

#### LyondellBasell (LYB) Long Term: 6-12 Months Zacks Recommendation: Neutral (Since: 04/01/21) \$105.55 (As of 04/01/21) Prior Recommendation: Outperform Price Target (6-12 Months): \$111.00 3-Hold Short Term: 1-3 Months Zacks Rank: (1-5) VGM:A Zacks Style Scores: Value: A Growth: C Momentum: A

### **Summary**

Earnings estimates for LyondellBasell for the first quarter have been going down over the past month. The company is expanding its key projects to leverage on U.S. natural gas liquids. The high-density polyethylene (HDPE) project is expected to boost capacity and contribute to its margins. LyondellBasell is also expected to benefit from the construction of propylene oxide and tertiary butyl alcohol (PO/TBA) plant. The A. Schulman buyout will also generate significant cost synergies. The polyethylene joint venture with Sasol will also allow the company to expand core businesses. However, the company is seeing challenges in the Refining segment due to weak demand for transportation fuels. Moreover, costs associated with maintenance turnarounds are likely to weigh on margins in 2021. High debt level is another concern.

#### **Data Overview**

52-Week High-Low	\$112.73 - \$44.33
20-Day Average Volume (Shares)	1,867,282
Market Cap	\$35.3 B
Year-To-Date Price Change	15.2%
Beta	1.58
Dividend / Dividend Yield	\$4.20 / 4.0%
Industry	Chemical - Diversified
Zacks Industry Rank	Top 36% (92 out of 253)

Last EPS Surprise	67.2%
Last Sales Surprise	11.0%
EPS F1 Estimate 4-Week Change	2.0%
Expected Report Date	05/07/2021
Earnings ESP	-2.5%

P/E TTM	18.7
P/E F1	9.0
PEG F1	1.2
P/S TTM	1.3

### 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*
2022	9,615 E	9,883 E	9,573 E	9,429 E	36,342 E
2021	8,813 E	9,270 E	8,748 E	8,571 E	34,621 E
2020	7,494 A	5,546 A	6,776 A	7,937 A	27,753 A

#### **EPS Estimates**

	Q1	Q2	Q3	Q4	Annual*
2022	\$2.19 E	\$2.38 E	\$2.29 E	\$2.17 E	\$10.87 E
2021	\$2.82 E	\$3.55 E	\$2.90 E	\$2.66 E	\$11.70 E
2020	\$1.52 A	\$0.71 A	\$1.27 A	\$2.19 A	\$5.61 A

The data in the charts and tables, including the Zacks Consensus EPS and sales estimates, is as of 04/01/2021. The report's text and the

analyst-provided price target are as of 04/05/2021.

#### Overview

Based in Houston, TX, LyondellBasell Industries N.V. is among the leading plastics, chemical and refining companies globally with operations across 18 countries. The company's products are used across a bevy of industries including electronics, automotive parts, packaging, construction materials and biofuels.

LyondellBasell, which emerged from Chapter 11 bankruptcy in 2010, is among the leading global producers of olefins and polyethylene. It is the world's second largest producer of polypropylene. It generated revenues of roughly \$27.8 billion in 2020.

LyondellBasell operates through six segments – Olefins & Polyolefins – Americas; Olefins & Polyolefins - Europe, Asia, International; Intermediates and Derivatives; Advanced Polymer Solutions; Refining; and Technology.

The Olefins & Polyolefins – Americas (24% of 2020 sales) division makes and markets olefins, including ethylene and ethylene co-products, and polyolefins.

The Olefins & Polyolefins - Europe, Asia, International unit (28%) is engaged in the production and distribution of olefins, including ethylene and ethylene co-products, polyolefins and polypropylene compounds.



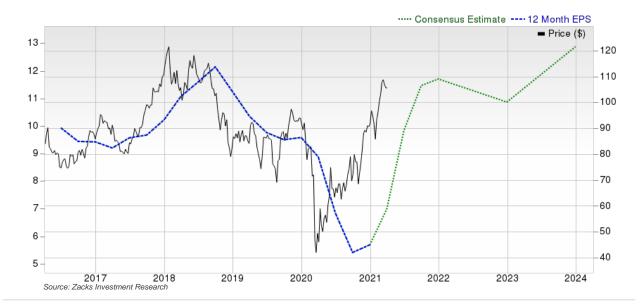
The Intermediates and Derivatives segment (20%) manufactures propylene oxide and its co-products and derivatives, acetyls, including methanol, ethanol, ethylene oxide and its derivatives, and oxygenated fuels (oxyfuels).

The Advanced Polymer Solutions segment (12%) manufactures and markets Compounding & Solutions and Advanced Polymers.

The Refining segment (15%) refines heavy, high-sulfur crude oil and different types of other crude oils as well as sources available on the U.S. Gulf Coast. The company's Houston refinery in Texas has been designed to refine heavy, high-sulfur crude oil.

LyondellBasell's Technology segment (1%) develops and licenses chemical and polyolefin process technologies and also makes and distributes polyolefin catalysts.

LyondellBasell has acquired A. Schulman, Inc. in a deal worth \$2.25 billion. The deal was closed on August 2018 and results from the new business are included prospectively.



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### **Reasons To Buy:**

▲ LyondellBasell is benefitting from the favorable North American natural gas environment. It is executing its expansion projects to leverage the U.S. natural gas liquids (NGLs) advantage. The construction of LyondellBasell's new HDPE plant on the U.S. Gulf Coast is complete. It employs the company's proprietary Hyperzone PE technology and has an annual capacity of 1.1 billion pounds. The company expects the Hyperzone HDPE plant to generate roughly \$170 million of annual EBITDA. LyondellBasell is also constructing a world scale plant on the U.S. Gulf Coast for producing propylene oxide and tertiary butyl alcohol. The plant will have annual capacity of 1 billion pounds of PO and 2.2 billion pounds of TBA and its derivatives. It expects the project to be completed in 2023 and generate roughly \$450 million of annual EBITDA.

LyondellBasell's HDPE project should boost capacity and add to its earnings. The buyout of A. Schulman will also create significant synergies. The joint venture with Sasol is another positive.

- ▲ The company, in 2018, purchased A. Schulman in a deal worth \$2.25 billion, a move that creates a premier global provider of advanced polymer solutions with extensive geographic reach, leading technologies and a diverse product portfolio. A. Schulman is a leading supplier of high-performance plastic compounds, composites and powders. The buyout doubles the size of LyondellBasell's existing compounding business and creates a platform for future growth with reach into additional high-growth markets such as packaging and consumer products, electronics and appliances, building and construction, and agriculture. LyondellBasell expects to capture more than \$200 million in annual run-rate cost synergies from the acquisition.
- ▲ LyondellBasell, in late 2020, closed the Louisiana-based Integrated Polyethylene Joint Venture (JV) transaction with global integrated chemicals and energy company, Sasol. The 50/50 JV includes a 0.9 million-ton low-density, 1.5 million-ton ethane cracker and linear-low density polyethylene plants along with related infrastructure near Lake Charles, LA. The JV aligns with LyondellBasell's strategy of investing in high-quality assets in growing markets. The formation of this JV is also part of LyondellBasell's initiative expand core businesses, while positioning the company to gain from improving economic conditions. The JV is expected to generate roughly \$330 million of annual EBITDA.
- ▲ LyondellBasell remains committed to deliver greater value to its shareholders leveraging healthy cash flows. The company generated cash flows from operations of roughly \$3.4 billion in 2020. At the end of 2020, LyondellBasell had strong cash and liquid investments of \$2.5 billion. In 2020, the company paid out dividends worth \$1.4 billion.

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#### **Reasons To Sell:**

- ▼ The company is seeing certain challenges in the Refining segment as well as in the Intermediates and Derivatives business. Results of the Intermediates and Derivatives segment were affected by declining margins in the last reported quarter. A well-supplied market for its Intermediate Chemicals business has put pressure on margins. Moreover, weak gasoline demand and prices are hurting margins for Oxyfuels & Related products. The segment's EBITDA fell around 20% year over year in the fourth quarter. Also, the Refining segment swung to a loss in the quarter. Lower demand for refined products affected the segment. Factors like surplus industry capacity and reduced demand for transportation fuels are exerting pressure in the Refining business. Margins in the Refining unit are expected to remain under pressure as demand for gasoline and jet fuel is yet to return to pre-pandemic levels.
- ▼ LyondellBasell faces headwind from costs associated with maintenance turnarounds in 2021. The company has a planned turnaround at one of its European cracker and a few in the Intermediates and Derivatives unit this year. The company expects lost production related to this maintenance downtime to impact its EBITDA by around \$170 million in 2021. As such, maintenance costs are likely to weigh on volumes and margins.
- ▼ The company's high debt level is another concern. Its long-term debt was \$15,286 million at the end of fourth-quarter 2020, up from \$13,759 million in the prior quarter. Further, its times-interest-earned ratio of 3.6 at the end of the fourth quarter fell from 3.9 in the prior quarter and has also deteriorated over the last several quarters. As such, the company appears to have a higher default risk.

LyondellBasell is seeing certain challenges in the Refining segment and the Intermediates and Derivatives business. Costs associated with maintenance turnarounds may also hurt margins. High debt level is another cause of concern.

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### **Last Earnings Report**

#### LyondellBasell Beats Earnings and Sales Estimates in Q4

LyondellBasell posted profits of \$855 million or \$2.55 per share in fourth-quarter 2020, up from \$612 million or \$1.83 in the year-ago quarter.

Barring one-time items, adjusted earnings came in at \$2.19 cents per share that topped the Zacks Consensus Estimate of \$1.31.

Revenues fell 3% year over year to \$7,937 million in the reported quarter. However, the figure, beat the consensus mark of \$7,154 million.

Consolidated EBITDA increased 20.6% year over year to \$1,413 million.

The company witnessed strong consumer-driven demand, industry supply constraints and recovery in durable goods market which reduced the usual year-end slowdown.

**Quarter Ending** 

Report Date

Sales Surprise

**EPS Surprise** 

Quarterly EPS

Annual EPS (TTM)

12/2020

10.95% 67.18%

2.19

5.69

Jan 29, 2021

#### **Segment Review**

In the Olefins & Polyolefins — Americas division, EBITDA increased 45% year over year to \$722 million in the reported quarter. Olefins results were driven by ethylene volumes due to higher demand.

The Olefins & Polyolefins — Europe, Asia, International segment witnessed a rise in EBITDA of 111.1% year over year to \$304 million. Olefins results were driven by higher margins and volumes. Polyolefins results were higher due to increased polyolefin volumes and polyethylene margin. This was partly offset by lower polypropylene spread.

The Advanced Polymer Solutions segment posted EBITDA \$152 million, up from \$54 million in the year-ago quarter. Advanced Polymer results remained the same but Compounding & Solutions results increased due to improved margins.

EBITDA in the Intermediates and Derivatives segment fell 20.4% on a year-over-year basis to \$262 million. The downside was caused by LIFO inventory changes.

The Refining segment recorded a loss of \$72 million in the reported quarter against a profit of \$22 million in the year-ago quarter. The Houston Refinery operated at 53,000 barrels per day lower than prior-year quarter's levels, thanks to lower demand for refined products.

The Technology segment's EBITDA fell to \$45 million in the reported quarter, down 67.4% year over year. The downside was due to lower licensing revenues.

### FY20 Results

Earnings (as reported) for full-year 2020 were \$4.24 per share compared with \$9.58 per share a year ago. Net sales fell 20% year over year to roughly \$27.8 billion.

#### **Financials**

At the end of 2020, LyondellBasell had cash and liquid investments of \$2.5 billion.

In 2020, the company paid out dividends worth \$1.4 billion. It also had 334 million common shares outstanding as of Dec 31,2020.

#### Outlook

The company noted that improving trends seen last month are continuing in the first quarter of 2021. The Olefins and Polyolefins businesses are witnessing strong margins due to increased export demand to China and Latin America. The company formed a new joint venture this month to build its second world-scale propylene oxide and styrene monomer unit in China.

The company looks forward to debt reduction in the near future. It believes that it is well placed to drive profitability through its growth initiatives, which will increase free cash flow and strengthen its investment grade balance sheet.

#### **Valuation**

LyondellBasell's shares are up 111.6% over the trailing 12-month period. Over the past year, the Zacks Chemical - Diversified industry and Zacks Basic Materials sector are up 89.3% and up 82.7%, respectively.

The S&P 500 index is up 53.5% in the past year.

The stock is currently trading at 14.15X trailing 12-month enterprise value-to EBITDA (EV/EBITDA) ratio, which compares to 13.2X for the Zacks sub-industry, 9.77X for the Zacks sector and 17.9X for the S&P 500 index.

Over the past five years, the stock has traded as high as 14.53X and as low as 4.16X, with a 5-year median of 7.1X.

Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$111 price target reflects 9.66X forward 12-month earnings per share.

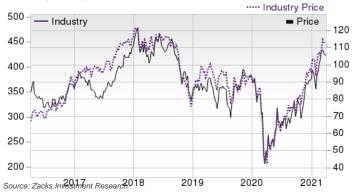
The table below shows summary valuation data for LYB:

Valuation Multiples - LYB						
		Stock	Sub-Industry	Sector	S&P 500	
	Current	14.15	13.2	9.77	17.9	
EV/EBITDA TTM	5-Year High	14.53	13.28	17.69	17.9	
	5-Year Low	4.16	5.19	6.54	9.63	
	5-Year Median	7.1	7.71	9.81	13.35	
	Current	9.19	16.62	11	22.67	
P/E F 12M	5-Year High	12.97	19.24	21.08	23.83	
	5-Year Low	3.77	8.97	10.23	15.3	
	5-Year Median	9.04	13.36	13.16	17.95	
	Current	4.42	2.38	2.62	6.79	
P/B TTM	5-Year High	6.47	2.82	3.09	6.79	
	5-Year Low	1.44	0.87	1.22	3.84	
	5-Year Median	4.1	1.75	2.27	4.98	

As of 04/01/2021

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# Industry Analysis Zacks Industry Rank: Top 36% (92 out of 253)



# **Top Peers**

Company (Ticker)	Rec	Rank
Dow Inc. (DOW)	Outperform	1
Westlake Chemical Corporation (WLK)	Outperform	1
Exxon Mobil Corporation (XOM)	Outperform	1
Air Products and Chemicals, Inc. (APD)	Neutra	4
BASF SE (BASFY)	Neutra	3
Eastman Chemical Company (EMN)	Neutra	3
Huntsman Corporation (HUN)	Neutra	3
Stepan Company (SCL)	Neutra	3

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

Industry Comparison Industry: Chemical - Diversified			Industry Peers			
	LYB	X Industry	S&P 500	APD	EMN	WLK
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Outperform
Zacks Rank (Short Term)	3	-	-	4	3	1
VGM Score	A	-	-	В	Α	В
Market Cap	35.27 B	4.05 B	29.69 B	63.04 B	15.19 B	11.70 B
# of Analysts	7	3	13	7	8	6
Dividend Yield	3.98%	1.28%	1.34%	2.11%	2.48%	1.18%
Value Score	Α	-	-	С	Α	В
Cash/Price	0.07	0.10	0.06	0.10	0.04	0.12
EV/EBITDA	14.49	12.68	16.59	17.20	15.14	11.20
PEG F1	1.16	1.62	2.35	3.86	0.91	0.48
P/B	4.41	2.23	3.95	4.82	2.48	1.78
P/CF	10.71	11.52	16.66	20.66	10.70	10.95
P/E F1	9.02	16.35	21.87	31.58	14.15	15.24
P/S TTM	1.27	1.15	3.39	7.02	1.79	1.56
Earnings Yield	11.08%	6.08%	4.49%	3.17%	7.06%	6.56%
Debt/Equity	1.91	0.56	0.66	0.54	0.86	0.54
Cash Flow (\$/share)	9.86	3.00	6.78	13.79	10.40	8.36
Growth Score	С	-	-	В	В	С
Historical EPS Growth (3-5 Years)	-7.67%	1.71%	9.39%	5.12%	-1.58%	-11.09%
Projected EPS Growth (F1/F0)	108.63%	34.43%	15.29%	7.65%	27.89%	162.30%
Current Cash Flow Growth	-30.42%	-10.14%	0.44%	4.97%	-11.63%	-5.90%
Historical Cash Flow Growth (3-5 Years)	-10.99%	2.01%	7.37%	5.92%	-3.19%	3.99%
Current Ratio	2.11	1.93	1.39	2.95	1.74	2.56
Debt/Capital	65.85%	36.62%	41.26%	35.17%	46.31%	35.15%
Net Margin	5.14%	4.12%	10.59%	21.09%	5.64%	4.40%
Return on Equity	25.44%	9.52%	14.86%	15.09%	13.67%	4.55%
Sales/Assets	0.85	0.69	0.51	0.38	0.53	0.54
Projected Sales Growth (F1/F0)	24.75%	9.73%	7.36%	9.18%	7.95%	12.24%
Momentum Score	Α	-	-	В	С	В
Daily Price Change	1.44%	1.04%	0.97%	1.27%	1.06%	3.11%
1-Week Price Change	-1.12%	-0.24%	2.12%	4.29%	0.79%	-3.07%
4-Week Price Change	-0.58%	6.22%	6.95%	11.10%	0.09%	7.34%
12-Week Price Change	8.29%	5.47%	8.07%	-0.14%	3.42%	1.50%
52-Week Price Change	129.86%	89.87%	67.38%	46.48%	145.24%	160.09%
20-Day Average Volume (Shares)	1,867,282	127,293	2,332,946	1,021,370	1,044,473	921,155
EPS F1 Estimate 1-Week Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
EPS F1 Estimate 4-Week Change	2.00%	0.00%	0.00%	-0.02%	-0.63%	10.25%
EPS F1 Estimate 12-Week Change	52.33%	7.48%	2.24%	-2.77%	8.30%	94.18%
EPS Q1 Estimate Monthly Change	18.72%	0.00%	0.00%	0.00%	0.74%	5.12%

Source: Zacks Investment Research

#### **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.

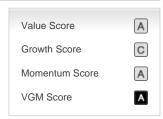
#### **Zacks Rank**

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.



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.

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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.

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