

## Berry Global Group (BERY)

**\$40.08** (As of 05/15/20)

Price Target (6-12 Months): **\$42.00**

Long Term: 6-12 Months

**Zacks Recommendation:**

**Neutral**

(Since: 02/10/20)

Prior Recommendation: Outperform

Short Term: 1-3 Months

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

**2-Buy**

Zacks Style Scores:

VGM:A

Value: A

Growth: B

Momentum: C

### Summary

Berry Global's diversified business structure allows it to mitigate the adverse impacts of weakness in one end market, with strength across others. The company is well-placed to benefit from acquisitions it made over time. The RPC Group buyout has been enhancing its growth opportunities in the plastic and recycled packaging industry. We believe that improvement in cash flows will support Berry Global's capital-allocation strategies. In the past month, its shares have outperformed the industry. However, the coronavirus outbreak-led market downturn and weakness in the industrial end markets remain concerning for its top line. High debt levels may increase the company's financial obligations and hurt profitability. For fiscal 2020, it expects cash interest costs of \$430 million. Moreover, high operating expenses can also hurt margins.

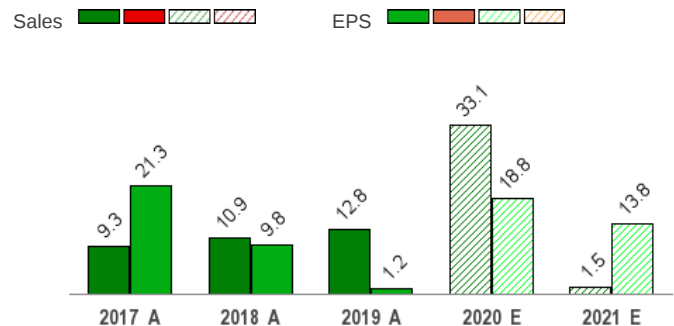
### Price, Consensus & Surprise



### Data Overview

|                            |                                                  |
|----------------------------|--------------------------------------------------|
| 52 Week High-Low           | \$55.26 - \$25.00                                |
| 20 Day Average Volume (sh) | 1,776,181                                        |
| Market Cap                 | \$5.3 B                                          |
| YTD Price Change           | -15.6%                                           |
| Beta                       | 1.33                                             |
| Dividend / Div Yld         | \$0.00 / 0.0%                                    |
| Industry                   | <a href="#">Containers - Paper and Packaging</a> |
| Zacks Industry Rank        | Top 11% (29 out of 254)                          |

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



|                           |       |
|---------------------------|-------|
| Last EPS Surprise         | 11.2% |
| Last Sales Surprise       | -2.9% |
| EPS F1 Est- 4 week change | 0.7%  |
| Expected Report Date      | NA    |
| Earnings ESP              | 0.8%  |
| P/E TTM                   | 11.3  |
| P/E F1                    | 9.9   |
| PEG F1                    | 1.0   |
| P/S TTM                   | 0.5   |

### Sales Estimates (millions of \$)

|      | Q1      | Q2      | Q3      | Q4      | Annual*  |
|------|---------|---------|---------|---------|----------|
| 2021 |         |         |         |         | 11,992 E |
| 2020 | 2,816 A | 2,975 A | 3,042 E | 2,890 E | 11,813 E |
| 2019 | 1,972 A | 1,950 A | 1,937 A | 3,019 A | 8,878 A  |

### EPS Estimates

|      | Q1       | Q2       | Q3       | Q4       | Annual*  |
|------|----------|----------|----------|----------|----------|
| 2021 |          |          |          |          | \$4.61 E |
| 2020 | \$0.56 A | \$1.19 A | \$1.17 E | \$1.17 E | \$4.05 E |
| 2019 | \$0.77 A | \$0.84 A | \$0.90 A | \$0.90 A | \$3.41 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 05/15/2020. The reports text is as of 05/18/2020.

## Overview

**Berry Global Group, Inc.** manufactures and distributes nonwoven specialty materials, engineered materials and consumer packaging products in the market. The company services personal care, healthcare as well as beverage and food markets in South America, North America, Asia and Europe.

This Evansville, IN-based company was formerly known as Berry Plastics Group, Inc, but changed its official name to Berry Global Group, Inc in April 2017. The company employs more than 48,000 people globally (as of fiscal 2019 end).

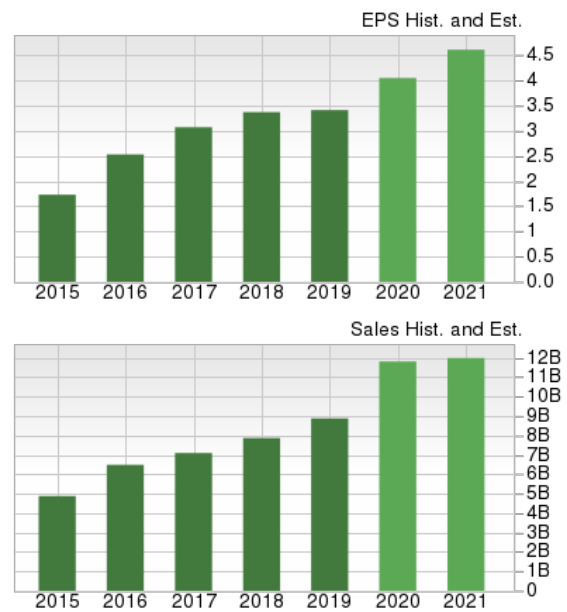
In July 2019, the company acquired United Kingdom-based RPC Group Plc. The latter specializes in providing recycled solutions and plastic packaging. Its products are mainly used by customers, both in the non-packaging and packaging markets. With the completion of the RPC Group buyout, Berry Global revised its business segments from the earlier three segments (Engineered Materials; Health, Hygiene & Specialties; and Consumer Packaging) to four segments — Consumer Packaging - International; Consumer Packaging - North America; Engineered Materials; and Health, Hygiene, and Specialties.

**Consumer Packaging – International** segment (36.8% revenues in second-quarter fiscal 2020): This segment consists of the international businesses of acquired RPC Group. It is engaged in manufacturing several products under products groups of bottles and canisters, containers, polythene films, pharmaceutical devices and technical components.

**Consumer Packaging — North America** segment (23.7%): The segment incorporates the company's legacy Consumer Packaging business and the U.S. portion of the acquired RPC Group business. It offers various products under groups like containers and pails, foodservice, closures and overcaps, bottles and prescription vials and tubes.

**Engineered Materials** segment (20.1%): This segment is comprised of product groups like stretch and shrink films, converter films, tape products, food and consumer films, retail bags, PVC and agriculture films.

**Health, Hygiene & Specialties** segment (19.4%): This segment consists of several product groups including health products, hygiene products and specialties products.



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## Reasons To Buy:

- ▲ Berry Global follows a balanced capital allocation strategy. It utilizes its cash flow for improving organic growth capabilities, executing cost-reduction actions, acquisitions, repaying debts and repurchasing shares. In the first six months of fiscal 2020, the company repaid its long-term debt of \$1,484 million. Notably, Berry Global stated that it used the net proceeds of \$325 million, realized from the sale of its SFL business (in July 2019) to repay debt. Further improvement in cash flows is likely to effectively support the company's capital-allocation strategies. For fiscal 2020, Berry Global anticipates cash flow from operations of a minimum of \$1,400 million, capital expenditure of \$600 million and free cash flow of more than \$800 million. In addition, in the past 30 days, the company's earnings estimates have moved upward by 1.8% for fiscal 2020 and 1.5% for fiscal 2021. In the past month, its shares have gained 9.9% compared with the industry's growth of 1.7%.

Sound capital-allocation strategies, anticipated synergistic gains from acquired assets and diversified products portfolio will likely be beneficial for Berry Global.
  - ▲ Over time, Berry Global has solidified its product portfolio and leveraged business opportunities through the addition of assets. In July 2019, the company completed the acquisition of RPC Group Plc. The buyout has been enhancing Berry Global's growth opportunities in the plastic and recycled packaging industry. Notably, in the first and second quarters of fiscal 2020, the buyout contributed 38.4% and 39.5%, respectively, to sales. Notably, the company continues to expect the deal to generate annual cost synergies of \$150 million, with half of it expected to be realized in fiscal 2020. Berry Global noted that the RPC integration-related activities are on track. Moreover, the company noted that its organic growth investments have been benefiting its Engineered Materials and Health, Hygiene & Specialties segments. In addition, its diligent cost-cutting initiatives are likely to improve its competency over time.
  - ▲ Berry Global has a diversified business structure, with strong portfolio of products, with bulk of it being consumer non-discretionary products. This allows it to mitigate the adverse impacts of weakness in one end-market, with strength across others. Going forward, the company expects both of its Consumer Packaging segments to show resilience during the coronavirus-led global market downturn, backed by strength across the healthcare, hygiene and grocery end-markets. Going forward, the Health, Hygiene & Specialties segment is also likely to benefit from higher demand for its healthcare products. Moreover, the company revised its business segments from the earlier three (Engineered Materials; Health, Hygiene & Specialties; and Consumer Packaging) to four (Health, Hygiene and Specialties; Consumer Packaging - International; Engineered Materials; and Consumer Packaging - North America). The move, announced following the completion of the RPC Global buyout, will continue to enable Berry Global to offer better services to customers and enhance shareholder value.
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## Reasons To Sell:

- ▼ Berry Global is experiencing a persistent weak operational performance across its Engineered Materials segment. Notably, in second-quarter fiscal 2020, the Engineered Materials segment's sales declined 3.4% year over year due to a fall in selling prices and weakness in industrial end markets amid the coronavirus-led market downturn. The company expects the headwinds to persist in the near term. In addition, the duration of the coronavirus pandemic and its impact on demand for the company's products and services along with the impacts of the governmental regulations imposed in response to the crisis will likely have a bearing on the company's overall results in the upcoming quarters.
- ▼ Escalating cost of goods sold has been a major cause of concern for Berry Global over time. In the last five fiscal years (2015-2019), the company's cost of goods sold increased 12.6% (CAGR). Notably, in the first quarter of fiscal 2020 and the second quarter of fiscal 2020, the metric surged 42.1% and 51.5%, respectively, on a year-over-year basis despite its cost-reduction initiatives. In addition, in the fiscal first and second quarters, the company's selling, general and administrative expenses jumped 84.7% and 42.7%, respectively. Rise in expenses (on account of high operating and restructuring related costs) has been elevating its aggregate costs of late. Notably, in fiscal 2020, the company anticipates to incur restructuring-related costs of \$75 million from the RPC acquisition. Further, escalation in costs might weigh on Berry Global's margins in the quarters ahead.
- ▼ Berry Global's long-term debt in the last five fiscal years (2015-2019) increased 25.3% (CAGR). Despite the company's efforts to reduce debt leverage, its current and long-term debt remained high at \$11,115 million at the end of the second quarter of fiscal 2020. For fiscal 2020, Berry Global predicts interest expenses of \$430 million. Further, increase in debt levels can raise the company's financial obligations. Berry Global's stock looks more leveraged than the industry. Its debt/capital ratio is currently pegged at 0.87, significantly higher than 0.58 of the industry. This makes us cautious toward the stock.

Escalating costs, high debt levels, and coronavirus-led market downturn might be detrimental to Berry Global in the quarters ahead.

## Last Earnings Report

### Berry Global Q2 Earnings Beat Estimates, Revenues Miss

Berry Global reported mixed second-quarter fiscal 2020 (ended Mar 28, 2020) results, wherein earnings surpassed the Zacks Consensus Estimate but revenues lagged the same.

In the fiscal second quarter, the company's adjusted earnings of \$1.19 per share were higher than 84 cents reported a year ago. However, the bottom line beat the Zacks Consensus Estimate of \$1.07 by 11.2%.

Berry Global's net sales were \$2,975 million, reflecting a year-over-year increase of 52.6%. The improvement was driven by gains from acquired assets and 2% growth in organic volumes, partially offset by a decline in selling prices. However, the top line lagged the consensus estimate of \$3,064 million by 2.9%.

Quarter Ending **03/2020**

| Report Date      | May 01, 2020 |
|------------------|--------------|
| Sales Surprise   | -2.90%       |
| EPS Surprise     | 11.21%       |
| Quarterly EPS    | 1.19         |
| Annual EPS (TTM) | 3.55         |

### Segmental Performance

The company reports results under four segments — Consumer Packaging–International, Consumer Packaging–North America, Health, Hygiene & Specialties, and Engineered Materials. A brief snapshot of fiscal second-quarter segmental sales is provided below:

Consumer Packaging–International's sales were \$1,095 million compared with \$50 million in the year-ago quarter. The increase was driven by significant contribution of net sales from the RPC acquisition. It accounted for 36.8% of the quarter's net sales.

Consumer Packaging–North America's sales were \$706 million, up 10.5% year over year. The increase was attributable to gains from acquired assets, partially offset by lower selling prices. It accounted for 23.7% of the quarter's net sales.

Revenues generated from Health, Hygiene & Specialties amounted to \$576 million, down 10.3% year over year. The fall was primarily attributable to divestiture of the SFL business and lower selling prices. It accounted for 19.4% of the quarter's net sales.

Revenues from Engineered Materials declined 3.4% year over year to \$598 million. The fall was due to lower selling prices, partially offset by 2% growth in base volume. It accounted for 20.1% of the quarter's net sales.

### Margin Details

In the fiscal second quarter, Berry Global's cost of goods sold increased 51.5% to \$2,391 million. It represented 80.4% of net sales compared with 80.9% in the year-ago quarter. Selling, general and administrative expenses rose 42.7% to \$204 million, and represented 6.9% of net sales.

Adjusted operating income in the quarter increased 45% to \$332 million. In addition, adjusted operating margin came in at 11.1%, down 60 basis points year over year. Interest expenses were \$111 million, up 68.2% year over year.

### Balance Sheet & Cash Flow

Exiting second-quarter fiscal 2020, Berry Global's cash and cash equivalents were \$953 million, down from \$750 million recorded a year ago. Current and long-term debt decreased 2.2% to \$11,115 million from Dec 28, 2019.

In the first six months of fiscal 2020, the company generated net cash of \$533 million from operating activities, reflecting an increase of 61% from the year-ago period.

In the quarter, capital invested for the purchasing of property, plant and equipment totaled \$115 million, up from \$92 million. Free cash flow in the reported quarter was \$200 million, up from \$78 million reported in the year-ago quarter.

### Outlook

For fiscal 2020 (ending September 2020), Berry Global predicts free cash flow of more than \$800 million, with cash flow from operations of a minimum of \$1,400 million and capital expenditure of \$600 million. Moreover, interest expenses for fiscal 2020 are predicted to be \$430 million, while taxes are estimated to be \$150 million. In addition, working capital, restructuring and other costs are anticipated to be \$50 million.

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## Recent News

### Berry Global Announces Addition of Meltblown Asset in Berlin

On **May 13, 2020**, Berry Global announced the extension of its global Meltex meltblown capacity, with the inclusion of an additional meltblown asset for the production of high-efficiency filtration media. The new asset, which will be located at the company's existing manufacturing facility in Berlin, will likely commence its operations in October 2020. Berry Global will also work on incorporating its proprietary charging technology into the new line for delivering optimal filtration efficiency. Notably, the expanded production line will help cater to growing customer demand for material required for premium applications, including FFP2 (N95) and FFP3 (N99) for face-mask markets.

### Berry Global Highlights Measures to Fight Coronavirus Outbreak

On **Apr 16, 2020**, Berry Global announced some of its initiatives for expanding the production of materials for face masks.

The company added meltblown capacity at its Waynesboro facility, with the expansion of its state-of-the-art Meltex platform. In fact, the production line will help cater to growth in customer demand for meltblown materials required for the production of protective face masks as well as N95 and N99 respirators. Notably, the enhanced capacity at the facility will aid in the production of around 200 million face masks on an annual basis.

### Berry Global Invests in Specialty Meltblown Asset

On **Mar 31, 2020**, Berry Global announced that it increased investment in an additional specialty meltblown asset for the production of high-efficiency filtration media for the EMEA markets. The company will work on incorporating its proprietary charging technology into the new line for delivering optimal filtration efficiency. Its investment will help cater to growth in customer demand for material required for premium applications, including FFP2 (N95) and FFP3 (N99) for cabin air filtration and industrial face-mask markets.

### Production Increase to Fight Coronavirus Outbreak

On **Mar 10, 2020**, Berry Global underlined its participation in the fight against the coronavirus outbreak. Notably, as a major manufacturer and distributor of nonwoven specialty materials, the company holds an important place in the supply chain for healthcare materials.

At the end of January 2020, it prioritized the production of nonwoven healthcare products in Nanhai and Suzhou facilities in China. As noted, it also shifted its capacity in the United States for delivering maximum output to cater to the growing demand for healthcare materials. In addition, the company noted that its meltblown line is running at full capacity in Europe for the production of material required for face masks and other healthcare applications like materials utilized in blood filtration.

Additionally, the company announced that it commercialized its new Spinlace production line in Mooresville, NC. It noted that the state-of-the-art asset has been functioning at full production rates, offering the company an additional annual capacity of 17,000 metric tons to the marketplace.

### Production Increase

On **Mar 4, 2020**, Berry Global announced a \$30-million investment to increase the production of ultra-high performance stretch films. This project, initiated to address rising demand, will likely be over by April 2021.

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## Valuation

Berry Global's shares are down 15.6% in the year-to-date period and 16.7% over the trailing 12 months. Stocks in the Zacks sub-industry and the Zacks Industrial Products sector are down 19.5% and 24.3%, respectively in the year-to-date period. Over the past year, the Zacks sub-industry has moved down 40.9% and the sector has declined 16.7%.

The S&P 500 Index has moved down 11.1% in the year-to-date period and increased 0.6% in the past year.

The stock is currently trading at 9.1x forward 12-month earnings per share, which compares to 13.81x for the Zacks sub-industry, 18.44x for the Zacks sector and 20.81x for the S&P 500 index.

Over the past five years, the stock has traded as high as 19.43x and as low as 6.19x, with a 5-year median of 15.09x. Our Neutral recommendation indicates that the stock will perform in line with the market. Our price target of \$42 reflects 9.56x forward 12-month earnings per share.

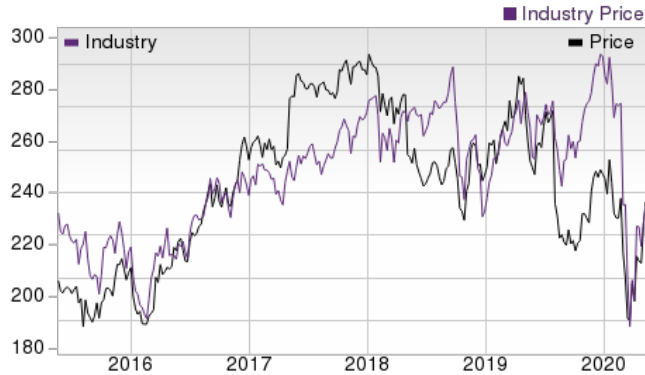
The table below shows summary valuation data for BERY.

| Valuation Multiples - BERY |              |        |         |
|----------------------------|--------------|--------|---------|
| Stock                      | Sub-Industry | Sector | S&P 500 |

|                |               |       |       |       |       |
|----------------|---------------|-------|-------|-------|-------|
| P/E F12M       | Current       | 9.1   | 13.81 | 18.44 | 20.81 |
|                | 5-Year High   | 19.43 | 18.95 | 19.93 | 20.81 |
|                | 5-Year Low    | 6.19  | 7.13  | 12.55 | 15.19 |
|                | 5-Year Median | 15.09 | 16.43 | 16.65 | 17.45 |
| EV/EBITDA F12M | Current       | 6.78  | 26.95 | 16.39 | 12.29 |
|                | 5-Year High   | 9.16  | 30.08 | 18.05 | 12.65 |
|                | 5-Year Low    | 4.95  | 10.98 | 10.56 | 9.09  |
|                | 5-Year Median | 8.16  | 16.43 | 14.08 | 10.82 |
| EV/Sales F12M  | Current       | 1.3   | 2.53  | 2.31  | 3.07  |
|                | 5-Year High   | 1.75  | 5.91  | 3.12  | 3.51  |
|                | 5-Year Low    | 0.83  | 1.87  | 1.76  | 2.3   |
|                | 5-Year Median | 1.5   | 2.26  | 2.3   | 2.82  |

As of 05/15/2020

## Industry Analysis Zacks Industry Rank: Top 11% (29 out of 254)



## Top Peers

| Company (Ticker)                        | Rec        | Rank |
|-----------------------------------------|------------|------|
| Silgan Holdings Inc. (SLGN)             | Outperform | 1    |
| AptarGroup, Inc. (ATR)                  | Neutral    | 3    |
| Greif, Inc. (GEF)                       | Neutral    | 3    |
| Graphic Packaging Holding Company (GPK) | Neutral    | 2    |
| 3M Company (MMM)                        | Neutral    | 3    |
| Packaging Corporation of America (PKG)  | Neutral    | 3    |
| Sealed Air Corporation (SEE)            | Neutral    | 3    |
| Sonoco Products Company (SON)           | Neutral    | 3    |

| Industry Comparison Industry: Containers - Paper And Packaging |           |            |           | Industry Peers |           |           |
|----------------------------------------------------------------|-----------|------------|-----------|----------------|-----------|-----------|
|                                                                | BERY      | X Industry | S&P 500   | GEF            | GPK       | MMM       |
| Zacks Recommendation (Long Term)                               | Neutral   | -          | -         | Neutral        | Neutral   | Neutral   |
| Zacks Rank (Short Term)                                        | 2         | -          | -         | 3              | 2         | 3         |
| VGM Score                                                      | A         | -          | -         | B              | B         | A         |
| Market Cap                                                     | 5.31 B    | 4.50 B     | 18.98 B   | 1.39 B         | 3.55 B    | 79.77 B   |
| # of Analysts                                                  | 7         | 5          | 14        | 4              | 8         | 7         |
| Dividend Yield                                                 | 0.00%     | 2.36%      | 2.21%     | 6.12%          | 2.36%     | 4.24%     |
| Value Score                                                    | A         | -          | -         | B              | B         | C         |
| Cash/Price                                                     | 0.16      | 0.05       | 0.06      | 0.06           | 0.03      | 0.05      |
| EV/EBITDA                                                      | 10.75     | 8.17       | 11.60     | 7.39           | 7.26      | 13.02     |
| PEG Ratio                                                      | 0.99      | 2.71       | 2.58      | 0.83           | 0.53      | 1.84      |
| Price/Book (P/B)                                               | 3.22      | 2.22       | 2.59      | 1.14           | 1.76      | 7.81      |
| Price/Cash Flow (P/CF)                                         | 4.94      | 7.54       | 10.28     | 3.15           | 5.21      | 11.53     |
| P/E (F1)                                                       | 9.90      | 14.25      | 19.01     | 8.32           | 13.26     | 17.51     |
| Price/Sales (P/S)                                              | 0.49      | 0.85       | 1.92      | 0.29           | 0.57      | 2.47      |
| Earnings Yield                                                 | 10.10%    | 7.05%      | 5.06%     | 12.03%         | 7.56%     | 5.71%     |
| Debt/Equity                                                    | 6.69      | 1.39       | 0.75      | 2.45           | 1.71      | 1.94      |
| Cash Flow (\$/share)                                           | 8.12      | 3.81       | 7.01      | 9.12           | 2.44      | 12.02     |
| Growth Score                                                   | B         | -          | -         | C              | C         | A         |
| Hist. EPS Growth (3-5 yrs)                                     | 17.75%    | 12.24%     | 10.82%    | 15.73%         | 4.33%     | 5.11%     |
| Proj. EPS Growth (F1/F0)                                       | 18.73%    | -2.88%     | -10.48%   | -12.69%        | 10.06%    | -12.97%   |
| Curr. Cash Flow Growth                                         | 7.93%     | 9.13%      | 5.68%     | 31.14%         | 3.10%     | -11.15%   |
| Hist. Cash Flow Growth (3-5 yrs)                               | 15.70%    | 6.65%      | 8.52%     | 8.37%          | 6.65%     | 1.67%     |
| Current Ratio                                                  | 1.84      | 1.70       | 1.27      | 1.59           | 1.86      | 1.65      |
| Debt/Capital                                                   | 86.99%    | 60.74%     | 44.25%    | 71.16%         | 63.34%    | 66.04%    |
| Net Margin                                                     | 3.86%     | 4.32%      | 10.54%    | 3.61%          | 2.18%     | 15.37%    |
| Return on Equity                                               | 28.90%    | 19.77%     | 16.29%    | 19.77%         | 13.98%    | 50.24%    |
| Sales/Assets                                                   | 0.73      | 0.87       | 0.54      | 0.87           | 0.86      | 0.75      |
| Proj. Sales Growth (F1/F0)                                     | 33.06%    | 0.00%      | -2.55%    | 1.62%          | 2.96%     | -5.32%    |
| Momentum Score                                                 | C         | -          | -         | C              | B         | A         |
| Daily Price Chg                                                | 0.55%     | -0.14%     | 0.20%     | -0.28%         | -1.09%    | 1.99%     |
| 1 Week Price Chg                                               | 6.92%     | 2.22%      | 3.23%     | -8.20%         | 2.58%     | -0.06%    |
| 4 Week Price Chg                                               | 12.55%    | -0.77%     | 0.88%     | -5.86%         | -1.70%    | -4.29%    |
| 12 Week Price Chg                                              | -6.64%    | -16.91%    | -23.26%   | -31.36%        | -20.53%   | -12.53%   |
| 52 Week Price Chg                                              | -17.87%   | -18.77%    | -12.56%   | -24.10%        | -6.27%    | -19.28%   |
| 20 Day Average Volume                                          | 1,776,181 | 285,880    | 2,553,422 | 197,710        | 3,930,020 | 3,506,437 |
| (F1) EPS Est 1 week change                                     | 0.00%     | 0.00%      | 0.00%     | 0.00%          | 0.00%     | 0.36%     |
| (F1) EPS Est 4 week change                                     | 0.67%     | 0.00%      | -5.57%    | -2.12%         | 3.37%     | -2.91%    |
| (F1) EPS Est 12 week change                                    | -1.94%    | -5.71%     | -16.22%   | -8.05%         | -4.25%    | -16.67%   |
| (Q1) EPS Est Mthly Chg                                         | -4.72%    | -7.02%     | -11.63%   | -7.02%         | 9.24%     | -5.55%    |

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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 have an excellent 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.

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### 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    | <b>A</b> |
| Growth Score   | <b>B</b> |
| Momentum Score | <b>C</b> |
| VGM Score      | <b>A</b> |

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

**This report contains independent commentary to be used for informational purposes only. The analysts contributing to this report do not hold any shares of this stock. The analysts contributing to this report do not serve on the board of the company that issued this stock. The EPS and revenue forecasts are the Zacks Consensus estimates, unless indicated otherwise on the reports first page.** Additionally, the analysts contributing to this report certify that the views expressed herein accurately reflect the analysts personal views as to the subject securities and issuers. ZIR certifies that no part of the analysts compensation was, is, or will be, directly or indirectly, related to the specific recommendation or views expressed by the analyst in the report.

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