

## International Flavors (IFF)

**\$147.09** (As of 06/09/21)

Price Target (6-12 Months): **\$155.00**

Long Term: 6-12 Months

**Zacks Recommendation:**

**Neutral**

(Since: 01/26/21)

Prior Recommendation: Underperform

Short Term: 1-3 Months

**Zacks Rank:** (1-5)

**3-Hold**

Zacks Style Scores:

VGM:D

Value: C

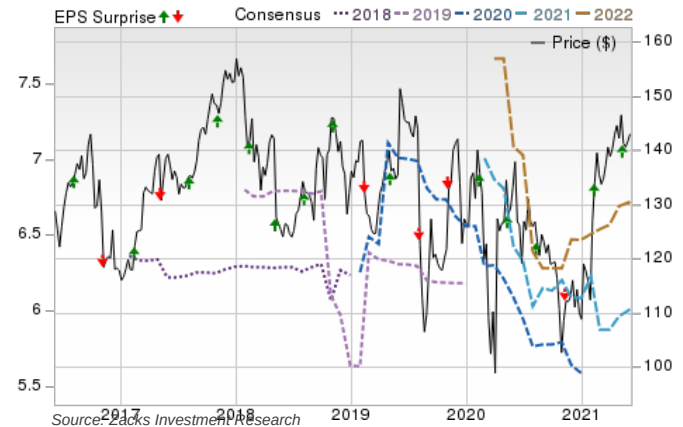
Growth: C

Momentum: F

## Summary

International Flavors will continue to benefit from robust demand for home care and personal categories on account of the pandemic-induced increase in global consumer staples purchases. However, weakness in Food Service will hurt results. High raw material costs and logistic costs will dent margins. Nevertheless, new business wins and acquisitions will contribute to growth. For 2021, the company expects sales to be approximately \$11.25 billion. The company increased its sales forecast for 2021, driven by higher volumes, foreign exchange, and pricing actions. For the ongoing year, pro-forma adjusted EBITDA margin is expected to be approximately 23% compared with 22% in 2020. Focus to drive greater efficiencies throughout the business through costs and productivity initiatives, margin improvement, acquisition-related synergies will boost results.

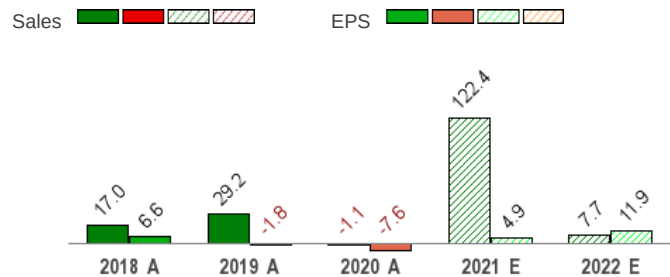
## Price, Consensus & Surprise



## Data Overview

|                                |                                    |
|--------------------------------|------------------------------------|
| 52-Week High-Low               | <b>\$148.17 - \$99.54</b>          |
| 20-Day Average Volume (Shares) | <b>1,309,424</b>                   |
| Market Cap                     | <b>\$36.6 B</b>                    |
| Year-To-Date Price Change      | <b>35.1%</b>                       |
| Beta                           | <b>0.96</b>                        |
| Dividend / Dividend Yield      | <b>\$3.08 / 2.1%</b>               |
| Industry                       | <b>Consumer Products - Staples</b> |
| Zacks Industry Rank            | <b>Bottom 9% (228 out of 251)</b>  |

## Sales and EPS Growth Rates (Y/Y %)



|                               |                   |
|-------------------------------|-------------------|
| Last EPS Surprise             | <b>6.0%</b>       |
| Last Sales Surprise           | <b>0.9%</b>       |
| EPS F1 Estimate 4-Week Change | <b>-0.5%</b>      |
| Expected Report Date          | <b>08/09/2021</b> |
| Earnings ESP                  | <b>-1.7%</b>      |
| P/E TTM                       | <b>25.9</b>       |
| P/E F1                        | <b>24.6</b>       |
| PEG F1                        | <b>5.8</b>        |
| P/S TTM                       | <b>5.9</b>        |

## Sales Estimates (millions of \$)

|      | Q1      | Q2      | Q3      | Q4      | Annual*  |
|------|---------|---------|---------|---------|----------|
| 2022 | 3,071 E | 3,060 E | 2,978 E | 3,004 E | 12,173 E |
| 2021 | 2,465 A | 2,985 E | 2,911 E | 2,918 E | 11,305 E |
| 2020 | 1,347 A | 1,199 A | 1,268 A | 1,270 A | 5,084 A  |

## EPS Estimates

|      | Q1       | Q2       | Q3       | Q4       | Annual*  |
|------|----------|----------|----------|----------|----------|
| 2022 | \$1.65 E | \$1.61 E | \$1.64 E | \$1.49 E | \$6.69 E |
| 2021 | \$1.60 A | \$1.54 E | \$1.54 E | \$1.34 E | \$5.98 E |
| 2020 | \$1.62 A | \$1.36 A | \$1.40 A | \$1.32 A | \$5.70 A |

\*Quarterly figures may not add up to annual.

The data in the charts and tables, including the Zacks Consensus EPS and sales estimates, is as of 06/09/2021. The report's text and the analyst-provided price target are as of 06/10/2021.

## Overview

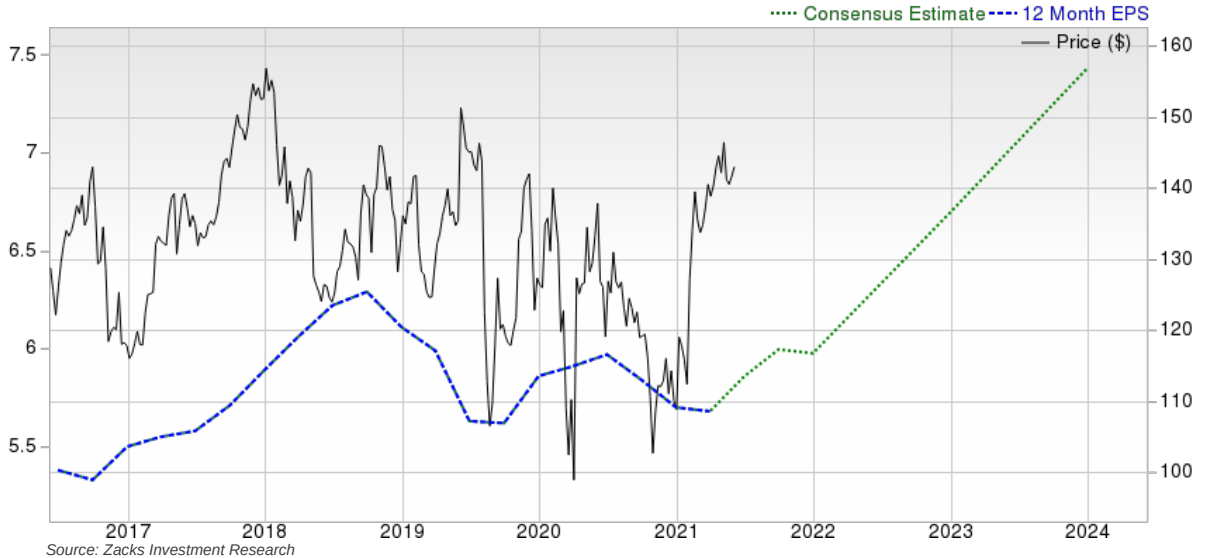
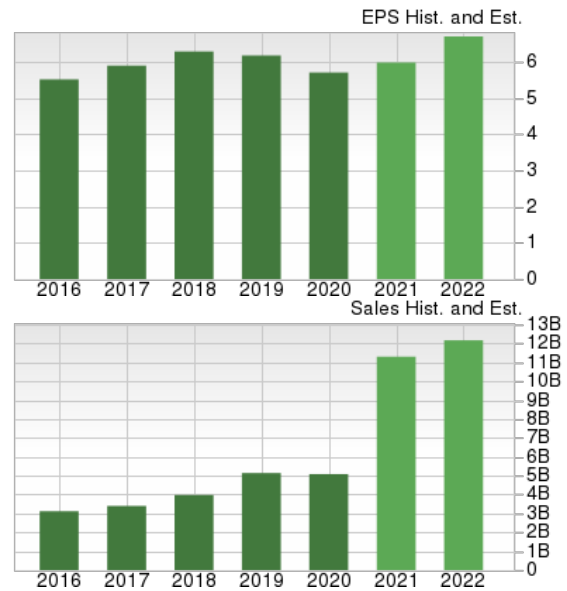
New York-based International Flavors & Fragrances recently completed its merger with DuPont's Nutrition & Biosciences ("N&B") business creating a global leader in high-value ingredients and solutions for food and beverage, home and personal care, and health & wellness markets. The company has introduced new business divisions — Nourish, Scent, Health & Biosciences and Pharma Solutions.

The Nourish segment contributed 53% of pro forma 2020 sales. It comprises three platforms — Ingredients, Flavors and Food Designs. Ingredients provide texturizing solutions to the food industry, food protection solutions used in food and beverage products, specialty soy and pea protein with value-added formulations, emulsifiers and sweeteners. Flavors provide a range of flavor compounds and natural taste solutions, and value-added spices and seasoning ingredients. Food Designs offer savory solution products such as spices, sauces, marinades and mixtures as well as inclusion products.

Health & Biosciences (21% of pro forma 2020 sales) includes six platforms — Health, Cultures & Food Enzymes, Home & Personal Care, Animal Nutrition, Grain Processing and Microbial Control, with a biotechnology-driven portfolio of products that serve the health and wellness, food, consumer and industrial markets. Products within this portfolio range from enzymes, food cultures, probiotics and specialty ingredients for non-food applications.

Scent (19% of pro forma 2020 sales) comprises Fragrance Compounds in two broad categories — Fine Fragrances (including perfumes and colognes) and Consumer Fragrances (including fragrance compounds for personal care, household products and beauty care). The segment also includes Fragrance Ingredients, consisting of synthetic and natural ingredients and Cosmetic Active Ingredients, consisting of active and functional ingredients, botanicals and delivery systems.

Pharma Solutions (8% of pro forma 2020 sales) produces cellulose and alginates-based pharma excipients, and is utilized to improve the functionality and delivery of active pharmaceutical ingredients, including controlled or modified drug release formulations, and enable the development of more effective pharma solutions.



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## Reasons To Buy:

▲ The Fabric, Home, Hair Care, and Personal Wash product categories are witnessing impressive growth on the pandemic-induced increase in global consumer staples purchases. International Flavors' largest segment, Nourish, continues to deliver strong results primarily aided by the Flavors unit. The Scent segment remains the largest growth driver, courtesy of continued strengths in Consumer Fragrances, Cosmetic Actives driven by volume recovery and new business wins. Also, the segment witnessed a strong rebound in Fine Fragrance as away-from-home restrictions continued to ease and consumer behavior returned to more traditional levels. In Health & Biosciences segment, the Home & Personal Care business remains strong supported by evolving consumer buying trends related to the pandemic. For the Pharma Solutions segment, growth has been witnessed in both Core Pharma and Industrial Pharma.

International Flavor's merger with DuPont's N&B creates a leader in food, beverage, health and biosciences. Rising demand for flavors and fragrances, and acquisitions remain catalysts.

▲ For 2021, the company expects pro-forma (giving effect to the N&B transaction) sales to be approximately \$11.25 billion, excluding approximately \$507 million in sales for N&B in January 2021. This compares to sales of approximately \$10.641 billion in 2020. The company increased its sales forecast for 2021, driven by higher volumes, foreign exchange, and pricing actions. For the ongoing year, pro-forma adjusted EBITDA margin is expected to be approximately 23% compared with 22% in 2020.

Focus to drive greater efficiencies throughout the business through costs and productivity initiatives, margin improvement, acquisition-related synergies and favorable taxes continue to drive profits. The company's productivity initiatives will enable the company to check costs, make strategic investments and expand businesses globally. The company is prioritizing projects that generate high returns within a short time while delaying longer-term investment that are unnecessary at this time.

▲ International Flavors is well-poised to benefit from increasing demand for a variety of consumer products containing flavors and fragrances. Anticipated growth in emerging markets remains a key catalyst. Consequently, International Flavors is focused on gaining share in emerging markets. Backed by the company's global presence, diversified business platform, broad product portfolio, global and regional customer base, it will be able to capitalize on the expansion in flavors and fragrances markets and deliver long-term growth.

▲ Over time, the company has made meaningful acquisitions, which have helped expand offerings and in turn profitability. In October 2018, the company completed the acquisition of Frutarom, the largest deal in the industry to date. Together, International Flavors and Frutarom created a global leader in natural taste, scent and nutrition with a broader customer base, more diversified product offerings and more exposure to end markets, including those with a focus on naturals and health and wellness. The company continues to anticipate generating cost synergies of more than \$145 million over the long haul. Synergies are expected to come from procurement, footprint optimization and streamlining of overhead expenses.

▲ International Flavors has officially completed its merger with DuPont's Nutrition & Biosciences ("N&B") business. The new entity is anticipated to be a global leader in high-value ingredients and solutions for food and beverage, home and personal care, and health & wellness markets with estimated pro forma revenue of more than \$11 billion and EBITDA of approximately \$2.5 billion. Notably, the projected sales is around 60% higher than nearest peer. Its Research & Development investment will be 1.5 times higher than its nearest peer.

It will command leading positions in core categories in nutrition, cultures, enzymes, probiotics, soy proteins, flavors and fragrances. This coupled with a diverse and broad customer base, and about 48% of annual sales from small medium and private label customers positions the company well for growth. The company anticipates around \$45 million of merger-related cost synergies in fiscal 2021 and a three-year run-rate cost synergy target of around \$300 million.

▲ International Flavors & Fragrances continues to maintain a disciplined approach to capital allocation even as it focuses on accelerating growth through organic investments and strategic acquisitions, while returning significant capital to shareholders. It continues to effectively manage its balance sheet by taking necessary actions to generate strong cash flow and maintain ample liquidity by reducing operational and capital expenses. Cash flow from operations totaled \$358 million in first-quarter 2021, driven by a \$193 million improvement in core working capital. Free cash flow generation was \$265 million and the company distributed \$82 million in dividends to its shareholders. Its cash position at the end of first-quarter 2021 was \$872 million. As of the first quarter end, its total debt-to-total capital ratio was at 0.36. International Flavors' times interest earned ratio is at 2.4 and current ratio is at 1.89. This indicates that the company is in a good position to fulfill its debt obligations.

▲ In sync with its portfolio optimization strategy to maximize shareholder value through non-core business divestitures, International Flavors has entered into an agreement to divest its fruit preparation business to Frulact. The fruit preparation business produces fruit, vegetable, herb, meat and fish preparation solutions for the food, beverage, and pet food markets. The divestiture is expected to close in third-quarter 2021, pending customary closing conditions. The fruit preparation business contributed approximately \$70 million to International Flavors' Nourish segment pro forma sales in 2020.

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## Reasons To Sell:

- ▼ The lingering impacts of COVID-19 pandemic remains a headwind. Due to the length and severity of COVID-19, the company is witnessing continued volatility as a result of retail and travel, consumer shopping and consumption behavior. Due to the pandemic, it has witnessed a slowdown in demand flavors utilized in retail food services. This continues to be a drag on Food Design unit.
- ▼ The company anticipates growth in India to be challenged this year as the country is grappling with a worsening COVID-19 situation. Further, related ongoing restrictions continue to heavily impact Western and Central Europe, which has resulted in challenges across the entire EMEA region and impacted sales.
- ▼ The company is witnessing additional manufacturing and raw material costs related to COVID-19. The company has experienced disruption in supply of raw materials and transport logistics due to pandemic related government restrictions. The company might incur additional costs to from labor, shipping, and cleaning and higher raw material costs owing to potential COVID-19 supply chain disruptions. Manufacturing expenses are also expected to increase to support higher demand.
- ▼ Market for the flavors and fragrances segment is fragmented and highly competitive. The company might not be able to combat the raw material inflation with price increases given the aggressive price competition, which would negatively impact its profits. Further, the company's presence in international markets (accounting for 75% of its net sales) has exposed it to currency-translation risks. Another cause of concern is that increasing awareness of health and wellness are driving changes in the consumer products industry. Consumers in developed economies such as the United States and Western Europe, are now shifting away from products containing artificial ingredients to all natural, healthier alternatives.
- ▼ In connection with Frutarom acquisition, the company has been executing an integration plan, which 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 with most of the closures targeted to occur by the end of 2022. Since the inception of the initiative through Mar 31, 2021, the company has closed 22 sites and expensed total costs of approximately \$27 million. Total costs for the program are expected to be approximately \$60 million including cash and non-cash items through 2022.

Lower demand for flavors used in retail food services and fine fragrances as well as high manufacturing and logistics costs due to the COVID-19 pandemic remains a concern.

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## Last Earnings Report

### International Flavors Q1 Earnings & Sales Top Estimates

International Flavors reported adjusted earnings of \$1.60 per share in first-quarter 2021, beating the Zacks Consensus Estimate of \$1.51. The bottom-line figure, however, edged down 1.2% from the year-ago quarter.

Including one-time items, the company reported a loss per share of 21 cents per share as against the earnings of \$1.15 per share recorded in the year-ago quarter.

International Flavors' net sales came in at \$2,465 million in the March-end quarter, reflecting a year-over year-growth of 83%. This was driven by the additional sales related to the merger with DuPont's Nutrition & Biosciences (N&B) business.

The top-line figure surpassed the Zacks Consensus Estimate of \$2,442 million. During the March-end quarter, currency neutral sales were up 1%, aided by strong performances in Scent & Pharma Solutions.

**Quarter Ending** **03/2021**

|                  |              |
|------------------|--------------|
| Report Date      | May 10, 2021 |
| Sales Surprise   | 0.94%        |
| EPS Surprise     | 5.96%        |
| Quarterly EPS    | 1.60         |
| Annual EPS (TTM) | 5.68         |

### Operational Highlights

During the January-March quarter, International Flavors' adjusted cost of goods sold was significantly up 96% year over year to \$1,529 million. Adjusted gross profit climbed 65% year over year to \$936 million. Adjusted gross margin came in at 38% compared with the 42% witnessed in the year-ago quarter.

Research and development expenses flared up 66% year over year to \$143 million. Adjusted selling and administrative expenses shot up 49.5% year on year to \$314 million during the first quarter. Adjusted operating EBITDA came in at \$569 million compared with the prior-year quarter \$303 million. Operating EBITDA margin was 23.1% compared with the year-ago quarter's 22.4%.

### Segmental Performances

Revenues in the Nourish segment jumped 69.4% year over year to \$1,308 million during the March-end quarter. Adjusted operating EBITDA was \$270 million, reflecting year-over-year growth of 5.8%.

Revenues generated in the Health & Bioscience segment came in at \$426 million compared with the year-earlier quarter's \$34 million. Adjusted operating EBITDA declined 2.3% year over year to \$128 million.

Scent segment revenues came in at \$569 million compared with the year-ago quarter's \$541 million. Adjusted operating EBITDA increased 8.4% year over year to \$128 million.

Revenues in the Pharma Solutions were \$162 million compared with the year-ago quarter's \$152 million. Adjusted operating EBITDA was \$43 million compared with the prior-year quarter's \$42 million.

### Financial Position

International Flavors had cash and cash equivalents of \$872 million at the end of first-quarter 2021, up from \$433 million witnessed at the end of the prior-year quarter. Long-term debt increased to \$11,330 million as of Mar 31, 2021, from \$3,779 million as of Dec 31, 2020.

International Flavors generated \$358 million of cash from operating activities in the first quarter compared with the \$17 million recorded in the year-ago quarter. Capital invested in purchasing property, plant and equipment totaled \$93 million in the reported quarter compared with the prior-year quarter's \$49 million. Dividend paid summed \$82 million in the first quarter.

### 2021 Guidance

International Flavors estimates sales of \$11.25 billion in 2021, driven by higher volumes, favorable foreign exchange, and pricing actions to mitigate escalating raw material and logistics costs. Adjusted EBITDA margin is projected at around 23%.

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## Recent News

### International Flavors Closes Integration Deal with DuPont

On **Feb 1, 2021**, International Flavors announced that it has wrapped up its previously announced merger deal with DuPont's N&B business. DuPont received a one-time cash payment of \$7.3 billion. DuPont shareholders will own 55.4% of the newly-formed company, while International Flavors shareholders will hold the remaining.

The new entity is anticipated to be a global leader in high-value ingredients and solutions for food and beverage, home and personal care, and health & wellness markets with estimated 2020 pro forma revenue of more than \$11 billion and EBITDA of approximately \$2.5 billion. With an expanded global reach and enhanced capabilities, the company will be able to meet customers' increasing preference for natural and healthier products.

In December 2019, International Flavors entered into a definitive merger agreement with DuPont's N&B business unit to form a new entity, focused on creating a leading global integrated solution.

## Valuation

International Flavors' shares are up 32.5% in the trailing six-month period and 16.5% over the trailing 12-month period. Stocks in Consumer Products – Staples industry are down 5.5% while the Zacks Consumer Staples sector are up 8% in the trailing six-month period. Over the past year, the Zacks sub-industry are down 10.5% while the sector are up 25.7%.

The S&P 500 index is up 15.8% in the trailing six-month period and 42.9% in the past year.

The stock is currently trading at 23.38X forward 12-month earnings, which compares with 23.97X for the Zacks sub-industry, 20.79X for the Zacks sector and 21.75X for the S&P 500 index.

Over the past five years, the stock has traded as high as 26.92X and as low as 14.65X, with a 5-year median of 21.3X.

Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$155 price target reflects 24.64X forward 12-month earnings.

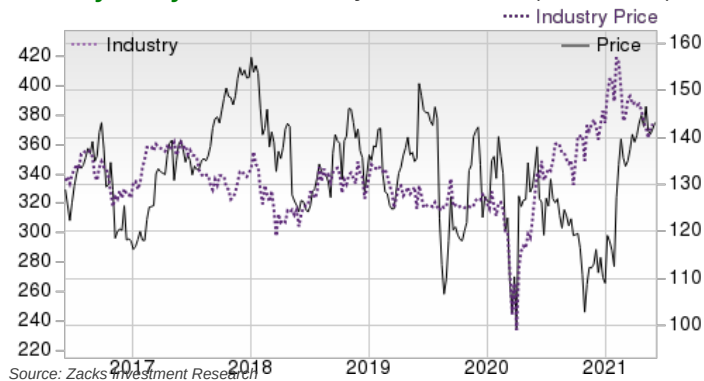
The table below shows summary valuation data for IFF.

| Valuation Multiples - IFF |               |       |              |        |         |
|---------------------------|---------------|-------|--------------|--------|---------|
|                           |               | Stock | Sub-Industry | Sector | S&P 500 |
| P/E F12M                  | Current       | 23.38 | 23.97        | 20.79  | 21.75   |
|                           | 5-Year High   | 26.92 | 24.95        | 22.40  | 23.83   |
|                           | 5-Year Low    | 14.65 | 13.32        | 16.51  | 15.31   |
|                           | 5-Year Median | 21.30 | 18.11        | 19.5   | 18.05   |
| EV/EBITDA TTM             | Current       | 32.30 | 10.77        | 42.62  | 17.32   |
|                           | 5-Year High   | 32.30 | 19.17        | 45.74  | 17.74   |
|                           | 5-Year Low    | 11.27 | 3.37         | 27.43  | 9.63    |
|                           | 5-Year Median | 14.99 | 10.88        | 39.27  | 13.46   |
| P/B TTM                   | Current       | 1.69  | 5.45         | 20.34  | 7.02    |
|                           | 5-Year High   | 7.33  | 22.09        | 20.73  | 7.03    |
|                           | 5-Year Low    | 1.55  | 2.99         | 9.25   | 3.84    |
|                           | 5-Year Median | 3.56  | 5.84         | 16.8   | 5.02    |

As of 06/09/2021

Source: Zacks Investment Research

## Industry Analysis Zacks Industry Rank: Bottom 9% (228 out of 251)



## Top Peers

| Company (Ticker)                     | Rec          | Rank |
|--------------------------------------|--------------|------|
| CONAGRA BRANDS (CAG)                 | Neutral      | 3    |
| Church & Dwight Co., Inc. (CHD)      | Neutral      | 3    |
| Campbell Soup Company (CPB)          | Neutral      | 3    |
| The Estee Lauder Companies Inc. (EL) | Neutral      | 3    |
| e.l.f. Beauty Inc. (ELF)             | Neutral      | 3    |
| Hershey Company The (HSY)            | Neutral      | 3    |
| The Kraft Heinz Company (KHC)        | Neutral      | 3    |
| The Clorox Company (CLX)             | Underperform | 4    |

The positions listed should not be deemed a recommendation to buy, hold or sell.

| Industry Comparison Industry: Consumer Products - Staples |           |            |           | Industry Peers |           |           |
|-----------------------------------------------------------|-----------|------------|-----------|----------------|-----------|-----------|
|                                                           | IFF       | X Industry | S&P 500   | CAG            | CHD       | CPB       |
| Zacks Recommendation (Long Term)                          | Neutral   | -          | -         | Neutral        | Neutral   | Neutral   |
| Zacks Rank (Short Term)                                   | 3         | -          | -         | 3              | 3         | 3         |
| VGM Score                                                 | D         | -          | -         | B              | C         | B         |
| Market Cap                                                | 36.61 B   | 2.84 B     | 30.22 B   | 17.91 B        | 20.73 B   | 13.91 B   |
| # of Analysts                                             | 7         | 3.5        | 12        | 8              | 10        | 7         |
| Dividend Yield                                            | 2.09%     | 0.00%      | 1.29%     | 2.95%          | 1.19%     | 3.22%     |
| Value Score                                               | C         | -          | -         | A              | C         | A         |
| Cash/Price                                                | 0.02      | 0.11       | 0.06      | 0.00           | 0.01      | 0.06      |
| EV/EBITDA                                                 | 52.38     | 11.98      | 17.40     | 14.14          | 18.31     | 12.48     |
| PEG F1                                                    | 5.81      | 2.29       | 2.13      | 2.03           | 3.49      | 5.48      |
| P/B                                                       | 1.69      | 4.07       | 4.17      | 2.15           | 6.46      | 4.65      |
| P/CF                                                      | 16.14     | 16.14      | 17.80     | 12.08          | 23.27     | 11.32     |
| P/E F1                                                    | 24.65     | 16.99      | 21.56     | 14.21          | 27.88     | 14.95     |
| P/S TTM                                                   | 5.90      | 1.28       | 3.51      | 1.53           | 4.17      | 1.60      |
| Earnings Yield                                            | 4.07%     | 3.47%      | 4.55%     | 7.05%          | 3.58%     | 6.69%     |
| Debt/Equity                                               | 0.52      | 0.41       | 0.66      | 0.99           | 0.56      | 1.67      |
| Cash Flow (\$/share)                                      | 9.11      | 1.59       | 6.83      | 3.09           | 3.63      | 4.06      |
| Growth Score                                              | C         | -          | -         | C              | C         | C         |
| Historical EPS Growth (3-5 Years)                         | 1.22%     | 0.61%      | 9.44%     | 3.17%          | 12.70%    | -1.12%    |
| Projected EPS Growth (F1/F0)                              | 4.84%     | 5.57%      | 21.30%    | -0.10%         | 7.14%     | 4.12%     |
| Current Cash Flow Growth                                  | -4.74%    | 7.73%      | 0.98%     | 22.57%         | 12.83%    | 7.36%     |
| Historical Cash Flow Growth (3-5 Years)                   | 13.55%    | 13.55%     | 7.28%     | 4.34%          | 11.02%    | 2.72%     |
| Current Ratio                                             | 1.89      | 1.70       | 1.39      | 0.80           | 0.87      | 0.89      |
| Debt/Capital                                              | 34.52%    | 33.35%     | 41.53%    | 49.84%         | 36.09%    | 62.53%    |
| Net Margin                                                | 3.17%     | 2.97%      | 11.95%    | 10.15%         | 15.63%    | 9.18%     |
| Return on Equity                                          | 7.94%     | 13.62%     | 16.36%    | 16.95%         | 23.00%    | 33.21%    |
| Sales/Assets                                              | 0.31      | 1.03       | 0.51      | 0.53           | 0.69      | 0.71      |
| Projected Sales Growth (F1/F0)                            | 121.21%   | 12.36%     | 9.37%     | -2.03%         | 5.76%     | -2.84%    |
| Momentum Score                                            | F         | -          | -         | B              | B         | C         |
| Daily Price Change                                        | 1.57%     | -0.74%     | -0.44%    | -3.02%         | -0.69%    | -6.51%    |
| 1-Week Price Change                                       | 0.94%     | 0.00%      | 0.58%     | 2.15%          | 0.86%     | 2.08%     |
| 4-Week Price Change                                       | 8.72%     | 8.33%      | 2.80%     | -0.51%         | -3.27%    | -6.67%    |
| 12-Week Price Change                                      | 6.70%     | -1.23%     | 7.24%     | 0.70%          | 2.90%     | -6.21%    |
| 52-Week Price Change                                      | 10.16%    | 47.31%     | 36.87%    | 12.38%         | 11.97%    | -6.17%    |
| 20-Day Average Volume (Shares)                            | 1,309,424 | 496,562    | 1,770,532 | 2,671,468      | 1,219,544 | 2,369,641 |
| EPS F1 Estimate 1-Week Change                             | 0.00%     | 0.00%      | 0.00%     | 0.00%          | 0.00%     | -5.09%    |
| EPS F1 Estimate 4-Week Change                             | -0.45%    | 0.00%      | 0.03%     | 0.00%          | 0.00%     | -5.05%    |
| EPS F1 Estimate 12-Week Change                            | 1.70%     | 0.54%      | 3.39%     | 0.45%          | -0.07%    | -4.83%    |
| EPS Q1 Estimate Monthly Change                            | -3.42%    | 0.00%      | 0.00%     | 0.00%          | 0.00%     | 0.00%     |

Source: Zacks Investment Research



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## Zacks Stock Rating System

We offer two rating systems that take into account investors' holding horizons: Zacks Rank and Zacks Recommendation. Each provides valuable insights into the future profitability of the stock and can be used separately or in combination with each other depending on your investment style.

### Zacks Recommendation

The Zacks Recommendation aims to predict performance over the next 6 to 12 months. The foundation for the quantitatively determined Zacks Recommendation is trends in the company's estimate revisions and earnings outlook. The Zacks Recommendation is broken down into 3 Levels; Outperform, Neutral and Underperform. Unlike many Wall Street firms, we maintain a balance between the number of Outperform and Neutral recommendations. Our team of 70 analysts are fully versed in the benefits of earnings estimate revisions and how that is harnessed through the Zacks quantitative rating system. But we have given our analysts the ability to override the Zacks Recommendation for the 1200 stocks that they follow. The reason for the analyst over-rides is that there are often factors such as valuation, industry conditions and management effectiveness that a trained investment professional can spot better than a quantitative model.

### Zacks Rank

The Zacks Rank is our short-term rating system that is most effective over the one- to three-month holding horizon. The underlying driver for the quantitatively-determined Zacks Rank is the same as the Zacks Recommendation, and reflects trends in earnings estimate revisions.

### Zacks Style Scores

The Zacks Style Score is as a complementary indicator to the Zacks rating system, giving investors a way to focus on the highest rated stocks that best fit their own stock picking preferences.

Academic research has proven that stocks with the best Value, Growth and Momentum characteristics outperform the market. The Zacks Style Scores rate stocks on each of these individual styles and assigns a rating of A, B, C, D and F. We also produce the VGM Score (V for Value, G for Growth and M for Momentum), which combines the weighted average of the individual Style Scores into one score. This is perfectly suited for those who want their stocks to have the best scores across the board.

|                |   |
|----------------|---|
| Value Score    | C |
| Growth Score   | C |
| Momentum Score | F |
| VGM Score      | D |

As an investor, you want to buy stocks with the highest probability of success. That means buying stocks with a Zacks Recommendation of Outperform, which also has a Style Score of an A or a B.

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## Disclosures

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Investing involves risk; principal loss is possible. There is no guarantee that companies that can issue dividends will declare, continue to pay or increase dividends.

## Glossary of Terms and Definitions

**52-Week High-Low:** The range of the highest and lowest prices at which a stock has traded during the past year. This range is determined based on the stock's daily closing price which may differ from the intra-day high or low. Many investors use it as a technical indicator to determine a stock's current value and future price movement. The idea here is that if price breaks out from the 52-week range, in either direction, the momentum may continue in the same direction.

**20-Day Average Volume (Shares):** The average number of shares of a company traded in a day over the last 20 days. It is a direct indication of a security's overall liquidity. The higher the average daily trading volume, the easier it is to enter or exit the stock at a desired price with more buyers and sellers being available.

**Daily Price Change:** This is the percentage difference between a trading day's closing price and the prior trading day's closing price. This item is updated at 9 p.m. EST each day.

**1-Week Price Change:** This is the percentage change in a stock's closing price over the last 5 trading days. This change reflects the collective buying and selling sentiment over the 1-week period.

A strong weekly price increase for the stock, especially when accompanied by increased volume, is an indication of it gaining momentum.

**4-Week Price Change:** This is the percentage change in a stock's closing price over the last 20 trading days or past 4 weeks. This is a medium-term price change metric and an indication of the stock gaining momentum.

**12-Week Price Change:** This is the percentage change of a stock's closing price over the last 60 trading days or past 12 weeks. Similar to 4-week price change, this is a medium-term price change metric. It shows whether a stock has been enjoying strong investor demand, or if it has been in consolidation, or distress over this period.

**52-Week Price Change:** This is the percentage change in a stock's closing price over the last 260 trading days or past 52 weeks. This long-term price change metric is a good reference point for investors. Some investors seek stocks with the best percentage price change over the last 52 weeks, expecting the momentum to continue.

**Market Cap:** The number of outstanding common shares of a company times its latest price per share. This figure represents a company's size, which indicates various characteristics, including price stability and risk, in which investors could be interested.

**Year-To-Date Price Change:** Change in a stock's daily closing price in the period of time beginning the first day of the current calendar year through to the previous trading day.

**# of Analysts:** Number of EPS estimates used in calculating the current-quarter consensus. These estimates come from the brokerage analysts tracking this stock. However, the number of such analysts tracking this stock may not match the number of estimates, as all brokerage analysts may not come up with an estimate or provide it to us.

**Beta:** A measure of risk commonly used to compare the volatility of a stock to the overall market. The S&P 500 Index is the base for calculating beta and carries a value of 1. A stock with beta below 1 is less risky than the market as a whole. And a stock with beta above 1 is riskier.

**Dividend:** The portion of earnings a company is expected to distribute to its common shareholders in the next 12 months for each share they own. Dividends are usually paid quarterly. Dividend payments reflect positively on a company and help maintain investors' trust. Investors typically find dividend-paying stocks appealing because the dividend adds to any market price appreciation to result in higher return on investment (ROI). Moreover, a steady or increasing dividend payment provides investors a cushion in a down market.

**Dividend Yield:** The ratio of a company's annual dividend to its share price. The annual dividend used in the ratio is calculated based on the most recent dividend paid by the company. Dividend yield is an estimate of the dividend-only return from a stock in the next 12 months. Since dividend itself doesn't change frequently, dividend yield usually changes with a stock's price movement. As a result, often an unusually high dividend yield is a result of weak stock price.

**S&P 500 Index:** The Standard & Poor's 500 (S&P 500) Index is an unmanaged group of securities considered to be representative of the stock market in general. It is a market-capitalization-weighted index of stocks of the 500 largest U.S. companies. Each stock's weight in the index is proportionate to its market value.

**Industry:** One of the 250+ groups that Zacks classifies all stocks into based on the nature of business. These groups are termed as expanded (aka "X") industries and map to their respective (economic) sectors; Zacks has 16 sectors.

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**Zacks Industry Rank:** The Zacks Industry Rank is determined by calculating the average Zacks Rank for all stocks in the industry and then assigning an ordinal rank to it. For example, an industry with an average Zacks Rank of 1.6 is better than an industry with an average Zacks Rank of 2.3. So, the industry with the better average Zacks Rank would get a better Zacks Industry Rank. If an industry has the best average Zacks Rank, it would be considered the top industry (1 out of 250+), which would place it at the top 1% of Zacks-ranked industries. Studies have shown that roughly half of a stock's price movement can be attributed to the industry group it belongs to. In fact, the top 50% of Zacks-ranked industries outperforms the bottom 50% by a factor of more than 2 to 1.

**Last EPS Surprise:** The percentage deviation of a company's last reported earnings per share from the Zacks Consensus Estimate. Companies with a positive earnings surprise are more likely to surprise again in the future (or miss again if they recently missed).

**Last Sales Surprise:** The percentage deviation of a company's last reported sales from the Zacks Consensus Estimate.

**Expected Report Date:** This is an estimated date of a company's next earnings release. The information originated or gathered by Zacks Investment Research from its information providers or publicly available sources is the basis of this estimate.

**Earnings ESP:** The Zacks Earnings ESP compares the Most Accurate Estimate to the Zacks Consensus Estimate for the yet-to-be reported quarter. The Most Accurate Estimate is the most recent version of the Zacks Consensus EPS Estimate. The idea here is that analysts revising their estimates closer to an earnings release have the latest information, which could potentially be more accurate than what they and others contributing to the consensus had predicted earlier. Thus, a positive or negative Earnings ESP reading theoretically indicates the likely deviation of the actual earnings from the consensus estimate. However, the model's predictive power is significant for positive ESP readings only. A positive Earnings ESP is a strong predictor of an earnings beat, particularly when combined with a Zacks Rank #1 (Strong Buy), #2 (Buy) or #3 (Hold). Our research shows that stocks with this combination produce a positive surprise nearly 70% of the time.

**Periods:**

**TTM:** Trailing 12 months. Using TTM figures is an effective way of analyzing the most-recent financial data in an annualized format that helps neutralize the effects of seasonality and other quarter-to-quarter variation.

**F1:** Current fiscal year. This period is used to analyze the estimates for the ongoing full fiscal year.

**F2:** Next fiscal year. This period is used to analyze the estimates for the next full fiscal year.

**F12M:** Forward 12 months. Using F12M figures is an effective way of analyzing the near-term (the following four unreported quarters) estimates in an annualized manner. Instead of typically representing estimates for the full fiscal year, which may not represent the nitty-gritty of each quarter, F12M figures suggest an all-inclusive annualized estimate for the following four quarters. The annualization helps neutralize the potential effects of seasonality and other quarter-to-quarter variations.

**P/E Ratio:** The price-to-earnings ratio measures a company's current market price per share relative to its earnings per share (EPS). Usually, the trailing-12-month (TTM) EPS, current-fiscal-year (F1) EPS estimate, or forward-12-month (F12M) EPS estimate is used as the denominator. In essence, this ratio shows what the market is willing to pay today for each dollar of EPS. In other words, this ratio gives a sense of what the relative value of the company is at the already reported level of earnings or at a future level of earnings.

It is one of the most widely-used multiples for determining the value of a company and helps comparing its valuation with that of a competitor, the industry group or a benchmark.

**PEG Ratio:** The price/earnings to growth ratio is a stock's P/E ratio using current fiscal year (F1) EPS estimate divided by its expected EPS growth rate over the coming 3 to 5 years. This ratio essentially determines a stock's value by factoring in the company's expected earnings growth and is thus believed to provide a more complete picture than just the P/E ratio, particularly for faster-growing companies.

**P/S Ratio:** The price-to-sales ratio is calculated as a company's current price per share divided by trailing 12 months (TTM) sales or revenues per share. This ratio shows what the market is willing to pay today for each dollar of TTM sales per share. The P/S ratio is at times the only valuation metric when the company has yet to become profitable.

**Cash/Price Ratio:** The cash-to-price ratio or Cash Yield is calculated as cash and marketable securities per share divided by the company's current share price. Like the earnings yield, which shows the anticipated yield (or return) on a stock from earnings for each dollar invested, the cash yield does the same, with cash being the source of return instead of earnings. For example, a cash/price ratio of 0.08 suggests a return of 8% or 8 cents for every \$1 investment.

**EV/EBITDA Ratio:** The EV/EBITDA ratio, also known as Enterprise Multiple, is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by EBITDA (earnings before interest, taxes, depreciation and amortization). Usually, trailing-12-month (TTM) or forward-12-month (F12M) EBITDA is used as the denominator.

**EV/Sales Ratio:** The enterprise value-to-sales ratio is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by annual sales. It is an expansion of the P/S valuation, which uses market value instead of enterprise value. The EV/Sales ratio is perceived as more accurate than P/S, in part, because the market capitalization does not take a company's debt into account when valuing it.

**EV/CF Ratio:** The enterprise value-to-cash flow ratio is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by the trailing-12-month (TTM) operating cash flow. It's a measure of how long it would take to buy the entire business if you were able to use all the company's operating cash flow.

The EV/CF ratio is perceived as more accurate than the P/CF ratio, in part, because the market price does not take a company's debt into account when valuing it.

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**EV/FCF Ratio:** The enterprise value-to-free cash flow metric compares a company's enterprise value to its trailing-12-month (TTM) free cash flow (FCF). This metric is very similar to the EV/CF ratio, but is considered a more exact measure owing to the fact that it uses free cash flow, which subtracts capital expenditures (CAPEX) from a company's total operating cash flow, thereby reflecting the actual cash flow available for funding growth activities and payments to shareholders.

**P/EBITDA Ratio:** The P/EBITDA ratio is calculated as a company's per share market value divided by EBITDA (earnings before interest, taxes, depreciation, and amortization). This metric is very similar to the EV/EBITDA ratio, but is considered a little less exact measure as it uses market price, which does not take a company's debt into account. However, since EBITDA is often considered a proxy for cash income, the metric is used as a measure of what the market is willing to pay today for each dollar of the company's cash profitability in the trailing 12 months (TTM) or forward 12 months (F12M).

**P/B Ratio:** The price-to-book ratio is calculated as a company's current price per share divided by its book value (total assets – liabilities – preferred stocks) per share. In short, the book value is how much a company is worth. In other words, it reflects the total value of a company's assets that its common shareholders would receive if it were to be liquidated. So, the P/B ratio indicates whether you're paying higher or lower than what would remain if the company went bankrupt immediately. Investors typically use this metric to determine how a company's stock price stacks up to its intrinsic value.

**P/TB Ratio:** The price-to-tangible-book value ratio is calculated as a the per share market value of a company divided by the value of its tangible assets (total assets – liabilities – preferred stocks – intangible assets) per share. Tangible book value is the same thing as book value except it excludes the value of intangible assets to get a step closer to the baseline value of the company.

**P/CF Ratio:** The price-to-cash flow ratio measures a company's per share market price relative to its trailing-12-month (TTM) operating cash flow per share. This metric is used to determine whether a company is undervalued or overvalued relative to another stock, industry or sector. And like the P/E ratio, a lower number is typically considered better from the value perspective.

One of the reasons why P/CF ratio is often preferred over P/E ratio is the fact that operating cash flow adds back non-cash expenses such as depreciation and amortization to net income. This feature helps valuing stocks that have positive cash flow but are not profitable because of large noncash charges.

**P/FCF Ratio:** The price-to-free cash flow ratio is an extension of P/CF ratio, which uses trailing-12-month (TTM) free cash flow per share instead of operating cash flow per share. This metric is considered a more exact measure than P/CF ratio, as free cash flow subtracts capital expenditures (CAPEX) from a company's total operating cash flow, thereby reflecting the actual cash flow available for funding activities that generate additional revenues.

**Earnings Yield:** The earnings yield is calculated as current fiscal year (F1) EPS estimate divided by the company's current share price. The ratio, which is the inverse of the P/E ratio, measures the anticipated yield (or return) from earnings for each dollar invested in a stock today.

For example, earnings yield for a stock, which is trading at \$35 and expected to earn \$3 per share in the current fiscal year (F1), would be 0.0857 ( $3/35 = 0.0857$ ) or 8.57%. In other words, for \$1 invested in the stock today, the yield from earnings is anticipated to be 8.57 cents.

Investors most commonly compare the earnings yield of a stock to that of a broad market index (such as the S&P 500) and prevailing interest rates, such as the current 10-year Treasury yield. Since bonds and stocks compete for investors' dollars, stock investors typically demand a higher yield for the extra risk they assume compared to investors of U.S. Treasury-backed securities that offer virtually risk-free returns. This additional return is referred to as the risk premium.

**Debt/Equity Ratio:** The debt-to-equity ratio is calculated as a company's total liabilities divided by its shareholder equity. This metric is used to gauge a company's financial leverage. In other words, it is a measure of the degree to which a company is financing its operations through debt versus its own funds. The higher the ratio, the higher the risk for shareholders.

However, this ratio is difficult to compare across industry groups where ideal amounts of debt vary. Some businesses are more capital intensive than others and typically require higher debt to finance their operations. So, a company's debt-to-equity ratio should be compared with other companies in the same industry.

**Cash Flow (\$/share):** Cash flow per share is calculated as operating cash flow (after-tax earnings + depreciation + other non-cash charges) divided by common shares outstanding. It is used by many investors as a measure of a company's financial strength. Since cash flow per share takes into consideration a company's ability to generate cash by adding back non-cash expenses, it is regarded by some as a more accurate measure of a company's financial situation than earnings per share, which could be artificially deflated.

**Current Ratio:** The current ratio or liquidity ratio is a company's current assets divided by its current liabilities. It measures a company's ability to pay short-term obligations. A current ratio that is in line with the industry average or slightly higher is generally considered acceptable. A current ratio that is lower than the industry average would indicate a higher risk of distress or default. A higher number is usually better. However, a very high current ratio compared to the industry average could be an indication of inefficient use of assets by management.

**Debt/Capital Ratio:** Debt-to-capital ratio is a company's total debt (interest-bearing debt + both short- and long-term liabilities) divided its total capital (interest-bearing debt + shareholders' equity). It is a measure of a company's financial leverage. All else being equal, the higher the debt-to-capital ratio, the riskier the stock.

However, this ratio can vary widely from industry to industry, the ideal amount of required debt being different. Some businesses are more capital intensive than others and typically require higher debt to finance their operations. So, a company's debt-to-capital ratio should be compared with the same for its industry.

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**Net Margin:** Net margin is calculated as net income divided by sales. It shows how much of each dollar in sales generated by a company translates into profit. For example, if a company's net margin is 15%, its net income is 15 cents for every \$1 of sales it makes.

A change in margin can reflect either a change in business conditions, or a company's cost controls, or both. If a company's expenses are growing faster than sales, its net margin will decline. However, different net margin rates are considered good for different industries, so it's better to compare net margin rates of companies in the same industry group.

**Return on Equity:** Return on equity (ROE) is calculated as trailing-12-month net income divided by trailing-12-month average shareholder equity (including reinvested earnings). This metric is considered a measure of how effectively management is using a company's assets to generate profits. For example, if a company's ROE is 10%, it creates 10 cents profits for every \$1 shareholder equity, which is basically the company's assets minus debt. A company's ROE deemed good or bad depends on what's normal for its peers or industry group.

**Sales/Assets Ratio:** The sales-to-assets ratio or asset utilization ratio or asset turnover ratio is calculated as a company's annual sales divided by average assets (average of assets at the beginning of the year and at the year's end). This metric helps investors understand how effectively a company is using its assets to generate sales. For example, a sales-to-assets ratio of 2.5 indicates that the company generated \$2.50 in sales for every \$1 of assets on its books.

The higher the sales-to-assets ratio, the better the company is performing. However, similar to many other ratios, the asset turnover ratio tends to be higher for companies in certain industries/sectors than in others. So, a company's sales-to-assets ratio should be compared with the same for its industry/sector.

**Historical EPS Growth (3-5 Years):** This is the average annual (trailing-12-month) EPS growth rate over the last 3-5 years. This metric helps investors see how a company's EPS has grown from a long-term perspective.

Note: There are many factors that can influence short-term numbers — a recession will reduce this number, while a recovery will inflate it. The longterm perspective helps smooth out short-term events.

**Projected EPS Growth (F1/F0):** This is the estimated EPS growth rate for the current financial year. It is calculated as the consensus estimate for the current fiscal year (F1) divided by the reported EPS for the last completed fiscal year (F0).

**Current Cash Flow Growth:** It measures the latest year-over-year change in operating cash flow. Cash flow growth tells an investor how quickly a company is generating inflows of cash from operations. A positive change in the cash flow is desired and shows that more 'cash' is coming in than going out.

**Historical Cash Flow Growth (3-5 Years):** This is the annualized change in cash flow over the last 3-5 years. The change in a longer period helps put the current reading into proper perspective. By looking at the rate, rather than the actual dollar value, the comparison across the industry and peers becomes easier.

**Projected Sales Growth (F1/F0):** This metric looks at the estimated sales growth for the current year. It is calculated as sales estimate for the current fiscal year (F1) divided by the reported sales for the last completed fiscal year (F0).

Like EPS growth, a higher rate is better for sales growth. A look at a company's projected sales growth instantly tells you what the outlook is for their products and services. However, different sales growth rates are considered good for different industries, so it's better to compare sales growth rates of companies in the same industry group.

**EPS F1 Estimate 1-Week Change:** The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past week. The change in a company's consensus EPS estimate (or earnings estimate revision) has proven to be strongly correlated with the near-term price movement of its shares. It is an integral part of the Zacks Rank.

If a stock's consensus EPS estimate is \$1.10 now versus \$1.00 a week ago, that will be reflected as a 10% upward revision. If, on the other hand, it went from \$1.00 to 90 cents, that would be a 10% downward revision.

**EPS F1 Estimate 4-Week Change:** The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past four weeks.

A stock's earnings estimate revision in a 1-week period is important. But it's more meaningful to look at the longer-term revision. And, of course, the 4-week change helps put the 1-week change into proper perspective.

**EPS F1 Estimate 12-Week Change:** The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past 12 weeks.

This metric essentially shows how the consensus EPS estimate has changed over a period longer than 1 week or 4 weeks.

**EPS Q1 Estimate Monthly Change:** The percentage change in the Zacks Consensus EPS estimate for the current fiscal quarter over the past four weeks.

While the revision in consensus EPS estimate for the current fiscal year is strongly correlated with the near-term price movement of its shares, the estimate revision for the current fiscal quarter is an important metric as well, especially over the short term, and particularly as a stock approaches its earnings date. If a stock's Q1 EPS estimate decreases ahead of its earnings release, it's usually a negative sign, whereas an increase is a positive sign.