

## Albemarle Corporation (ALB)

**\$170.57** (As of 04/26/21)

Price Target (6-12 Months): **\$179.00**

Long Term: 6-12 Months

**Zacks Recommendation:**

**Neutral**

(Since: 08/13/20)

Prior Recommendation: Underperform

Short Term: 1-3 Months

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

**4-Sell**

Zacks Style Scores:

VGM: C

Value: C

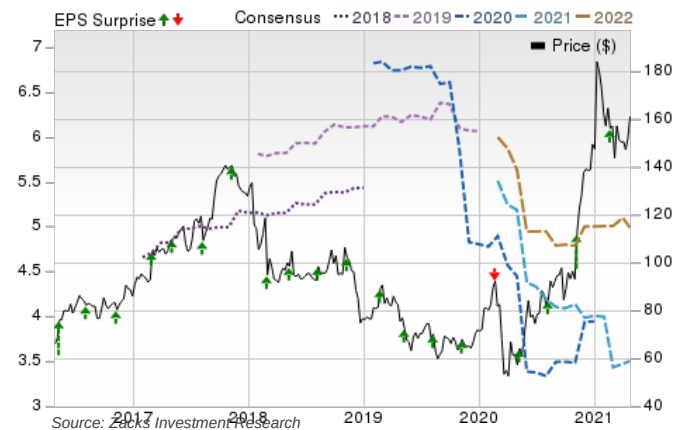
Growth: B

Momentum: B

### Summary

Earnings estimates for Albemarle for the first quarter have been going down over the past month. The company is expected to gain from its actions to boost its global lithium derivative capacity and synergies of the Rockwood acquisition. Its cost saving actions are also expected to support margins in 2021. Albemarle also remains committed to boost shareholder returns. However, its Lithium unit is facing headwinds from weak pricing and volumes. Lithium prices remain under pressure amid oversupply in the market. The coronavirus outbreak and weaker automotive production due to the global chip shortage are also likely to hurt demand in the near term. Lower volumes due to weaker fuel demand are also affecting the Catalysts unit. The company's high debt level and stretched valuation are other concerns.

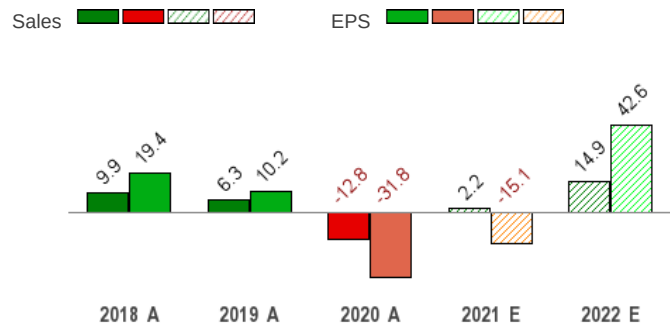
### Price, Consensus & Surprise



### Data Overview

|                                |                                |
|--------------------------------|--------------------------------|
| 52-Week High-Low               | <b>\$188.35 - \$55.75</b>      |
| 20-Day Average Volume (Shares) | <b>1,050,345</b>               |
| Market Cap                     | <b>\$19.9 B</b>                |
| Year-To-Date Price Change      | <b>15.6%</b>                   |
| Beta                           | <b>1.52</b>                    |
| Dividend / Dividend Yield      | <b>\$1.56 / 0.9%</b>           |
| Industry                       | <b>Chemical - Diversified</b>  |
| Zacks Industry Rank            | <b>Top 26% (66 out of 250)</b> |

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



|                               |                   |
|-------------------------------|-------------------|
| Last EPS Surprise             | <b>1.7%</b>       |
| Last Sales Surprise           | <b>0.3%</b>       |
| EPS F1 Estimate 4-Week Change | <b>1.0%</b>       |
| Expected Report Date          | <b>05/05/2021</b> |
| Earnings ESP                  | <b>9.9%</b>       |
| P/E TTM                       | <b>41.4</b>       |
| P/E F1                        | <b>48.7</b>       |
| PEG F1                        | <b>4.6</b>        |
| P/S TTM                       | <b>6.4</b>        |

### Sales Estimates (millions of \$)

|      | Q1    | Q2    | Q3    | Q4      | Annual* |
|------|-------|-------|-------|---------|---------|
| 2022 | 807 E | 893 E | 909 E | 1,073 E | 3,675 E |
| 2021 | 754 E | 784 E | 790 E | 895 E   | 3,198 E |
| 2020 | 739 A | 764 A | 747 A | 879 A   | 3,129 A |

### EPS Estimates

|      | Q1       | Q2       | Q3       | Q4       | Annual*  |
|------|----------|----------|----------|----------|----------|
| 2022 | \$0.91 E | \$1.11 E | \$1.13 E | \$1.49 E | \$4.99 E |
| 2021 | \$0.79 E | \$0.79 E | \$0.87 E | \$1.02 E | \$3.50 E |
| 2020 | \$1.00 A | \$0.86 A | \$1.09 A | \$1.17 A | \$4.12 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 04/26/2021. The report's text and the analyst-provided price target are as of 04/27/2021.

## Overview

Charlotte, NC-based Albemarle Corporation is a premier specialty chemicals company with leading positions in attractive end markets globally. It is a leading producer of highly-engineered specialty chemicals geared to meet customer requirements across a bevy of end markets including petroleum refining, consumer electronics, energy storage, construction and automotive.

Albemarle, in January 2015, completed its acquisition of Rockwood Holdings, Inc for \$5.7 billion. Rockwood became a fully-owned subsidiary of Albemarle following the deal closure.

The company's former Performance Chemicals segment was split in 2016 into two separate segments, Lithium and Advanced Materials and Bromine Specialties. This led to the creation of three reportable segments – Lithium and Advanced Materials, Bromine Specialties and Refining Solutions.

Albemarle, in April 2018, completed the sale of its polyolefin catalysts and components business to W. R. Grace & Co. (GRA). Per the terms of the deal, the curatives and organometallics portions of the Performance Catalysts Solutions (PCS) business remain with Albemarle.

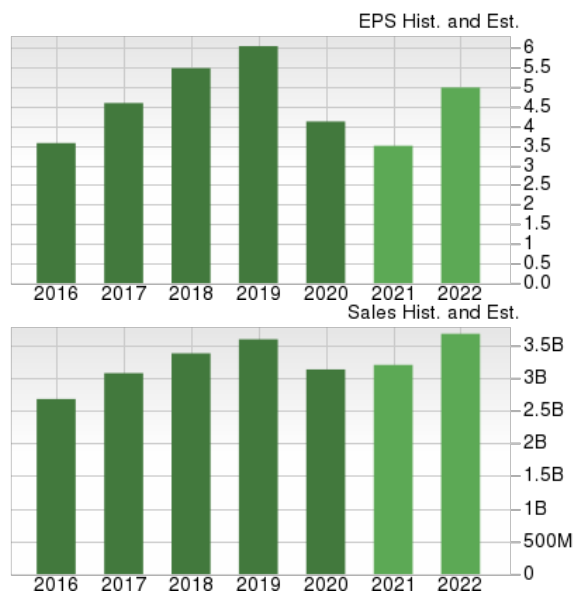
The company realigned its reportable segments following this divestment, effective first-quarter 2018. The PCS business has been merged with the Refining Solutions segment to form a new segment called Catalysts. As such, the company now has three reportable segments – Lithium, Bromine Specialties and Catalysts.

The Lithium unit is a low-cost producer of one of the most diverse portfolios of lithium derivatives in the industry. The segment develops lithium materials (including lithium carbonate and lithium hydroxide) for a vast range of end-use markets.

The company's bromine business includes products used in fire safety solutions and other specialty chemicals applications.

The Catalysts unit includes product lines such as clean fuels technologies (CFT), fluidized catalytic cracking (FCC) catalysts and additives and performance catalystsolutions (PCS).

Albemarle recorded sales of \$3,128.9 million in 2020 with Lithium, Bromine Specialties and Catalysts segments accounting 37%, 31%, 26%, respectively. Its other businesses represented the balance 6% of sales.



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## Reasons To Buy:

- ▲ Albemarle is well placed to gain from long-term growth in the battery-grade lithium market. It remains focused on strengthening its lithium business. The company's Talison joint venture (49%) in Australia is expanding lithium concentrate production at its Greenbushes mine. The joint venture completed the phase II of the expansion in the fourth quarter of 2019, bringing the lithium carbonate equivalent capacity at Greenbushes to around 60,000 metric tons per year. Albemarle, in 2019, also completed a 20,000-metric ton lithium hydroxide expansion in China at the Xinyu II facility. It also increased lithium carbonate production in La Negra I and II by roughly 5%. Construction at La Negra III and IV projects are scheduled for completion by mid-2021. The company has also commenced work at its lithium hydroxide conversion plant in Kemerton, Western Australia with completion of construction expected in late 2021. In sync with its expansion moves, Albemarle in 2019 completed its joint venture (JV) transaction with Mineral Resources. The move allowed the company to own 60% interest in the Wodgina hard rock lithium mine in Australia and develop an integrated lithium hydroxide operation at the resource site. The company will manage the marketing and sales of lithium hydroxide produced by the JV. The company also recently announced the expansion of its lithium production facility in Silver Peak, NV, to increase domestic lithium production.
- ▲ The acquisition of Rockwood Holdings has brought together two leading specialty chemicals makers with strong market positions and complimentary product portfolios. The merged entity now has greater customer reach, enhanced diversity across end markets, technologies and geographies. The combined company is now well positioned to boost earnings by expanding the reach of lithium-based energy storage products including batteries for the automotive industry, leveraging attractive trends in refinery catalysts including rising demand for transportation fuels, expanding in the bromine markets through new applications and capitalizing on its leading position in surface treatment products.
- ▲ Albemarle remains committed to deliver incremental returns to shareholders. It paid dividend worth around \$162 million to its shareholders in 2020. The company, in February 2020, raised its quarterly dividend by 5% to 38.5 cents per share. The hike represents the 26th straight year of dividend increase by the company. Albemarle, in 2020, was also named to the S&P 500 Dividend Aristocrats Index. The company remains focused on maintaining its dividend payout.
- ▲ The company remains focused on executing its cost savings program. It realized \$80 million of sustainable cost savings in 2020. It expects sustainable cost savings to reach a run-rate of more than \$120 million by 2021. Albemarle is also implementing short-term cash management actions which is expected to deliver \$25-\$40 million of savings per quarter. Its cost actions are expected to support margins in 2021.

Albemarle remains focused on strengthening its lithium business and is taking actions to grow its key businesses. It should also gain from synergies of the Rockwood acquisition and cost actions.

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## Reasons To Sell:

- ▼ Albemarle is witnessing pricing pressure for both lithium carbonate and hydroxide. Global pricing weakness continued in the most recent quarter. Lithium prices remain under pressure amid oversupply of the white metal in the market. Lithium supply capacity has grown faster than demand, leading to oversupply in the market. This has caused a sharp decline in lithium prices. Pricing weakness is expected to continue over the near term amid excess global supply. Moreover, the coronavirus outbreak is hurting demand in the automotive market due to reduced automotive OEM (original equipment manufacturer) production. Moreover, the ongoing semiconductor shortage is affecting all major automotive OEMs and is disrupting automotive production globally. Weaker automotive production is likely to affect the company's lithium business in first-quarter 2021.
- ▼ The company's Catalysts unit is facing headwind from lower Fluid Catalytic Cracking (FCC) volumes resulting from reduced transportation fuel consumption and travel restrictions due to the pandemic. Lower FCC volumes hurt sales in this segment in the last reported quarter and is expected to remain a headwind over the near term. The company is also seeing lower Hydroprocessing Catalysts (HPC) volumes due to depressed oil prices and weaker fuel demand. HPC volumes are expected to remain under pressure in the first quarter of 2021.
- ▼ Albemarle's stretched valuation is another concern. Going by the EV/EBITDA (Enterprise Value/ Earnings before Interest, Tax, Depreciation and Amortization) multiple, which is often used to value chemical stocks, the company is currently trading at a trailing 12-month EV/EBITDA multiple of 26.49, much higher than the industry average of 12.12. As such, investors might not want to pay more for the stock at present.
- ▼ The company's high debt level is another concern. Its total debt was \$3.6 billion at the end of 2020, up around 17% year over year. Further, its time-interest-earned ratio of 6.1 at the end of the fourth quarter of 2020 fell from 6.3 in the prior quarter and has also deteriorated over the last few quarters. As such, the company appears to have a higher default risk.

Albemarle is facing pricing headwind in its Lithium unit. It is also exposed to volume pressure in its Catalysts unit. High debt level and stretched valuation are other concerns.

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## Last Earnings Report

### Albemarle Tops Earnings and Revenue Estimates in Q4

Albemarle recorded a profit of \$84.6 million or 79 cents per share in the fourth quarter of 2020, down from \$90.4 million or 85 cents per share it earned a year ago.

Adjusted earnings for the reported quarter were \$1.17 per share, down from \$1.73 a year ago. It, however, topped the Zacks Consensus Estimate of \$1.15.

Revenues fell roughly 11% year over year to \$879.1 million in the quarter. It surpassed the Zacks Consensus Estimate of \$876.2 million. Lower sales across Catalysts and Lithium segments were partly offset by gains in Bromine and other segments. The company also benefited from its cost-savings initiatives.

Quarter Ending 12/2020

|                  |              |
|------------------|--------------|
| Report Date      | Feb 17, 2021 |
| Sales Surprise   | 0.34%        |
| EPS Surprise     | 1.74%        |
| Quarterly EPS    | 1.17         |
| Annual EPS (TTM) | 4.12         |

### Segment Highlights

Sales from the Lithium unit dropped around 13% year over year to \$358.6 million in the reported quarter, hurt by lower contract and market pricing. Adjusted EBITDA was down roughly 13% year over year to \$122.1 million.

The Bromine Specialties segment recorded sales of \$263.4 million, up around 8% year over year. Sales were supported by a recovery in demand following the coronavirus-led slowdown. Adjusted EBITDA was \$87.9 million, up around 10% year over year.

The Catalysts unit recorded revenues of \$195.7 million in the reported quarter, down around 31% year over year. Adjusted EBITDA was \$22.1 million, down roughly 71% year over year. The company saw lower volumes in Fluid Catalytic Cracking on a year-over-year basis due to reduced transportation fuel consumption. Hydroprocessing Catalysts volumes also fell in the quarter, impacted by reduced fuel demand.

### FY20 Results

Earnings (as reported) for full-year 2020 were \$3.52 per share, compared with earnings of \$5.02 per share a year ago. Revenues dropped roughly 13% year over year to \$3,128.9 million for the full year.

### Financial Position

Albemarle ended 2020 with cash and cash equivalents of roughly \$746.7 million, up 22% year over year. Long-term debt was \$2,767.4 million, down around 3% year over year.

Cash flow from operations was \$798.9 million for full-year 2020, up around 11% year over year.

### Outlook

Moving ahead, Albemarle expects its performance for full-year 2021 to improve modestly on a year-over-year basis on a sustained recovery in global economic activities.

The company expects net sales for 2021 between \$3.2 billion and \$3.3 billion. Moreover, adjusted EBITDA for the year has been forecast in the range of \$810-\$860 million. Albemarle also sees adjusted earnings per share in the band of \$3.25 to \$3.65 for 2021.

Albemarle also realized around \$80 million of sustainable cost savings in 2020. It expects sustainable cost savings to reach a run-rate of more than \$120 million by 2021.

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## Recent News

### Albemarle to Sell Fine Chemistry Business to W.R. Grace

Albemarle, on **Feb 25, 2021**, signed a definitive agreement with W.R. Grace & Co. to sell its Fine Chemistry Services business for roughly \$570 million. The price consists of \$300 million in cash and the issuance of preferred equity worth \$270 million of a W.R. Grace & Co. Subsidiary to Albemarle.

As per the deal, Grace will acquire Albemarle's operations in Tyrone, PA and South Haven, MI. The deal is subject to regulatory approvals and other customary closing conditions. The transaction is expected to be completed in the second quarter of 2021. The deal reflects Albemarle's ongoing commitment to actively and continuously refine its portfolio with focus on its core, growth-oriented business segments. Fine Chemistry Services is a profitable business and the company believes that Grace can help it thrive.

### Albemarle Declares Pricing of Common Stock

Albemarle, on **Feb 3, 2021**, announced the pricing of an underwritten public offering of 8,496,733 shares of its common stock at a price of \$153 per share. The gross proceeds from this offering are anticipated to be around \$1.3 billion. The company plans to use the net proceeds of the offering to fund growth capital expenditures, including the construction and expansion of lithium operations in Australia, Chile and Silver Peak. It also intends to use the net proceeds for repaying debt in the short term and other general corporate purposes.

### Albemarle Expands Nevada Site to Boost Lithium Production

Albemarle, on **Jan 7, 2021**, announced the expansion of its lithium production facility in Silver Peak, NV to increase domestic lithium production. There will also be an initiative to evaluate resources at Nevada like clay for the commercial production of lithium, which is an essential component for green mobility as well as a sustainable future.

Regionalizing of supply chain is becoming important with growth in demand for electric vehicles (EV) for better security and sustainability. The uptick in demand for domestic lithium supply will be backed by Albemarle's investment in Silver Peak. Starting in 2021, the company plans to invest \$30 million to \$50 million to double the current production at Nevada by 2025, utilizing the brine water rights to the fullest.

Moreover, Albemarle plans exploration of clay and assess technology to expedite the viability of lithium production from the clay resources available at Nevada. It is also finding ways to optimize extraction of lithium from its brine resources, including the ones located in the Clayton Valley. The company is evaluating a process to streamline production of lithium hydroxide, which is used in EV batteries, through a Department of Energy-sponsored research project with Argonne National Laboratory.

## Valuation

Albemarle's shares are up 165.2% over the trailing 12-month period. Over the past year, the Zacks Chemical - Diversified industry and Zacks Basic Materials sector are up 68.4% and up 67.5%, respectively.

The S&P 500 index is up 48.2% in the past year.

The stock is currently trading at 26.49X trailing 12-month enterprise value-to EBITDA (EV/EBITDA) ratio, which compares to 12.12X for the Zacks sub-industry, 10.01X for the Zacks sector and 18.76X for the S&P 500 index.

Over the past five years, the stock has traded as high as 26.49X and as low as 6.43X, with a 5-year median of 11.93X.

Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$179 price target reflects 44.97X forward 12-month earnings per share.

The table below shows summary valuation data for ALB:

| Valuation Multiples - ALB |               |       |              |        |         |
|---------------------------|---------------|-------|--------------|--------|---------|
|                           |               | Stock | Sub-Industry | Sector | S&P 500 |
| EV/EBITDA TTM             | Current       | 26.49 | 12.12        | 10.01  | 18.76   |
|                           | 5-Year High   | 26.49 | 13.42        | 18.31  | 18.78   |
|                           | 5-Year Low    | 6.43  | 5.19         | 6.54   | 9.62    |
|                           | 5-Year Median | 11.93 | 7.73         | 9.58   | 13.37   |
| P/E F 12M                 | Current       | 42.89 | 16.01        | 11.18  | 22.99   |
|                           | 5-Year High   | 45.73 | 19.31        | 21.08  | 23.83   |
|                           | 5-Year Low    | 9.1   | 8.97         | 10.23  | 15.3    |
|                           | 5-Year Median | 19.78 | 13.39        | 13.15  | 18.01   |
| P/B TTM                   | Current       | 4.46  | 2.14         | 3.04   | 7.11    |
|                           | 5-Year High   | 4.46  | 2.82         | 3.09   | 7.11    |
|                           | 5-Year Low    | 1.32  | 0.87         | 1.22   | 3.83    |
|                           | 5-Year Median | 2.68  | 1.75         | 2.27   | 4.99    |

As of 04/26/2021

Source: Zacks Investment Research

## Industry Analysis Zacks Industry Rank: Top 26% (66 out of 250)



## Top Peers

| Company (Ticker)                              | Rec        | Rank     |
|-----------------------------------------------|------------|----------|
| Sociedad Quimica y Minera S.A. ( <b>SQM</b> ) | Outperform | <b>2</b> |
| BASF SE ( <b>BASFY</b> )                      | Neutral    | <b>3</b> |
| Cabot Corporation ( <b>CBT</b> )              | Neutral    | <b>1</b> |
| FMC Corporation ( <b>FMC</b> )                | Neutral    | <b>3</b> |
| W.R. Grace & Co. ( <b>GRA</b> )               | Neutral    | <b>3</b> |
| Israel Chemicals Shs ( <b>ICL</b> )           | Neutral    | <b>2</b> |
| Lithium Americas Corp. ( <b>LAC</b> )         | Neutral    | <b>2</b> |
| Livent Corporation ( <b>LTHM</b> )            | Neutral    | <b>3</b> |

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

| Industry Comparison Industry: Chemical - Diversified |           |            |           | Industry Peers |           |            |
|------------------------------------------------------|-----------|------------|-----------|----------------|-----------|------------|
|                                                      | ALB       | X Industry | S&P 500   | LAC            | LTHM      | SQM        |
| Zacks Recommendation (Long Term)                     | Neutral   | -          | -         | Neutral        | Neutral   | Outperform |
| Zacks Rank (Short Term)                              | <b>4</b>  | -          | -         | <b>2</b>       | <b>3</b>  | <b>2</b>   |
| VGM Score                                            | <b>C</b>  | -          | -         | <b>F</b>       | <b>F</b>  | <b>F</b>   |
| Market Cap                                           | 19.91 B   | 4.05 B     | 30.22 B   | 1.83 B         | 2.79 B    | 14.66 B    |
| # of Analysts                                        | 10        | 3          | 12        | 6              | 6         | 3          |
| Dividend Yield                                       | 0.91%     | 1.29%      | 1.26%     | 0.00%          | 0.00%     | 0.52%      |
| Value Score                                          | <b>C</b>  | -          | -         | <b>F</b>       | <b>F</b>  | <b>F</b>   |
| Cash/Price                                           | 0.04      | 0.09       | 0.05      | 0.09           | 0.00      | 0.04       |
| EV/EBITDA                                            | 32.31     | 13.31      | 16.96     | -60.90         | 406.84    | 67.28      |
| PEG F1                                               | 4.60      | 1.71       | 2.38      | NA             | 3.60      | NA         |
| P/B                                                  | 4.06      | 2.34       | 4.13      | 9.55           | 4.91      | 6.78       |
| P/CF                                                 | 27.04     | 11.35      | 17.22     | NA             | 131.17    | 62.37      |
| P/E F1                                               | 48.81     | 16.26      | 22.45     | NA             | 175.38    | 46.28      |
| P/S TTM                                              | 6.36      | 1.19       | 3.40      | NA             | 9.67      | NA         |
| Earnings Yield                                       | 2.05%     | 6.07%      | 4.40%     | -2.03%         | 0.58%     | 2.15%      |
| Debt/Equity                                          | 0.62      | 0.56       | 0.66      | 0.64           | 0.42      | 0.88       |
| Cash Flow (\$/share)                                 | 6.31      | 3.00       | 6.78      | -0.29          | 0.14      | 0.89       |
| Growth Score                                         | <b>B</b>  | -          | -         | <b>F</b>       | <b>F</b>  | <b>F</b>   |
| Historical EPS Growth (3-5 Years)                    | 6.39%     | 0.76%      | 9.70%     | NA             | NA        | -1.97%     |
| Projected EPS Growth (F1/F0)                         | -15.02%   | 41.06%     | 16.71%    | 18.42%         | 316.66%   | 33.70%     |
| Current Cash Flow Growth                             | -21.56%   | -9.87%     | 0.72%     | 76.45%         | -74.15%   | -15.50%    |
| Historical Cash Flow Growth (3-5 Years)              | -1.72%    | 2.01%      | 7.37%     | NA             | NA        | -1.21%     |
| Current Ratio                                        | 1.22      | 1.93       | 1.38      | 17.63          | 3.04      | 5.40       |
| Debt/Capital                                         | 38.24%    | 36.62%     | 41.19%    | 38.86%         | 29.50%    | 46.76%     |
| Net Margin                                           | 12.01%    | 4.26%      | 11.07%    | NA             | -6.56%    | 9.05%      |
| Return on Equity                                     | 10.32%    | 9.69%      | 15.32%    | -24.10%        | -1.39%    | 9.91%      |
| Sales/Assets                                         | 0.31      | 0.69       | 0.50      | NA             | 0.32      | 0.37       |
| Projected Sales Growth (F1/F0)                       | 2.22%     | 10.60%     | 7.53%     | NA             | 24.12%    | 21.65%     |
| Momentum Score                                       | <b>B</b>  | -          | -         | <b>C</b>       | <b>F</b>  | <b>A</b>   |
| Daily Price Change                                   | 5.79%     | 0.14%      | 0.06%     | 7.59%          | 4.45%     | 4.05%      |
| 1-Week Price Change                                  | 6.05%     | -0.14%     | 0.47%     | -1.52%         | 9.58%     | -2.87%     |
| 4-Week Price Change                                  | 16.50%    | 2.64%      | 4.37%     | 9.68%          | 20.64%    | 8.92%      |
| 12-Week Price Change                                 | 2.52%     | 12.80%     | 15.10%    | -20.52%        | -1.96%    | 7.03%      |
| 52-Week Price Change                                 | 174.01%   | 75.35%     | 51.64%    | 398.37%        | 220.40%   | 150.63%    |
| 20-Day Average Volume (Shares)                       | 1,020,718 | 107,774    | 1,756,496 | 3,115,725      | 2,359,069 | 1,052,459  |
| EPS F1 Estimate 1-Week Change                        | 0.00%     | 0.00%      | 0.00%     | 0.00%          | 0.00%     | 0.00%      |
| EPS F1 Estimate 4-Week Change                        | 0.96%     | 0.64%      | 0.15%     | 18.85%         | -1.52%    | 8.90%      |
| EPS F1 Estimate 12-Week Change                       | -12.33%   | 7.14%      | 2.11%     | 25.00%         | -45.83%   | 13.74%     |
| EPS Q1 Estimate Monthly Change                       | 1.84%     | 0.55%      | 0.02%     | 20.83%         | 0.00%     | 7.55%      |

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   | B |
| Momentum Score | B |
| VGM Score      | C |

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.