

Ball Corporation (BLL)

\$80.31 (As of 08/28/20)

Price Target (6-12 Months): \$84.00

Long Term: 6-12 Months	Zacks Recon (Since: 08/11/2 Prior Recommo	Neutral perform
Short Term: 1-3 Months	Zacks Rank:	2-Buy
	Zacks Style So	VGM:C
	Value: D	Momentum: F

Summary

Ball Corp is poised well to gain from the growing global beverage-can demand as customers are preferring cans over glass and plastic. The company is thus investing in growing its capacity to capitalize on this current trend. Also, higher athome consumption amid the pandemic is anticipated to sustain demand for the company's products. The Aerospace segment is likely to benefit from its strong backlog levels and business wins. Ball Corp's balance sheet remains healthy and provides flexibility to invest in growth. Focus on launching new products and cost-cutting efforts will also aid results. The earnings estimates for the third quarter and current year have, thus, undergone positive revisions lately. However, supply constraints and incremental costs related to the COVID-19 pandemic may affect the company's results in the near term.

Data Overview

52-Week High-Low	\$82.82 - \$51.26
20-Day Average Volume (Shares)	1,622,690
Market Cap	\$26.2 B
Year-To-Date Price Change	24.1%
Beta	0.52
Dividend / Dividend Yield	\$0.60 / 0.7%
Industry	Containers - Metal and Glass
Zacks Industry Rank	Top 1% (3 out of 252)

Last EPS Surprise	14.0%
Edot El O Odipiloo	14.070
Last Sales Surprise	-2.2%
EPS F1 Estimate 4-Week Change	4.0%
Expected Report Date	NA
Earnings ESP	-0.1%
P/E TTM	30.1
P/F F1	29 በ

PEG F1	5.3
P/S TTM	2.3

Price, Consensus & Surprise



Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of \$)

*Quarterly figures may not add up to annual.

	Q1	Q2	Q3	Q4	Annual*
2021	2,945 E	3,115 E	3,150 E	2,960 E	12,280 E
2020	2,785 A	2,801 A	3,001 E	2,854 E	11,515 E
2019	2,785 A	3,017 A	2,953 A	2,719 A	11,474 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$0.61 E	\$0.84 E	\$0.89 E	\$0.76 E	\$3.18 E
2020	\$0.61 A	\$0.65 A	\$0.78 E	\$0.74 E	\$2.77 E
2019	\$0.49 A	\$0.64 A	\$0.70 A	\$0.71 A	\$2.53 A

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 08/28/2020. The reports text is as of 08/31/2020.

Overview

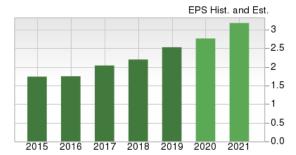
Headquartered at Broomfield, CO, Ball Corporation is one of the world's leading suppliers of metal packaging to the beverage, personal care and household products industries. Its packaging products compete with plastics and glass and are produced for a variety of end uses to large, multinational beverage, personal care and household products companies. The company also provides aerospace and other technologies and services to governmental and commercial customers.

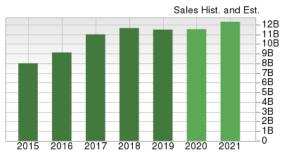
Effective Jan 1, 2020, the company implemented changes to its management and internal reporting structure for cost reduction and operational efficiency purposes. The company's operations are presented in the four reportable segments –

Beverage packaging, North and Central America (41% of 2019 sales) - Consists of operations in the United States, Canada and Mexico that manufacture and sell metal beverage containers throughout those countries.

Beverage packaging, South America (15%) - Consists of operations in Brazil, Argentina, Paraguay and Chile that manufacture and sell metal beverage containers throughout most of South America.

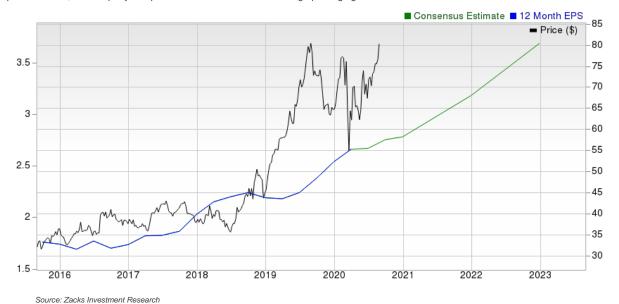
Beverage packaging, EMEA (23%) - Consists of operations in several countries in Europe, including Russia, Egypt and Turkey that manufacture and sell metal beverage containers throughout most of Europe.





Aerospace (13%) - Consists of operations that manufacture and sell aerospace and other related products and provide services to the defense, civil space and commercial space industries.

In October 2019, the company sold its Argentine steel aerosol packaging business, which included facilities in Garin and San Luis, Argentina. In September 2019, the company completed the sale of its metal beverage packaging business in China.



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Reasons To Buy:

▲ Ball Corp provides key aluminum packaging products and services to stable consumeroriented end-markets, such as food and beverages, household and healthcare. Demand is
usually fairly stable across economic cycles as they include essentials used in day-to-day
lives. As the coronavirus outbreak spread in North America, the company witnessed
significant demand for beverage can demand. Higher at-home consumption is anticipated to
sustain demand. Throughout 2020, the Beverage packaging, North and Central America
segment is expected to gain on new customer contracts, operational efficiency, strong
demand for aluminum beverage packaging, and increased availability of cans from new
production lines in Georgia and Texas. Notably, these product lines will be operational in the
second half and expected to add significantly to year-over-year results.

Ball Corporation will benefit from growing preference for aluminium packaging, strong aerospace backlog, low debt level, new products and focus on cost-cutting actions.

Additionally, two new can manufacturing facilities in Arizona and the northeastern U.S. will be operational by mid-2021. The Beverage Packaging, EMEA segment will gain from multiple beverage can line additions that will be executed across the existing European plant network in 2020 and beyond in order to meet demand. The Beverage Packaging, South America segment will gain on increasing preference for aluminum beverage packaging over other options. In mid-2021, multiple new Brazilian production lines will come on line to support the expected growth across the region.

- ▲ The Aerospace segment's contracted backlog remains strong at \$2.1 billion as of second-quarter 2020 end. Contracts already won, but not yet booked into current contracted backlog, reflected a sequential increase of 10% to \$5.3 billion. Program execution remains at a high level across the business. The segment continues to win and provide mission-critical programs and technologies to U.S. government, defense, intelligence, reconnaissance and surveillance customers. Multiple projects to expand manufacturing capacity, test capabilities and engineering and support workspace are on track. So far this year, the segment's aerospace headcount has increased by nearly 450 employees, and the company anticipates hiring an additional 550 employees by end of this year. In 2020 and beyond, the larger labor base will execute on a broad base of defense, civil, climate monitoring and weather prediction contracts that will help drive the segment's earnings in the future.
- ▲ Overall global beverage can demand continues to grow as customers are now preferring cans over glass and plastic. Ball Corp continues to execute its strategies of achieving better value for standard products and higher growth for specialty products. The company is focused on pursuing cost-control, completing growth capital projects and commercializing on the inherent sustainability attributes of metal packaging, which will benefit it in the foreseeable future. Ball Corp expects capital spending to exceed \$900 million in 2020. Further, the company has taken actions to improve operational performance in aluminum aerosol business, while initiating additional products to expand aerospace infrastructure and testing capabilities. The company maintains its expectation to deliver long-term diluted earnings per share growth of at least 10% to 15% beyond 2020 and achieve EVA (economic value added) dollars growth of 4% to 8% per year.
- ▲ The company is largely investing in aluminum packaging production to capitalize on the rising demand for aluminum cans, bottles and cups. The company has completed the sale of its China beverage can business and its Argentine steel aerosol business. Ball Corp's recently-launched infinity bottle will provide sustainable solution for personal care products, as customers are shifting from small- to mid-sized plastic containers at hotels and stores. Ball Corp expects its previously-announced aluminum beverage can and cup projects to add at least 8 billion units of capacity by the end of 2021. In March 2020, Ball Corp agreed to acquire Tubex Industria E Comercio de Embalagens Ltda, an aluminum aerosol packaging business with a plant near Sao Paolo, Brazil, for initial cash consideration of \$80 million, subject to customary closing adjustments, and potential additional consideration not to exceed \$30 million over the three years following the transaction close date. The business will be part of Ball Corp's aerosol packaging operating segment. The transaction is expected to close in third-quarter 2020 and will broaden the geographic reach of the company's aluminum aerosol packaging business, serving the growing Brazilian personal care market.
- ▲ Ball Corp's balance sheet remains healthy and provides flexibility to invest in capacity while returning value to shareholders in the current economic environment. The company's long-term debt was around \$7 billion at the end of second-quarter 2020. As of Jun 30, 2020, taking into account outstanding letters of credit, approximately \$918 million was available under the company's existing long-term, revolving credit facilities. In addition to these facilities, the company had approximately \$930 million of short-term uncommitted credit facilities available at Jun 30, 2020, of which \$519 million was outstanding and due on demand. The company has no debt maturities until 2022 and its senior credit facilities are in place until 2024. Ball Corp expects to generate free cash flow of around \$400 million in 2020. Further, its times interest earned ratio was 2.2 at the end of second-quarter 2020.

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Reasons To Sell:

- ▼ Demand in the United States has remained strong, driven by a favorable pack mix shift and growth in at-home consumption. However, demand has outpaced Ball Corp's current supply capacity. Due to these supply constraints, Ball Corp expects to import cans to meet demand until its new plants ramp up. Further, it will also lead to higher freight costs.
- ▼ The company might incur higher-than-expected start-up costs due to the ongoing capacity expansion efforts to meet growing demand for cans. Further, incremental costs related to the COVID-19 pandemic may dampen near-term price/mix. These factors will impact margins in the near term.
- Ball Corp's performance in the near term is likely to be impacted by headwinds stemming from the coronavirus pandemic, supply constraints and higher startup costs.
- ▼ The current global business environment is being impacted directly and indirectly by the effects the coronavirus. In line with other companies in the packaging and aerospace industries, Ball Corp makes majority of its sales and significant purchases to or from a relatively small number of global, or large regional, customers and suppliers. Furthermore, the company makes majority of its sales from a small number of product lines. Thus, the impact of COVID-19 on a significant customer or supplier, or on demand for certain of its products could negatively impact the company's results.

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Last Earnings Report

Ball Corp's Earnings Beat Estimates in Q2, Up Y/Y

Ball Corp reported second-quarter 2020 adjusted earnings of 65 cents per share, beating the Zacks Consensus Estimate of 57 cents. The bottom line also improved 1.6% on a year-over-year basis. The quarterly results reflect solid aluminum beverage-can demand in North America.

On a reported basis, the company posted earnings of 28 cents per share compared with the prioryear quarter's 58 cents.

Total sales came in at \$2,801 million in the reported quarter, down 7.2% from the year-ago quarter. The top-line figure also missed the Zacks Consensus Estimate of \$2,865 million.

Quarter Ending	06/2020
Report Date	Aug 06, 2020
Sales Surprise	-2.24%
EPS Surprise	14.04%
Quarterly EPS	0.65
Annual EPS (TTM)	2.67

Operational Update

Cost of sales came in at \$2,230 million in second-quarter 2020, down 8.2% from the year-ago quarter. Gross profit came in at \$571 million compared with the year-ago quarter's \$589 million. Gross margin came in at 20.4% during the reported quarter compared with the prior-year quarter figure of 19.5%.

Selling, general and administrative expenses remained flat year over year at \$111 million. Adjusted operating income declined 5.8% year over year to \$327 million. The company recorded operating margin of 11.7% compared with the prior-year quarter's 11.5%.

Segment Performance

The Beverage packaging's North and Central America segment revenues declined to \$1,267 million during the April-June period from the yearago quarter's \$1,286 million. Operating earnings surged 34% year over year to \$189 million.

Sales at the Beverage packaging, EMEA segment came in at \$699 million in the second quarter, down 8.9% year over year. Operating earnings plunged 35.7% year over year to \$63 million.

The Beverage packaging South America segment's revenues declined to \$329 million in the second quarter from the \$377 million witnessed in the prior-year period. Operating earnings fell to \$46 million from the year-earlier quarter's \$65 million.

In the Aerospace segment, sales rose 15.6% year over year to \$438 million. Operating earnings declined to \$30 million from the year-ago quarter figure of \$38 million. As of the end of the reported quarter, the segment's contracted backlog was \$2.1 billion and contracts already won, but not yet booked into current contracted backlog, increased 10% year to date to \$5.3 billion.

Financial Condition

Ball Corp reported cash and cash equivalents of \$643 million at the end of the second guarter, down from the \$764 million recorded at the end of the year-earlier period. Cash used in operating activities was \$232 million in the first half of 2020 compared with \$253 million cash generated in the first half of 2019. The company's long-term debt increased to \$7.2 billion at the end of the second quarter from \$6.9 billion at the end of prioryear quarter.

Outlook

Given the significant growth prospects in North American beverage business, the company anticipates current-year capital expenditures to exceed \$900 million. The company is on track to meet the previously-announced projects and will continue to deploy additional capital across its existing business portfolio to support new customer wins.

The company expects to increase its earnings per diluted share in the ongoing year. Moreover, Ball Corp maintains its expectation to deliver long-term diluted earnings per share growth of at least 10-15% beyond 2020 and achieve additional EVA (economic value added) dollars enhancing opportunities.

Valuation

Ball Corporation's shares up 24.1% over the trailing 12-month period and down 0.2% over the trailing 12-month period. Stocks in the Zacks Containers - Metal and Glass industry and the Zacks Industrial Products sector are up 18.9% and 0.2% in the year-to-date period, respectively. Over the past year, the Zacks sub-industry and the sector are up 6.0% and 14.7%, respectively.

The S&P 500 index is up 9.0% in the year-to-date period and up 20.3% in the past year.

The stock is currently trading at 26.38X forward 12-month earnings, which compares with 19.87X for the Zacks sub-industry, 22.10X for the Zacks sector and 23.49X for the S&P 500 index.

Over the past five years, the stock has traded as high as 33.25X and as low as 14.16X, with a 5-year median of 18.61X.

Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$84 price target reflects 27.93X forward 12-month earnings.

The table below shows summary valuation data for BLL:

		Stock	Sub-Industry	Sector	S&P 500
	Current	26.38	19.87	22.1	23.49
P/E F12M	5-Year High	33.25	20.04	22.1	23.49
	5-Year Low	14.16	11.41	12.55	15.25
	5-Year Median	18.61	16	17.48	17.58
	Current	2.18	1.62	2.99	3.84
P/S F12M	5-Year High	2.2	1.62	2.99	3.84
	5-Year Low	0.91	0.89	1.52	2.53
	5-Year Median	1.3	1.15	2.04	3.05
	Current	16.96	14.28	19.99	13.29
EV/EBITDA TTM	5-Year High	20.63	16.66	19.99	13.29
	5-Year Low	9.6	8.9	10.76	8.22
	5-Year Median	13.99	12.23	14.96	10.91

As of 08/28/2020

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Industry Analysis Zacks Industry Rank: Top 1% (3 out of 252)



Source: Zacks Investment Research

Top Peers

Company (Ticker)	Rec Rank
Crown Holdings, Inc. (CCK)	Outperform 2
Graphic Packaging Holding Company (GPK)	Outperform 2
Silgan Holdings Inc. (SLGN)	Outperform 1
Amcor PLC (AMCR)	Neutral 3
OI Glass, Inc. (OI)	Neutral 3
Packaging Corporation of America (PKG)	Neutral 3
Sealed Air Corporation (SEE)	Neutral 3
Sonoco Products Company (SON)	Neutral 3

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

			hold o	r sell.		
Industry Comparison Industr	y: Containers - M	y: Containers - Metal And Glass Industry Peers				
	BLL	X Industry	S&P 500	сск	SLGN	SON
Zacks Recommendation (Long Term)	Neutral	-	-	Outperform	Outperform	Neutra
Zacks Rank (Short Term)	2	-	-	2	1	3
VGM Score	C	-	-	Α	В	В
Market Cap	26.21 B	10.40 B	23.71 B	10.40 B	4.24 B	5.39 E
# of Analysts	8	7	14	7	5	Ę
Dividend Yield	0.75%	0.75%	1.63%	0.00%	1.26%	3.20%
Value Score	D	-	-	В	С	В
Cash/Price	0.03	0.04	0.07	0.04	0.05	0.16
EV/EBITDA	20.33	12.60	13.37	10.83	12.60	8.96
PEG F1	5.27	2.97	3.08	2.97	2.69	3.29
P/B	9.26	4.68	3.22	4.68	3.89	2.98
P/CF	17.06	9.39	12.90	8.69	9.39	9.0
P/E F1	28.99	14.87	21.82	14.87	13.44	16.43
P/S TTM	2.33	0.93	2.52	0.92	0.93	1.03
Earnings Yield	3.45%	6.72%	4.41%	6.72%	7.43%	6.09%
Debt/Equity	2.53	2.85	0.74	3.67	2.85	0.90
Cash Flow (\$/share)	4.70	4.70	6.94	8.88	4.07	5.96
Growth Score	В	-	-	В	С	В
Historical EPS Growth (3-5 Years)	10.45%	10.45%	10.41%	9.93%	13.28%	8.88%
Projected EPS Growth (F1/F0)	9.34%	10.46%	-4.94%	1.59%	31.67%	-7.42%
Current Cash Flow Growth	4.20%	5.44%	5.22%	7.40%	5.44%	3.38%
Historical Cash Flow Growth (3-5 Years)	13.04%	12.67%	8.50%	12.67%	4.92%	5.30%
Current Ratio	0.97	1.15	1.35	1.15	1.34	1.42
Debt/Capital	71.67%	74.03%	43.86%	78.59%	74.03%	47.24%
Net Margin	3.28%	4.28%	10.25%	4.28%	5.50%	5.23%
Return on Equity	29.73%	29.73%	14.66%	32.53%	27.83%	19.35%
Sales/Assets	0.67	0.73	0.50	0.73	0.84	1.00
Projected Sales Growth (F1/F0)	0.36%	0.36%	-1.43%	-3.05%	6.84%	-4.41%
Momentum Score	F	-	-	D	C	D
Daily Price Change	1.17%	0.29%	0.71%	0.29%	0.24%	-0.02%
1-Week Price Change	1.48%	-0.82%	-1.45%	-1.82%	-0.82%	-3.66%
4-Week Price Change	9.29%	7.21%	4.59%	7.21%	-0.31%	2.27%
12-Week Price Change	6.46%	11.03%	4.86%	11.03%	12.88%	-1.49%
52-Week Price Change	-0.20%	16.50%	3.09%	16.50%	27.88%	-6.05%
20-Day Average Volume (Shares)	1,622,690	636,940	1,887,168	636,940	501,689	367,810
EPS F1 Estimate 1-Week Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
EPS F1 Estimate 4-Week Change	4.04%	0.21%	0.79%	0.00%	0.21%	0.00%
EPS F1 Estimate 12-Week Change	3.88%	3.88%	3.43%	3.54%	18.50%	0.49%
EPS Q1 Estimate Monthly Change	2.74%	0.00%	0.00%	0.00%	-0.16%	0.00%

Source: Zacks Investment Research

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	D
Growth Score	В
Momentum Score	F
VGM Score	С

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.

Disclosures

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Additional Disclosure

This material represents an assessment of the market and economic environment at a specific point in time and is not intended to be a forecast of future events, or a guarantee of future results. Forward-looking statements are subject to certain risks and uncertainties. Any statements that refer to expectations, projections or characterizations of future events or circumstances, including any underlying assumptions, are forwardlooking statements. Actual results, performance, or achievements may differ materially from those expressed or implied.

Returns quoted represent past performance which is no guarantee of future results. Investment returns and principal value will fluctuate so that when shares are redeemed, they may be worth more or less than their original cost. Current performance may be higher or lower than the performance shown.

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 mediumterm 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 4week 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 longterm 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 mostrecent 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.

Past performance is no guarantee of future results. Please see important disclosures and definitions at the end of this report.

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 longterm 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.

Past performance is no guarantee of future results. Please see important disclosures and definitions at the end of this report.

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.

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