of products and raw materials. As of the end of 2018, Sensient Technologies listed the United Kingdom as being a location for major manufacturing plants for both the Flavors & Fragrances and Color Groups. In 2018, \$174 million (24 percent) of Flavors and Fragrances and \$168 million (31.2 percent) of Color Group revenue were attributed to Europe. Given that Sensient has important physical presence in the area, the company could face increased costs and complications from multiple angles- as a consumer of raw materials, a business with facilities within and without the UK, and as a producer of products sold on both sides of the UK border. Additionally, the outcome of BREXIT is sure to have broader, but very substantial impact on the UK economy. If the United Kingdom were to enter a recession, this alone could hurt Sensient’s business in this geographic area as demand for any

discretionary consumer goods which SXT’s business customers produce may tighten, in turn lowering demand for Sensient’s ingredients. In a November 2019 Global Industrial Conference presentation, the firm broke down 2018 Color Group revenue as being 45 percent non-food and beverage and 2018 Flavors & Fragrances Group revenue as being 14 percent non-food and beverage. So, while recessionary periods may not hurt consumer food intake, they could be expected to cause sales declines in Sensient’s other product areas unrelated to food and beverage products.

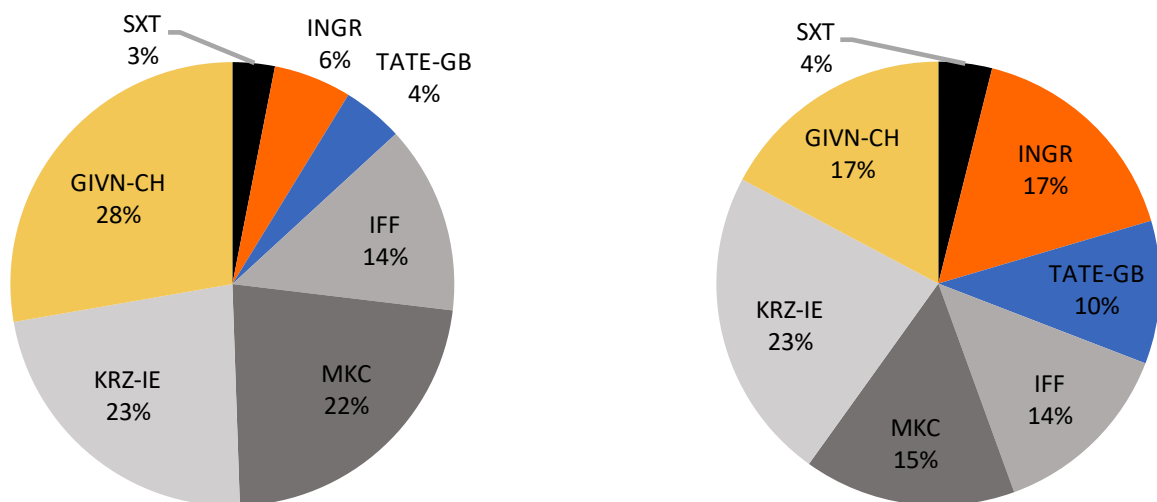
Competitor Analysis

Much like the company itself, Sensient’s competitors operate internationally and generally have diversified product ranges.

Sensient’s competitors often compete in a few of its business segments but do not have complete overlap.

- International Flavors & Fragrances (IFF) produces flavors and fragrances for a variety of consumer goods. Its business segments are broken up as Taste, Scent, and Frutarom (a recently acquired natural-focused company.)
- Givaudan (GIVN) also makes flavors and fragrances. This Swiss based company’s business segments are Fine Fragrances, Consumer Products, and Fragrance and Active Cosmetic Ingredients.
- McCormick (MKC) is an international leader in the production of flavorful products such as spices and seasonings.
- Kerry Group (KRZ) is based in Ireland and manufactures finished food products in addition to ingredients. Its business is divided into Taste and Nutrition (80 percent of revenue) and Consumer Foods (20 percent.)
- Ingredion (INGR) focuses on providing ingredients for the food and beverage industry, but also supplies ingredients for pharmaceutical purposes.
- Tate & Lyle (TATE), based in the United Kingdom, makes and sells ingredients for the food, beverage, and other industries. It is broken up into the Food & Beverage Solutions, Sucralose, and Primary Products segments.

**Figures 7 & 8: Industry concentration by market capitalization (left) vs. by sales (right)**



Source: FactSet, Analyst Computations

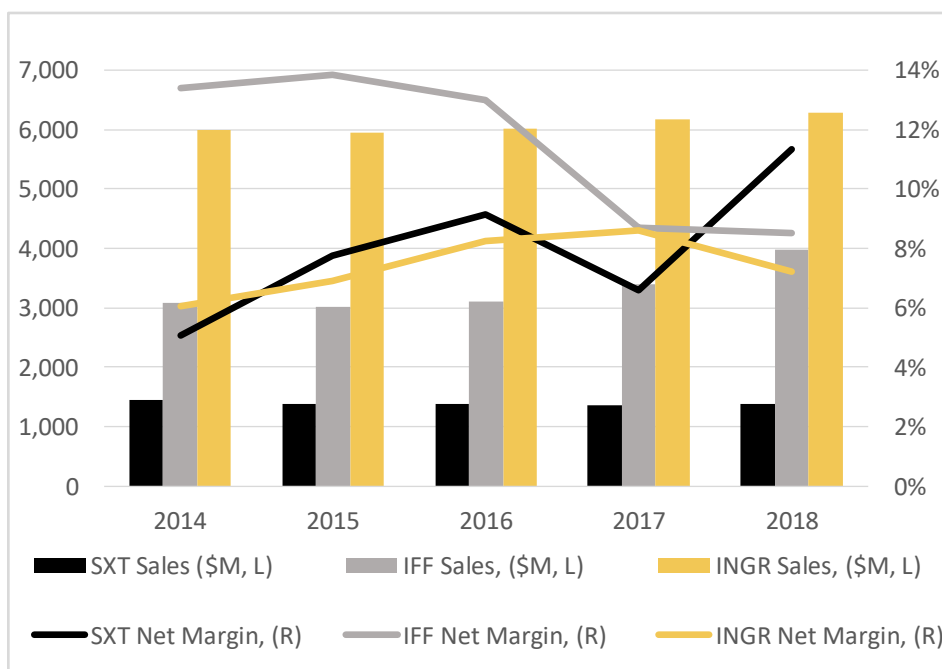
One of Sensient’s largest competitors, International Flavors & Fragrances (IFF), has made a similar move of growing and diversifying its business via acquisition in the recent purchase of Frutarom in 2018. Frutarom was already established in the global marketplace as a supplier of natural products, which were



SXT is not alone in expanding into natural products; competitor IFF has followed a similar acquisition strategy.

responsible for 75 percent of its sales. With the purchase being recent, it is not yet clear how integrating Frutarom will impact IFF’s business, but we can look to the company’s success prior to being acquired. In its 2017 annual shareholder report, Frutarom reported an impressive annual average sales growth of 18 percent since 2000. Of particular note is IFF’s recent December 2019 announcement of plans to merge with DuPont’s Nutrition & Biosciences business. According to IFF, the proposed merger will result in 2019 pro forma revenue of over \$11 billion. Pre-merger, IFF’s business is broken into three reporting segments- Taste, whose products are sold to food and beverage companies; Scent, which comprises Fragrance Compounds and Fragrance Ingredients, and Frutarom, which focuses on natural ingredients for a mix of customer types. 2018 sales were 44 percent from Taste, 47 percent from Scent, and 9 percent Frutarom. Meanwhile, SXT’s revenue is 68 percent from Flavors, Natural Ingredients, and Food & Beverage Colors, with the remaining coming from non-food related sources. If Sensient is able to achieve real growth in divisions that are impacted by the company’s natural extraction technology acquisitions, it has an opportunity to turn around its recent negative-to-flat growth rates. With its competition already actively adapting to these significant trends toward natural or “clean” consumer goods, SXT must continue to innovate in the area to stay competitive.

Figure 9: SXT, IFF, and INGR historical Sales (\$M) and net margin (%) by year, 2013-2018



SXT’s Net Margin improved to 11.4% in 2018, higher than either IFF or INGR.

Source: FactSet, Analyst Computations

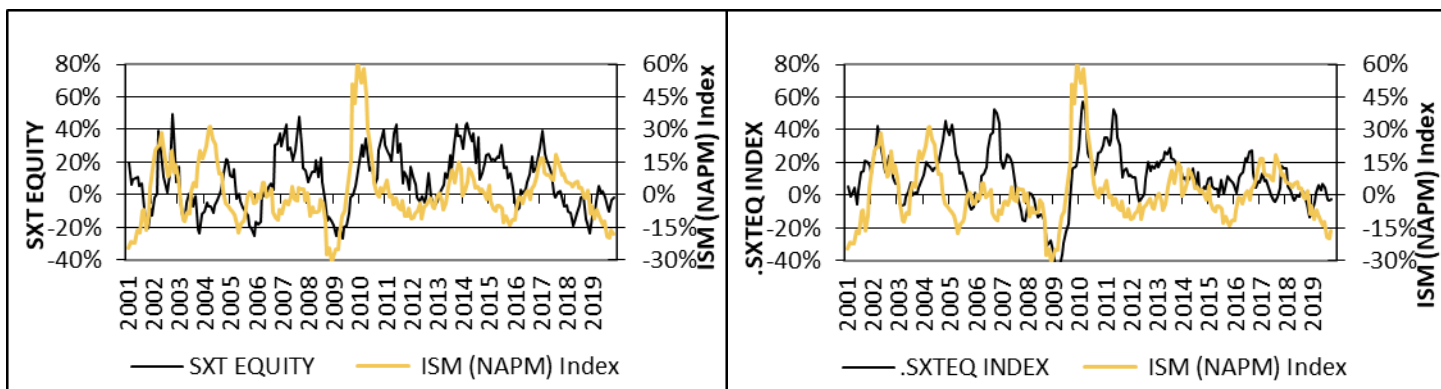
International Flavors & Fragrances and Ingredient are both US-based direct competitors to Sensient Technologies. Amongst this group, Sensient is the smallest by both market capitalization and sales. However, as shown above in figure 9, SXT has had the largest growth in net margin from a low of 5.1 percent in 2014 to a peak of 11.4 percent in 2018, while both IFF and INGR have seen their net margins decline and stay relatively flat, respectively. However, at the end of 2018, these differences in margins were not reflected in a high price to sales ratio for Sensient. SXT’s 2018 price to sales was 1.71, IFF’s 2.96, and INGR’s 1.03. Considering its improved margins, these ratios might suggest the market considers SXT to have higher risk. More likely, though, is that the company’s low or negative sales growth in recent years is expected to continue.

Macroeconomic Trends

SXT's stock has slightly led rises and falls in PMI.

Changes in Sensient Technologies' stock performance has slightly led rises and falls in the ISM's PMI, which is shown in figure 10. The relationship between SXT's competitor group and the PMI (figure 11) is not as strong. Since the PMI is highly correlated with the United States' economy and the S&P 500, this could be credited to an even stronger presence outside of North America on the part of some of the firm's much larger competitors.

**Figures 10 & 11: SXT's performance vs. ISM PMI (left); Competitor index vs. ISM PMI (right)**



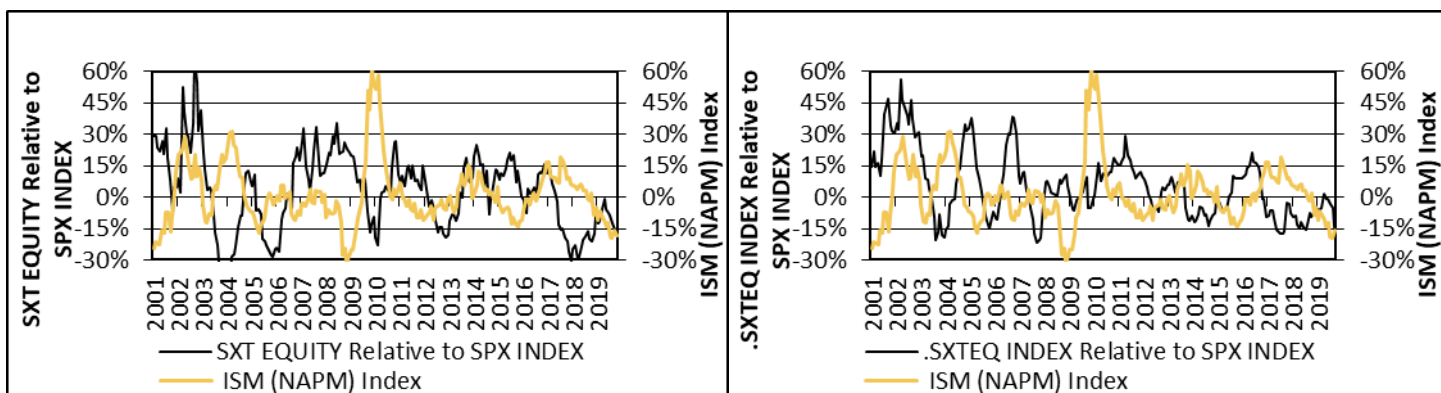
Source: Bloomberg, IMCP

SXT tends to outperform the S&P 500 ahead of or coincident with declines in the PMI.

Sensient's stock is a defensive position relative to the S&P 500. As shown in figure 12, SXT tends to outperform the S&P 500 ahead of or coincident with declines in the PMI. The inverse relationship appears to exist when the PMI increases as well. This performance may be attributable in part to Sensient's global diversification. Having significant business presence in regions outside of the United States may help cushion company performance in downturns, but also mean the firm does not realize the same gains when the American economy experiences growth. The fact that Sensient's products are used as components of finished goods that are not themselves very cyclical may also play a role in the stock's outperformance of the S&P 500 when the ISM PMI declines.

In figure 13, we can see that SXT's outperformance relative to the S&P 500 is outside that of the company's competitor group. This could suggest Sensient has a stronger correlation with the US economy even though its competitors' businesses are also globally diversified.

**Figures 12 & 13: SXT's stock performance relative to S&P 500 vs. ISM PMI (left); Competitor index relative to S&P 500 vs. ISM PMI (right)**



Source: Bloomberg, IMCP

## Financial Analysis

### Quantification of Drivers

I forecast EPS to grow slightly by \$0.12 in 2020.

Based on my forecasts, I expect EPS to grow slightly by \$0.12 to \$3.61 in 2020. A breakdown of this change is displayed below in figure 14. Given Sensient Technologies’ underwhelming growth in recent years, I do not expect revenue to increase substantially next year and therefore predict it will contribute only \$0.04 to an increase in EPS. The remaining \$0.08 of growth would instead result from the firm’s share buyback program. In 2017, the firm authorized the repurchase of up to 3 million shares. As of the end of 2018, just over 2.2 million of these shares remained. I predict that SXT will repurchase a majority of these shares in 2019, 2020, and 2021 with excess cash. I do not see reason for the company’s gross margin or SG&A to change substantially enough to affect EPS in the near-term, so I am not giving the firm credit for more savings from its restructuring plan.

Figures 14 & 15: Quantification of 2020 EPS drivers (left) and 2021 EPS drivers (right)



Source: Company Reports, IMCP

As shown in figure 15, in 2021, I similarly do not anticipate much growth in EPS. My forecasts predict EPS to increase by \$0.06 to \$3.66. As in the prior year, improvement will come from the continuance of the firm’s share repurchase program. Given the negative to flat nature of Sensient’s recent years’ sales growth, I forecast sales to stay relatively flat in the short-term, with a slight dip in 2021. This accounts for a negative impact of \$0.04 to EPS. Again, gross margin and SG&A are unlikely to change substantially.

### Review of Estimates

I am more optimistic than consensus in EPS predictions for both 2020 and 2021, with forecasts of \$3.61 and \$3.66, respectively. My 2020 sales forecast is slightly more optimistic than consensus- \$1326 million versus \$1302 million. However, I do not anticipate the same jump in sales to \$1391 million in 2021; my forecasts see revenue decreasing from the small uptick in 2020. Sensient management has not yet provided guidance 2020 EPS.

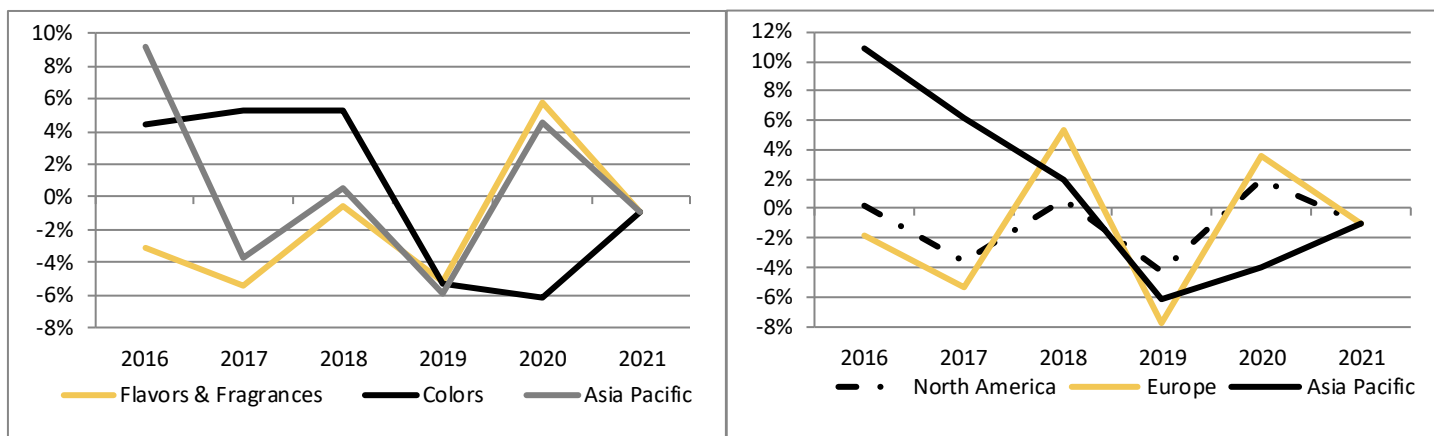
### Sales Forecast

Overall revenue for Sensient Technologies has remained fairly flat in recent years, with a significant decrease of 5.3 percent in 2019. This year’s drop is unlikely to be attributed to Sensient’s divestiture of its European Natural Ingredients business. This sale was completed in 2017 and was recorded as a non-cash loss of about \$21.6 million in that year. Additionally, while exact sales figures have not been provided in annual reports, the company has described the business as having “not generated significant profits for several years,” so lost sales from the divestiture would not account for much of SXT’s overall revenue

Sales will return to more flat growth rather than continue to decline.

decline. While I do not expect this sharp decline to continue, my forecast has total sales again remaining flat from its 2019 level of \$1313 million. The past several years have seen stable growth in the Color Group, SXT’s fastest growing group, and stabilization of both the Flavors & Fragrances and Asia Pacific groups. My forecast predicts all divisions to take a hit in 2019 from the firm’s overall slowest recent year of growth in 2018, a rebound in 2020, and then reverse to flat to negative growth in 2021. If Sensient can capture some of the rapidly growing natural consumer goods market by supplying such ingredients, it could turn this pattern around. However, this is not a given as the firm’s competitors are taking steps to do the same and are larger players in the market. Also, efforts in natural-focused areas could cause sales to decline in other existing businesses. Sales growth in the Asia Pacific geographic region has decreased the most sharply, as seen below in figure 17. My expectation is that it will rebound to be more in line with the company’s projected growth rate as a whole.

Figures 16 & 17: Percent change in sales forecasts by reported segment (left) and by geographic region (right)



Source: Company Reports, IMCP

Return on Equity

Both Sensient’s ROE and ROA have risen from 2016-2018. I expect that both will have peaked in 2018 and will decrease slightly for the next few years. The firm’s EBIT margin was up 1.3 percent in 2018 from 2016, but asset turnover fell. Of course, taxes declining in 2018 had a major positive impact on ROA. Leverage was also higher in 2018 than 2016. Going forward, I expect margins to be flat from 2019-2021, but asset turnover will decline in 2019. The net impact is ROA declines in 2019-2021 to about 8.1 percent from 2018. This is just partially offset by rising leverage in 2019, so ROE declines to 17.25 in 2019 from 28.45 in 2018. By 2021, ROE is forecasted to be 16.85.

My financial forecast supposes that SXT’s cash balance will increase in 2020 and 2021. While I anticipate the firm using a considerable amount of this cash to repurchase shares as part of their already announced stock buy-back program, I believe Sensient would be wise not to over-extend itself in terms of liquidity. Therefore, 2020 repurchases are such that the cash balance is left in line with 2019’s and 2021 buy-backs simply bring the company close to finishing the repurchase of the remaining 2.2 million of shares of those announced in 2017.

**Figure 18: Breakdown of return on equity, 2016-2021E**

5-Stage DuPont	2016	2017	2018	2019	2020	2021
EBIT / sales	13.4%	12.3%	14.7%	14.7%	14.7%	14.7%
Sales / avg assets	0.82	0.80	0.78	0.72	0.72	0.71
EBT / EBIT	90.1%	88.4%	89.3%	88.6%	88.8%	88.7%
Net income / EBT	75.5%	60.4%	86.7%	86.7%	86.7%	86.7%
ROA	7.5%	5.3%	8.9%	8.1%	8.2%	8.0%
Avg assets / avg equity	2.01	2.01	2.07	2.12	2.11	2.10
ROE	15.0%	10.6%	18.4%	17.2%	17.2%	16.8%

Source: Company Reports, IMCP

### Free Cash Flow

**Figure 19: Free cash flow breakdown, 2015-2021E**

Free Cash Flow - With Cash and Debt							
	2015	2016	2017	2018	2019	2020	2021
NOPAT	\$119	\$136	\$101	\$176	\$167	\$169	\$167
Growth		14.2%	-25.7%	74.0%	-5.3%	1.0%	-1.0%
NOWC	537	524	537	628	628	637	648
Net fixed assets	975	951	991	1,002	1,002	1,012	1,002
Total net operating capital	\$1,511	\$1,475	\$1,528	\$1,630	\$1,630	\$1,649	\$1,650
Growth		-2.4%	3.6%	6.7%	0.0%	1.1%	0.1%
- Change in NOWC		(13)	13	91	0	8	11
- Change in NFA		(24)	40	11	-	10	(10)
FCFF		\$173	\$48	\$74	\$167	\$150	\$165
Growth			-72.3%	54.8%	124.9%	-10.0%	10.0%
- After-tax interest expense		13	12	19	19	19	19
+ Net new short-term and long-term debt		(31)	21	85	-	-	-
FCFE		\$129	\$57	\$141	\$148	\$131	\$146
Growth			-55.6%	145.9%	5.2%	-11.2%	11.5%
FCFF per share		\$3.89	\$1.09	\$1.75	\$3.93	\$3.62	\$4.09
Growth			-71.8%	59.8%	124.9%	-7.9%	13.0%
FCFE per share		\$2.89	\$1.31	\$3.31	\$3.49	\$3.16	\$3.62
Growth			-54.9%	153.9%	5.2%	-9.2%	14.5%

Source: Company Reports, IMCP

In figure 19, we can see changes in Sensient's free cash flow over time. I chose to include debt and cash as SXT is a mature company that not only generates cash, but consistently has enough to maintain and grow its dividend and carry out back-to-back share repurchase programs. The firm's free cash flow fell

dramatically from 2016 to 2017 but has recovered since. This could be attributed to the drop in NOPAT between these years and the decline and then rise in investments from 2016-2017. NOPAT growth in 2017 was -25.7 percent, but recovered to 74 percent in 2018, falling again -5.3 percent in 2019- the same rate of growth for overall sales that year. I expect both to stabilize in coming years. Investments, on a net basis, are expected to be zero in 2021 and 18 million in 2020. The firm has over \$130 million per year in FCFE, which is plenty for the share buyback and dividends.

## Valuation

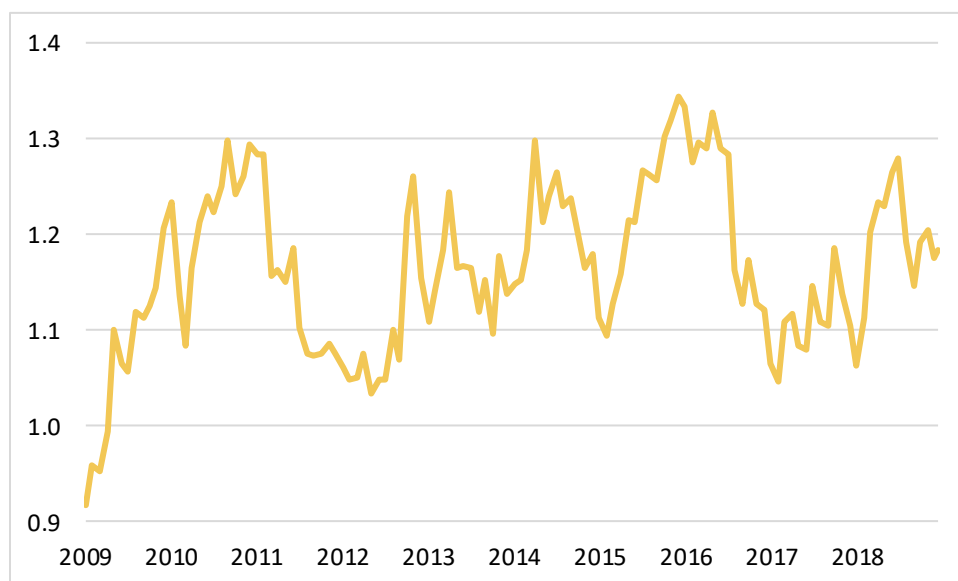
Weighting the DCF target price more heavily, I assign a target price of \$79.30 to SXT.

SXT was valued using multiples and a 3-stage discounting cash flow model. Based on earnings multiples, the stock is expensive relative to other firms and is worth \$74.20. Relative valuation shows SXT to be undervalued based on its fundamentals versus those of its peers. Price to book valuation yielded a price of \$86.63. A detailed DCF analysis values SXT lower at \$78.18; I give this value more weight because it incorporates assumptions that reflect SXT's already completed restructuring program, significant potential for sales growth due to the growing natural products market, and Sensient's historic outperformance of the S&P 500 in economic downturns. Weighting the DCF target price at 50 percent and the others at 25 percent each, I value the stock at \$79.30.

### Trading History

SXT is currently trading at 1.18 times the relative P/E valuation average, near its 10-year average of 1.18. The stock's current NTM P/E is 22.3, down from its 10-year peak of 45.62 in 2015, but close to its average of 23.53.

**Figure 20: SXT NTM P/E relative to S&P 500**



Source: FactSet, IMCP

If the firm maintains a NTM P/E of 22.3 through the end of 2020, it should trade at \$81.62 by the end of 2020:

- Price = P/E x EPS = 22.3 x 2021 EPS of \$3.66 = \$81.62

Discounting this price back one year would give a current target price of \$74.20 assuming a cost of equity of 10 percent as used in the DCF section below.

Relative Valuation

Sensient's 2020 P/E is 20.9 using consensus estimates versus a P/E of 22.2 for its peers. The firm's stock is relatively cheap relative to its immediate competitors. This may be because the market recognizes SXT's slumped sales growth. While there is reason to be optimistic about SXT's growth potential given the natural food market's potential, the company's competitors have the same opportunity, so Sensient is not guaranteed a large portion of the market. Looking at Sensient's more immediate competitors- IFF, INGR, and TATE, the firm's 2019 ROE of 72% is in line with all but IFF, whose ROE of 44% is considerably lower. SXT's P/B of 38% is higher than any of these competitors, with IFF again having the lowest ratio at 29%.

Figures 21, 22, &amp; 23: SXT Comparable Companies

Ticker	2019		P/E							Sales Growth		
	ROE	P/B	2017	2018	2019	TTM	NTM	2020	2021	NTM	STM	Pst 5yr
SXT	13.5%	2.97	36.0	15.1	21.9	20.2	20.7	20.5	18.5	-0.1%		
KRZ-IE	16.9%	5.06	26.7	24.7	29.9			27.1	24.7			2.5%
MKC	20.5%	6.62	23.9	28.0	32.3	32.9	32.1	31.0	29.0	2.7%	2.6%	5.6%
IFF	10.9%	2.39	25.9	21.4	22.0	40.1	21.0	21.6	19.6	3.8%	33.6%	6.1%
INGR	16.8%	2.37	18.2	13.2	14.1	15.7	14.1	14.1	13.5	2.2%		-1.6%
TATE-GB	16.7%	2.63	15.6	12.5	15.7			14.6	14.2			-2.6%
GIVN-CH	21.6%	7.97	27.9	31.9	33.8			32.7	29.9			
Average	16.7%	4.29	24.9	21.0	24.3	27.2	22.0	23.1	21.4	2.1%	18.1%	2.0%
Median	16.8%	2.97	25.9	21.4	22.0	26.5	20.9	21.6	19.6	2.4%	18.1%	2.5%
SPX			20.6	15.6	19.6			18.9	17.5			

Fundamental Percent of Max														
Ticker	Rank	Diff	Target Value	Weight		Earnings Growth							2019	2019
				0.0%	25.0%	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%	25.0%	
				Weighted Fund	Weighted Value	LTG	NTM	2018	2019	2020	2021	Pst 5yr	ROE	NPM
SXT	4	8%	59%	62%	50%	88%	-3%	100%	37%	50%	100%	41%	72%	79%
IFF	3	3%	59%	62%	57%	77%	100%	8%	-8%	15%	94%	41%	44%	97%
INGR	1	-28%	7%	32%	34%	59%	12%	-12%	-26%	0%	40%	9%	69%	57%
TATE-GB	2	-6%	37%	49%	43%	19%	49%	12%	-7%	59%	26%	-17%	71%	66%

Valuation Percent of Max																
Ticker	Rank	Diff	Target Value	Weight		P/E						EV/			1/	
				0.0%	25.0%	0.0%	25.0%	0.0%	0.0%	25.0%	25.0%	0.0%	0.0%	0.0%		
				Weighted Fund	Weighted Value	2017	2018	TTM	NTM	2019	2020	P/B	P/S	P/CF	EBIT	Yield
SXT	4	8%	59%	62%	50%	100%	47%	52%	68%	66%	69%	38%	48%	60%	54%	27%
IFF	3	3%	59%	62%	57%	72%	67%	100%	67%	64%	71%	29%	65%	73%	81%	31%
INGR	1	-28%	7%	32%	34%	50%	41%	38%	43%	40%	45%	28%	24%	56%	39%	21%
TATE-GB	2	-6%	37%	49%	43%	43%	39%	69%	72%	45%	47%	32%	31%	37%	45%	15%

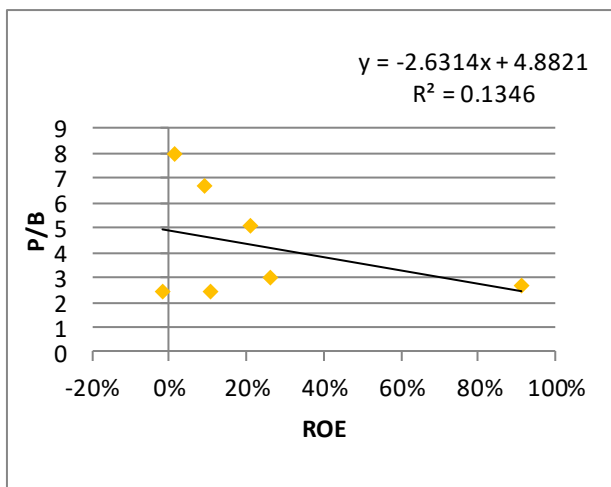
Source: FactSet, IMCP

Using the regression below in figure 24, I found that Sensient’s target price is actually above its current price of \$63.89:

- Target P/B = Estimated 2020 ROE (17.2%) x -2.6314 + 4.8821 = 4.43
- Appreciation = Target P/B (4.43) / Current P/B (2.97) – 1 = 49.2%
- Target Price= Current Price (\$63.89) x Appreciation (1 + 49.2%) = \$95.30

Discounting this back one year at a 10 percent cost of equity yields a target price of \$86.63.

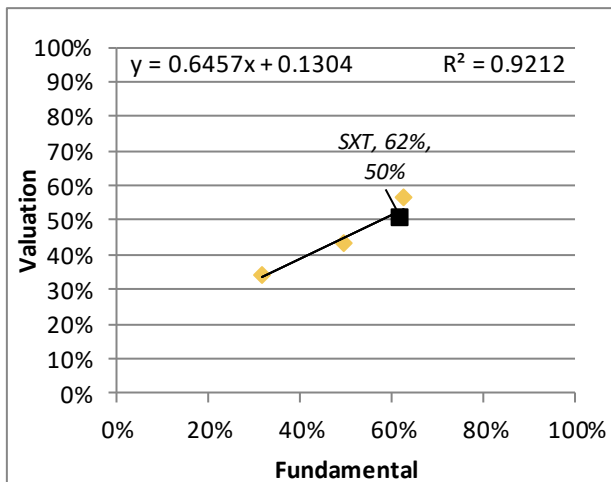
**Figure 24: P/B vs ROE**



Source: IMCP

For a final comparison, I created a composite of fundamental variables and compared this to a composite of valuation. I removed some outlier comps- KRZ, MKC, and GIVN. Since each variable has a different scale, I first converted each number to a percentile before creating the weighted composite values. I weighted NTM and 2018 EPS growth and ROE and net profit margin 25 percent each, and NTM and 2018 P/E, P/B, and P/CF 25 percent each. Figure 25 shows that Sensient is slightly below the line and inexpensive.

**Figure 25: Composite Relative Valuation**



Source: IMCP



DCF Valuation

A three stage discounted cash flow model was also used to value SXT.

For the purpose of this analysis, the company's cost of equity was calculated to be 10.00 percent using the Capital Asset Pricing Model. The underlying assumptions used in calculating this rate are as follows:

- The risk-free rate, as represented by the ten-year Treasury bond yield, is 1.9 percent.
- A beta of 1.0 was utilized since the company has risk in line with the market. Its 52-week beta is currently 1.01.
- A long-term market rate of return of 10 percent was assumed, since historically, the market has generated an annual return of about 10 percent.

Given the above assumptions, the cost of equity is 10.00 percent (1.9 + 1.0 (10.0 – 1.9)).

*Stage One* - The model's first stage simply discounts fiscal years 2020 and 2021 free cash flow to equity (FCFE). These per share cash flows are forecasted to be \$3.22 and \$4.05, respectively. Discounting these cash flows, using the cost of equity calculated above, results in a value of \$6.28 per share. Thus, stage one of this discounted cash flow analysis contributes \$6.28 to value.

NOPAT margin is forecasted to improve to 16 percent as SXT's restructuring efforts take effect.

*Stage Two* - Stage two of the model focuses on fiscal years 2022 to 2026. During this period, FCFE is calculated based on revenue growth, NOPAT margin and capital growth assumptions. The resulting cash flows are then discounted using the company's 10.00 percent cost of equity. I assume 2.0 percent sales growth in 2022, rising to 3.5 percent through 2026 stemming from the firm's natural-focused initiatives. The NOPAT margin is expected to rise to 16.0 percent in 2026 from 13.4 percent in 2022 as a result of the realization of Sensient's recently completed restructuring efforts. Finally, share repurchases are projected to continue, contributing to steady negative share growth of -1.5 percent, down 2.6 percent in 2021.

**Figure 26: FCFE and discounted FCFE, 2020-2026**

	2020	2021	2022	2023	2024	2025	2026
FCFE	\$3.22	\$4.05	\$3.21	\$3.18	\$3.50	\$3.79	\$4.25
Discounted FCFE	\$2.93	\$3.35	\$2.41	\$2.17	\$2.18	\$2.14	\$2.18

Source: IMCP

Added together, the second stage discounted cash flows total \$11.08.

*Stage Three* – Net income for the years 2022 – 2026 is calculated based upon the same margin and growth assumptions used to determine FCFE in stage two. EPS is expected to grow from \$3.61 in 2020 to \$5.93 in 2026.

**Figure 27: EPS estimates for 2020-2026**

	2020	2021	2022	2023	2024	2025	2026
EPS	\$3.61	\$3.66	\$4.02	\$4.43	\$4.88	\$5.39	\$5.93

Source: IMCP

Stage three of the model requires an assumption regarding the company's terminal price-to-earnings ratio. For the purpose of this analysis, I have chosen a terminal P/E of 20. This is in line with the company's current P/E, but also lower than its average of the last 10 years of 23.53. SXT tends to outperform the S&P 500 in economic downturns, and we may be near the end of a cycle. We may not have a recession, but it is reasonable to anticipate at least some kind of correction will happen in the

coming years. At the bottom of the 2009 financial crisis, Sensient’s P/E was 10.92. Several years later in December of 2012, it recovered to 14.17, but this is still below my terminal P/E of 20. However, I am expecting that the market will price in low risk as SXT tends to outperform the S&P 500 in economic downturns. Thus, a multiple above “normal” for the S&P 500 of 15-17 seems reasonable.

Given the assumed terminal price to earnings ratio of 20, a terminal value of \$118.53 per share is calculated. Using the 10.00 percent cost of equity, this number is discounted back to a present value of \$60.82.

*Total Present Value* – given the above assumptions and utilizing a three stage discounted cash flow model, an intrinsic value of \$78.18 is calculated (\$6.28 + \$11.08 + \$60.82). With SXT’S current price at \$63.89, this model indicates that the stock is undervalued.

Scenario Analysis

Sensient’s stock performance is difficult to predict without some knowledge of how the economy at large will perform. The company’s sales have been less than stellar in recent years but given the company’s historic performance relative to the overall stock market in downturns, SXT could see improvements in coming years. Even if the economy and market were to stay stable, recent investments in restructuring should eventually bear fruit in increased efficiencies and improved margins. Additionally, if the firm is able to capture enough of the predicted continued outsize growth of demand for natural ingredients, then this alone could help bolster revenues. Depending on these macroeconomic, company-specific, and industry factors, I valued SXT in two different scenarios for the period 2022-2026.

*Bull Case:* If the economy faces a downturn and Sensient Technologies continues its pattern of market outperformance, I expect an additional 2 percent of sales growth for the company by the end of 2026. Assuming Sensient’s restructuring efforts result in a meaningful annual cost savings, I project an improvement of NOPAT to sales to 18 percent in 2026. I also predict SXT to realize a further 2 percent of sales growth by end of 2026 from capturing growth from the trend towards natural products. With a slightly higher terminal P/E of 22, I forecast a target price of \$91.93.

**Figure 28: Bull case estimated value for 2020**

Summary (using P/E multiple for terminal value)		
First stage	\$6.28	Present value of first 2 year cash flow
Second stage	\$13.33	Present value of year 3-7 cash flow
Third stage	\$72.33	Present value of terminal value P/E
Value (P/E)	<b>\$91.93</b>	

Source: IMCP

*Bear Case:* Assuming either the economy stays stable, or if it does have a downturn, Sensient does not outperform the market, all else held equal I expect sales growth to continue a trend of slight decline, with growth in 2026 of -1 percent. Regarding the firm’s restructuring program, SXT had to invest more than anticipated to carry it out and has not yet realized much in terms of cost savings. It is possible that this will persist, and the company will only see modest improvement in NOPAT to sales of 2 percent- gradually improving to a rate of 14.7 percent in 2026. Finally, Sensient Technologies faces stiff competition in its market. Even if the demand for natural ingredients does substantially increase, this does not mean the firm will realize the same rate of growth, so I project only a modest boost to sales growth of 0.5 percent from this market shift. This increase would offset the aforementioned negative sales growth trend, resulting in overall sales growth of only 0.5% by 2026. With a lower terminal P/E of 18, my bear case target price is \$62.38.

**Figure 29: Bear case estimated value for 2020**

Summary (using P/E multiple for terminal value)		
First stage	\$6.28	Present value of first 2 year cash flow
Second stage	\$13.16	Present value of year 3-7 cash flow
Third stage	\$42.94	Present value of terminal value P/E
Value (P/E)	<b>\$62.38</b>	

Source: IMCP

## Business Risks

Although there are multiple reasons to be optimistic about Sensient Technologies Corporation's future performance, there are significant risks in its current position and inherent in its industry that lead to my neutral position on the company's stock.

### Natural ingredient demand:

Increase in consumer demand for goods with naturally derived ingredients is potentially one of the largest sources of sales growth for Sensient. If demand growth in this area slows, or even simply fails to meet expectations, SXT's recently sluggish sales are less likely to turn around.

### Technology from acquisitions:

Technology from recent acquisitions are another expected source of Sensient's future sales growth. Implementation of this technology across existing business segments could take longer than expected or fail to bear revenue increases once fully integrated.

### Failure to realize anticipated restructuring savings:

The firm has already invested 49-58 percent more than expected in its 2014-2017 restructuring efforts and has yet to realize its projected \$30 million in annual savings. In an environment where Sensient Technologies has had stagnant sales growth, savings from restructuring could be a source of improved margins.

### Competitive market:

Sensient's business is in a highly competitive industry. The company's 2018 annual report details how many of its customers have consolidated, giving them greater buying power. SXT is considerably smaller than its competitors and may be less able to resist pushes to decrease prices. Additionally, Sensient faces the risk of customers switching suppliers most especially in the case of the company's more commodity-like offerings, such as dehydrated onion, which are sold through its Sensient Natural Ingredients segment. In 2018, the firm reported this segment was responsible for 16.2 percent of sales.

### International market concerns:

While participating meaningfully in the global marketplace offers Sensient several upsides from diversification, it also exposes the firm to international market risks. SXT's 2018 annual report specifies that BREXIT could have a negative financial impact on the firm in both the short and long-term.

Source: Company Reports

## Appendix 1: Porter's 5 Forces

### Threat of New Entrants- Low

Sensient's industry is mature and has significant barriers to entry. Manufacture of its products relies upon sourcing raw materials from many different individual suppliers around the globe, formulating them into ingredients, complying with environmental and other regulations such as from the U.S. FDA, and keeping relationships with different customers in each product segment. Establishing and maintaining all of these relationships and processes is unlikely to happen without significant time and investment.

### Threat of Substitutes- Moderate

The likelihood of Sensient's customers switching to different suppliers varies in part depending on the product in question. For the company's more commodity-like ingredients, such as dehydrated onion, the threat is high as they are more easily and closely copied by competitors. However, SXT has a focus on formulating proprietary products with unique properties that are harder to replicate, as these increase customers' switching costs and make them more "sticky."

### Supplier Power- Low

The raw materials purchased by Sensient are not specialized and can be sourced from multiple locations. Suppliers do not have significant leverage over the firm as SXT does not rely exclusively on any one supplier. In its annual report, the company states that it would be able to reformulate its offerings using different raw material suppliers if necessary.

### Buyer Power- High

Consumers of Sensient's ingredients have significant bargaining power. Customers have consolidated, giving them greater ability to push back on price increases, which can negatively impact the firm's margins.

### Intensity of Competition- High

In all markets where Sensient participates, competition is high. It varies in which companies compete depending on the product line; SXT does not compete with any single company across all product lines. Competition is highest for simple, commodity-like ingredients, such as dehydrated vegetables. The ability of the firm to differentiate its offerings is lower in these cases and it risks being undercut by rivals on the basis of price.

*Source: Company Reports*

**Appendix 2: SWOT Analysis**

<b>Strengths</b>	<b>Weaknesses</b>
Globally diversified Defensive stock Barriers to entry	Stagnant sales growth Small player in industry Some products easily copied
<b>Opportunities</b>	<b>Threats</b>
Integration of new tech Growing natural market Expansion in Asia	Consolidating customers Intense competition International concerns

**Appendix 3: Sales Forecast**

<b>Sales Forecasts (in thousands)</b>							
<b>Items</b>	<b>Dec-15</b>	<b>Dec-16</b>	<b>Dec-17</b>	<b>Dec-18</b>	<b>Dec-19</b>	<b>Dec-20</b>	<b>Dec-21</b>
Sales	1,376	1,383	1,362	1,387	1,313	1,326	1,313
<i>Growth</i>		0.5%	-1.5%	1.8%	-5.3%	1.0%	-1.0%
Flavors & Fragrances	793	769	727	723	686	725	718
<i>Growth</i>		-3.1%	-5.5%	-0.5%	-5.2%	5.7%	-1.0%
<i>% of sales</i>	57.7%	55.6%	53.4%	52.1%	52.2%	54.7%	54.7%
Colors	466	487	513	540	511	480	475
<i>Growth</i>		4.5%	5.3%	5.3%	-5.3%	-6.2%	-1.0%
<i>% of sales</i>	33.9%	35.2%	37.6%	38.9%	38.9%	2.0%	36.2%
Asia Pacific	116	127	122	123	116	121	120
<i>Growth</i>		9.2%	-3.7%	0.6%	-6.0%	4.6%	-1.0%
<i>% of sales</i>	8.5%	9.2%	9.0%	8.9%	8.8%	9.1%	6.0%
Corporate & Other	-	-	-	1	-	-	-
<i>Growth</i>					-100.0%	0.0%	0.0%
<i>% of sales</i>	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
North America	744	746	719	723	692	706	699
<i>Growth</i>		0.2%	-3.6%	0.6%	-4.3%	2.0%	-1.0%
<i>% of sales</i>	54.1%	53.9%	52.8%	52.1%	52.7%	53.2%	53.2%
Europe	349	343	325	342	315	327	324
<i>Growth</i>		-1.8%	-5.3%	5.4%	-7.8%	3.6%	-1.0%
<i>% of sales</i>	25.4%	24.8%	23.8%	24.7%	24.0%	24.7%	24.7%
Asia Pacific	178	197	209	213	200	192	190
<i>Growth</i>		10.9%	6.1%	2.0%	-6.2%	-4.0%	-1.0%
<i>% of sales</i>	12.9%	14.2%	15.3%	15.4%	15.2%	14.5%	14.5%
Other	105	98	110	109	106	102	101
<i>Growth</i>		-6.7%	12.4%	-0.9%	-3.1%	-3.9%	-1.0%
<i>% of sales</i>	7.6%	7.1%	8.1%	7.9%	8.0%	7.7%	7.7%

## Appendix 4: Income Statement

Income Statement (in thousands)							
Items	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20	Dec-21
Sales	\$1,376	\$1,383	\$1,362	\$1,387	\$1,313	\$1,326	\$1,313
Direct costs	922	908	887	921	872	880	872
Gross Margin	454	475	475	466	441	446	441
SG&A, R&D, and other	288	290	308	263	249	251	249
EBIT	166	186	168	203	193	194	193
Interest	17	18	19	22	22	22	22
EBT	149	167	148	182	171	173	171
Taxes	42	44	59	24	23	23	23
Income	107	123	90	157	148	150	148
Other	0.5	(3)	-	-	-	-	-
Net income	107	126	90	157	148	150	148
Basic Shares	45.9	44.5	43.8	42.4	42.4	41.5	40.4
Fully Diluted Shares	46.2	44.8	44.0	42.5	42.4	41.5	40.4
EPS	\$2.33	\$2.84	\$2.05	\$3.71	\$3.49	\$3.61	\$3.66
EPS Fully Diluted	\$2.31	\$2.82	\$2.03	\$3.70	\$3.49	\$3.61	\$3.66
DPS	\$1.05	\$1.11	\$1.23	\$1.35	\$1.56	\$1.72	\$1.89

## Appendix 5: Balance Sheet

Capital							
Items	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20	Dec-21
Cash	12	26	29	32	32	34	52
Operating assets ex cash	717	691	704	791	791	799	791
Operating assets	729	717	733	823	823	833	843
Operating liabilities	192	193	196	195	195	197	195
NOWC	537	524	537	628	628	637	648
NOWC ex cash (NWC)	525	498	508	596	596	602	596
NFA	975	951	991	1,002	1,002	1,012	1,002
<i>Invested capital</i>	<i>\$1,511</i>	<i>\$1,475</i>	<i>\$1,528</i>	<i>\$1,630</i>	<i>\$1,630</i>	<i>\$1,649</i>	<i>\$1,650</i>
Marketable securities	-	-	-	-	-	-	-
<i>Total assets</i>	<i>\$1,704</i>	<i>\$1,668</i>	<i>\$1,724</i>	<i>\$1,825</i>	<i>\$1,825</i>	<i>\$1,845</i>	<i>\$1,845</i>
Short-term and long-term debt	\$634	\$603	\$624	\$710	\$710	\$710	\$710
Other liabilities	32	36	52	61	61	61	61
Debt/equity-like securities	-	-	-	-	-	-	-
Equity	845	836	852	860	860	878	880
<i>Total supplied capital</i>	<i>\$1,511</i>	<i>\$1,475</i>	<i>\$1,528</i>	<i>\$1,630</i>	<i>\$1,630</i>	<i>\$1,649</i>	<i>\$1,650</i>
<i>Total liabilities and equity</i>	<i>\$1,704</i>	<i>\$1,668</i>	<i>\$1,724</i>	<i>\$1,825</i>	<i>\$1,825</i>	<i>\$1,845</i>	<i>\$1,845</i>

## Appendix 6: Ratios

Ratios							
Items	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20	Dec-21
<b>Profitability</b>							
Gross margin	33.0%	34.4%	34.9%	33.6%	33.6%	33.6%	33.6%
Operating (EBIT) margin	12.1%	13.4%	12.3%	14.7%	14.7%	14.7%	14.7%
Net profit margin	7.8%	9.1%	6.6%	11.3%	11.3%	11.3%	11.3%
<b>Activity</b>							
NFA (gross) turnover		1.44	1.40	1.39	1.31	1.32	1.30
Total asset turnover		0.82	0.80	0.78	0.72	0.72	0.71
<b>Liquidity</b>							
Op asset / op liab	3.79	3.71	3.74	4.23	4.23	4.24	4.33
NOWC Percent of sales		38.3%	39.0%	42.0%	47.9%	47.7%	48.9%
<b>Solvency</b>							
Debt to assets	37.2%	36.2%	36.2%	38.9%	38.9%	38.5%	38.5%
Debt to equity	75.0%	72.2%	73.2%	82.5%	82.5%	80.8%	80.6%
Other liab to assets	3.6%	2.1%	3.0%	3.3%	3.3%	3.3%	3.3%
Total debt to assets	40.8%	38.3%	39.2%	42.2%	42.2%	41.7%	41.8%
Total liabilities to assets	52.1%	49.9%	50.6%	52.9%	52.9%	52.4%	52.3%
Debt to EBIT	3.81	3.25	3.72	3.49	3.69	3.65	3.68
EBIT/interest	9.82	10.13	8.66	9.31	8.81	8.90	8.81
Debt to total net op capital	42.0%	40.9%	40.9%	43.5%	43.5%	43.0%	43.0%
<b>ROIC</b>							
NOPAT to sales	8.7%	9.9%	7.4%	12.7%	12.7%	12.7%	12.7%
Sales to NWC		2.70	2.71	2.51	2.20	2.21	2.19
Sales to NFA		1.44	1.40	1.39	1.31	1.32	1.30
Sales to IC ex cash		0.94	0.92	0.90	0.82	0.83	0.82
Total ROIC ex cash		9.3%	6.9%	11.4%	10.4%	10.5%	10.4%
NOPAT to sales	8.7%	9.9%	7.4%	12.7%	12.7%	12.7%	12.7%
Sales to NOWC		2.61	2.57	2.38	2.09	2.10	2.04
Sales to NFA		1.44	1.40	1.39	1.31	1.32	1.30
Sales to IC		0.93	0.91	0.88	0.81	0.81	0.80
Total ROIC		9.1%	6.7%	11.2%	10.2%	10.3%	10.1%
NOPAT to sales	8.7%	9.9%	7.4%	12.7%	12.7%	12.7%	12.7%
Sales to EOY NWC	2.62	2.78	2.68	2.33	2.20	2.20	2.20
Sales to EOY NFA	1.41	1.45	1.37	1.38	1.31	1.31	1.31
Sales to EOY IC ex cash	0.92	0.95	0.91	0.87	0.82	0.82	0.82
Total ROIC using EOY IC ex cash	8.0%	9.4%	6.8%	11.0%	10.4%	10.4%	10.4%

<b>Ratios</b>							
<b>Items</b>	<b>Dec-15</b>	<b>Dec-16</b>	<b>Dec-17</b>	<b>Dec-18</b>	<b>Dec-19</b>	<b>Dec-20</b>	<b>Dec-21</b>
NOPAT to sales	8.7%	9.9%	7.4%	12.7%	12.7%	12.7%	12.7%
Sales to EOY NOWC	2.56	2.64	2.54	2.21	2.09	2.08	2.03
Sales to EOY NFA	1.41	1.45	1.37	1.38	1.31	1.31	1.31
Sales to EOY IC	0.91	0.94	0.89	0.85	0.81	0.80	0.80
Total ROIC using EOY IC	7.9%	9.2%	6.6%	10.8%	10.2%	10.2%	10.1%
<b>ROE</b>							
<b>5-stage</b>							
EBIT / sales		13.4%	12.3%	14.7%	14.7%	14.7%	14.7%
Sales / avg assets		0.82	0.80	0.78	0.72	0.72	0.71
EBT / EBIT		90.1%	88.4%	89.3%	88.6%	88.8%	88.7%
Net income / EBT		75.5%	60.4%	86.7%	86.7%	86.7%	86.7%
ROA		7.5%	5.3%	8.9%	8.1%	8.2%	8.0%
Avg assets / avg equity		2.01	2.01	2.07	2.12	2.11	2.10
ROE		15.0%	10.6%	18.4%	17.2%	17.2%	16.8%
<b>3-stage</b>							
Net income / sales		9.1%	6.6%	11.3%	11.3%	11.3%	11.3%
Sales / avg assets		0.82	0.80	0.78	0.72	0.72	0.71
ROA		7.5%	5.3%	8.9%	8.1%	8.2%	8.0%
Avg assets / avg equity		2.01	2.01	2.07	2.12	2.11	2.10
ROE		15.0%	10.6%	18.4%	17.2%	17.2%	16.8%
Payout Ratio		39.3%	60.3%	36.5%	44.7%	47.6%	51.6%
Retention Ratio		60.7%	39.7%	63.5%	55.3%	52.4%	48.4%
Sustainable Growth Rate		9.1%	4.2%	11.7%	9.5%	9.0%	8.2%



### Appendix 7: Comp Sheet

Ticker	Name	Current Price	Market Value	Price Change						Earnings Growth						LT Debt/Equity	S&P Rating	LTM Dividend		
				1 day	1 Mo	3 Mo	6 Mo	52 Wk	YTD	LTG	NTM	2018	2019	2020	2021			Pst 5yr	Beta	Yield
SXT	SENSIENT TECHNOLOGIES CORP	\$62.88	\$2,661	(0.4)	(3.9)	2.6	(10.5)	2.2	(4.9)	10.0	-2.7%	82.3%	-22.4%	6.6%	10.8%	1.07	70.2%	B+	2.22%	46.2%
KRZ-IE	KERRY GROUP	\$129.87	\$22,925	0.6	4.2	12.5	9.2	30.1	6.0	10.7		-4.8%	8.2%	10.6%	9.4%	0.48			0.65%	
MKC	MCCORMICK & CO INC	\$172.67	\$22,950	(0.1)	2.6	7.9	8.7	38.9	1.7	5.1	2.3%	16.7%	7.6%	4.1%	6.8%	0.02	110.8%	A+	1.37%	42.5%
IFF	INTL FLAVORS & FRAGRANCES	\$135.79	\$14,500	(0.2)	8.6	13.4	(7.0)	(1.0)	5.2	8.7	90.9%	6.6%	-1.8%	1.9%	10.2%	0.62	70.6%	A-	2.29%	86.9%
INGR	INGREDION INC	\$92.26	\$6,160	(0.7)	(0.3)	16.5	17.4	(5.3)	(0.7)		11.4%	-10.1%	-5.6%	0.0%	4.3%	1.12	81.1%	A-	2.69%	42.7%
TATE-GB	TATE & LYLE	\$10.35	\$4,803	1.3	3.1	16.9	4.6	13.5	4.2	2.4		9.8%	-1.5%	7.6%	2.8%	1.26			3.89%	
GIVN-CH	GIVAUDAN SA	\$3,248.87	\$29,948	2.0	3.7	11.4	19.5	28.6	4.1	11.3		-12.7%	21.7%	12.8%	9.3%	0.77			1.98%	
Average			\$14,849	0.4	2.6	11.6	6.0	15.3	2.2	8.0	25.5%	12.5%	0.9%	6.2%	7.7%	0.76	83.2%		2.16%	54.5%
Median			\$14,500	(0.1)	3.1	12.5	8.7	13.5	4.1	9.4	6.9%	6.6%	-1.5%	6.6%	9.3%	0.77	75.9%		2.22%	44.4%
SPX	S&P 500 INDEX	\$3,295		(0.9)	2.2	9.5	9.1	24.7	2.0			23.6%	1.3%	7.2%	7.7%					

Ticker	Website	2019		P/E							2019				EV/		P/CF	Sales Growth			Book Equity
		ROE	P/B	2017	2018	2019	TTM	NTM	2020	2021	NPM	P/S	NM	OM	ROIC	EBIT		Current	NTM	STM	
SXT	<a href="http://www.sensient.com">http://www.sensient.com</a>	13.5%	2.97	36.0	15.1	21.9	20.2	20.7	20.5	18.5	9.3%	2.04	11.3%	14.6%	10.5%	15.1	15.1	-0.1%			\$21.19
KRZ-IE	<a href="http://www.kerrygroup.com">http://www.kerrygroup.com</a>	16.9%	5.06	26.7	24.7	29.9			27.1	24.7	9.6%	2.87	8.2%	11.5%	9.4%	22.3	27.0			2.5%	\$25.69
MKC	<a href="http://www.mccormickcorporation.com">http://www.mccormickcorporation.com</a>	20.5%	6.62	23.9	28.0	32.3	32.9	32.1	31.0	29.0	13.2%	4.27	17.3%	17.5%	13.1%	26.0	26.4	2.7%	2.6%	5.6%	\$26.10
IFF	<a href="http://www.iff.com">http://www.iff.com</a>	10.9%	2.39	25.9	21.4	22.0	40.1	21.0	21.6	19.6	12.8%	2.83	8.4%	17.6%	4.8%	22.6	20.2	3.8%	33.6%	6.1%	\$56.72
INGR	<a href="http://www.ingredion.com">http://www.ingredion.com</a>	16.8%	2.37	18.2	13.2	14.1	15.7	14.1	14.1	13.5	7.6%	1.07	7.6%	13.1%	9.9%	10.9	15.6	2.2%		-1.6%	\$38.91
TATE-GB	<a href="http://tateandlyle.com">http://tateandlyle.com</a>	16.7%	2.63	15.6	12.5	15.7			14.6	14.2	8.8%	1.38	6.6%	10.7%	9.6%	12.6	10.3			-2.6%	\$3.94
GIVN-CH	<a href="http://www.givaudan.com">http://www.givaudan.com</a>	21.6%	7.97	27.9	31.9	33.8			32.7	29.9	12.8%	4.73	11.3%	14.9%	9.7%	34.5	25.1				\$407.78
Average		16.7%	4.29	24.9	21.0	24.3	27.2	22.0	23.1	21.4	10.6%	2.74	10.1%	14.3%	9.6%	20.6	20.0	2.1%	18.1%	2.0%	
Median		16.8%	2.97	25.9	21.4	22.0	26.5	20.9	21.6	19.6	9.6%	2.83	8.4%	14.6%	9.7%	22.3	20.2	2.4%	18.1%	2.5%	
SPX	S&P 500 INDEX			20.6	15.6	19.6			18.9	17.5											

## Appendix 8: 3-stage DCF Model

Year ending January	First Stage		Second Stage				
	2020	2021	2022	2023	2024	2025	2026
<i>Sales Growth</i>	1.0%	-1.0%	2.0%	3.0%	3.2%	3.5%	3.5%
<i>NOPAT / S</i>	12.7%	12.7%	13.4%	14.0%	14.7%	15.3%	16.0%
<i>S / NWC</i>	2.20	2.20	2.20	2.20	2.20	2.20	2.20
<i>S / NFA (EOY)</i>	1.31	1.31	1.31	1.31	1.31	1.31	1.31
<i>S / IC (EOY)</i>	0.82	0.82	0.82	0.82	0.82	0.82	0.82
<i>ROIC (EOY)</i>	10.4%	10.4%	11.0%	11.5%	12.1%	12.6%	13.1%
<i>ROIC (BOY)</i>		10.3%	11.2%	11.9%	12.4%	13.0%	13.6%
<i>Share Growth</i>		-2.6%	-1.5%	-1.5%	-1.5%	-1.5%	-1.5%
<b>Sales</b>	\$1,326	\$1,313	\$1,339	\$1,380	\$1,423	\$1,473	\$1,525
<b>NOPAT</b>	\$169	\$167	\$179	\$194	\$209	\$226	\$244
<i>Growth</i>		-1.0%	7.3%	8.1%	8.0%	8.1%	7.9%
<b>- Change in NWC</b>	6	-6	12	18	20	23	23
<i>NWC EOY</i>	602	596	608	627	646	669	693
<i>Growth NWC</i>		-1.0%	2.0%	3.0%	3.2%	3.5%	3.5%
<b>- Chg NFA</b>	10	-10	20	31	33	38	39
<i>NFA EOY</i>	1,012	1,002	1,022	1,053	1,086	1,124	1,164
<i>Growth NFA</i>		-1.0%	2.0%	3.0%	3.2%	3.5%	3.5%
<b>Total inv in op cap</b>	16	-16	32	49	53	61	63
<b>Total net op cap</b>	1614	1599	1631	1680	1733	1794	1856
<b>FCFF</b>	\$153	\$182	\$147	\$145	\$156	\$165	\$181
<i>% of sales</i>	11.5%	13.9%	11.0%	10.5%	10.9%	11.2%	11.9%
<i>Growth</i>		19.6%	-19.4%	-1.7%	7.7%	6.2%	9.6%
<b>- Interest (1-tax rate)</b>	19	19	19	20	21	21	22
<i>Growth</i>		0.0%	2.0%	3.0%	3.2%	3.5%	3.5%
<b>FCFE w/o debt</b>	\$134	\$164	\$128	\$125	\$135	\$144	\$159
<i>% of sales</i>	10.1%	12.5%	9.5%	9.0%	9.5%	9.8%	10.4%
<i>Growth</i>		22.3%	-21.9%	-2.4%	8.5%	6.6%	10.5%
<b>/ No Shares</b>	41.5	40.4	39.8	39.2	38.6	38.0	37.5
<b>FCFE</b>	\$3.22	\$4.05	\$3.21	\$3.18	\$3.50	\$3.79	\$4.25
<i>Growth</i>		25.6%	-20.7%	-0.9%	10.1%	8.2%	12.1%
<b>* Discount factor</b>	0.91	0.83	0.75	0.68	0.62	0.56	0.51
<b>Discounted FCFE</b>	\$2.93	\$3.35	\$2.41	\$2.17	\$2.18	\$2.14	\$2.18
Third Stage							
<b>Terminal value P/E</b>							
Net income	\$150	\$148	\$160	\$174	\$188	\$205	\$222
<i>% of sales</i>	11.3%	11.3%	11.9%	12.6%	13.2%	13.9%	14.6%
EPS	\$3.61	\$3.66	\$4.02	\$4.43	\$4.88	\$5.39	\$5.93
<i>Growth</i>		1.6%	9.6%	10.3%	10.2%	10.3%	10.0%
Terminal P/E							20.00
* Terminal EPS							\$5.93
Terminal value							\$118.53
* Discount factor							0.51
Discounted terminal value							\$60.82
Summary (using P/E multiple for terminal value)							
First stage	\$6.28	Present value of first 2 year cash flow					
Second stage	\$11.08	Present value of year 3-7 cash flow					
Third stage	\$60.82	Present value of terminal value P/E					
Value (P/E)	<b>\$78.18</b>						