

Westlake Chemical(WLK)

\$66.75 (As of 09/14/20)

Price Target (6-12 Months): \$71.00

Long Term: 6-12 Months	(Since: 08/19/2	Zacks Recommendation: (Since: 08/19/20) Prior Recommendation: Outperform		
Short Term: 1-3 Months	Zacks Rank:	(1-5)	3-Hold	
	Zacks Style So	VGM:B		
	Value: B	Growth: C	Momentum: C	

Summary

Earnings estimates for Westlake Chemical for the third quarter and 2020 have moved up over the past two months. The company is benefiting from synergies of the Axiall acquisition. The buyout has diversified its product portfolio and geographical operations. Further, the company is seeing favorable demand trends for polyethylene and PVC resin. Healthy demand in the polyethylene business is likely to continue, especially in food packaging. Also, rising housing starts in the United States augur well for its downstream vinyl products business and domestic demand for PVC. The company should also benefit from its capacity expansion projects. However, it faces headwinds from lower pricing for its products. The company's operations are also exposed to maintenance outages. The Olefins unit also faces headwinds from new capacity additions.

Data Overview

09/15/2020.

52-Week High-Low	\$75.65 - \$28.99
20-Day Average Volume (Shares)	403,484
Market Cap	\$8.5 B
Year-To-Date Price Change	-4.9%
Beta	1.68
Dividend / Dividend Yield	\$1.08 / 1.6%
Industry	Chemical - Plastic
Zacks Industry Rank	Top 50% (126 out of 251)

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Last EPS Surprise	1,200.0%
Last Sales Surprise	3.3%
EPS F1 Estimate 4-Week Change	34.2%
Expected Report Date	11/03/2020
Earnings ESP	-5.1%

P/E TTM	28.4
P/E F1	36.1
PEG F1	4.4
P/S TTM	1.1

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	1,600 E	1,568 E	1,699 E	1,576 E	7,661 E
2020	1,932 A	1,709 A	1,811 E	1,777 E	7,188 E
2019	2,025 A	2,144 A	2,066 A	1,883 A	8,118 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$0.24 E	\$0.59 E	\$0.66 E	\$0.51 E	\$2.13 E
2020	\$0.65 A	\$0.11 A	\$0.52 E	\$0.53 E	\$1.85 E
2019	\$0.94 A	\$0.92 A	\$1.22 A	\$0.37 A	\$3.26 A

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 09/14/2020. The reports text is as of

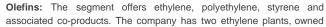
Overview

Houston, TX-based Westlake Chemical Corporation is a vertically integrated international producer and supplier of petrochemicals, polymers and building products. The company's range of products includes ethylene, polyethylene, styrene, vinyl intermediates, polyvinyl chloride (PVC), PVC Pipe, PVC windows, fence and decking components. The company utilizes most of its internally-produced basic chemicals to make higher value-added chemicals and building products.

The company's products are used across a range of consumer and industrial markets, including flexible and rigid packaging, automotive products, coatings, water treatment, refrigerants, residential and commercial construction. The company generated revenues of \$8,118 million in 2019.

Westlake Chemical operates through two segments - Vinyls and Olefins.

Vinyls: The segment's key products include PVC, chlor-alkali (chlorine and caustic soda) and chlorinated derivative products and ethylene. The company also makes building products fabricated from PVC, including siding, pipe, fittings, fence and decking products, window and door components and film and sheet products. The segment accounted for 78% of total revenues in 2019.

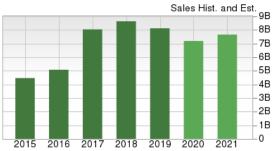


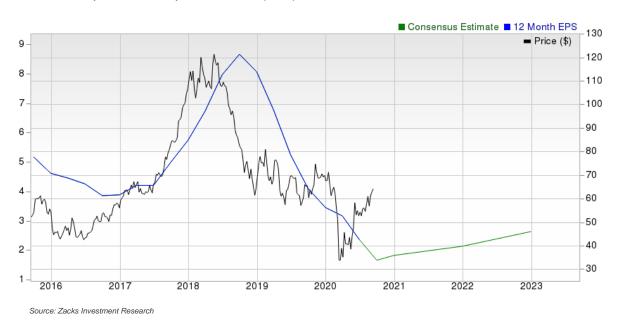
by OpCo, two polyethylene plants and one styrene monomer plant at its olefins facility at the Lake Charles site. The segment accounted for 22% of total revenues in 2019.

Westlake Chemical, in September 2016, concluded the acquisition of chemicals and building products maker, Axiall Corporation in an all-cash deal. The transaction represents an enterprise value of \$3.8 billion.

Westlake Chemical, in January 2019, also acquired global compounding solutions business, NAKAN. NAKAN's product portfolio is used in a wide-array of applications in the building & construction, automotive and medical industries. The combination is a strategic move that complements the company's existing compounding business. Through this move, Westlake Chemical's compounding business now has facilities in the United States, Italy, France, Germany, China, Mexico, Japan, Spain and Vietnam.







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Reasons To Buy:

- ▲ Westlake Chemical is well placed to benefit from acquisitions. The Axiall acquisition has diversified the company's product portfolio and geographical operations, creating a North American leader in Olefins and Vinyls. The company has realized \$275 million of cost reduction synergies and savings since the completion of the acquisition. The buyout of the global compounding solutions business, NAKAN also enabled Westlake Chemical to expand its product portfolio and global footprint that the company expects to leverage with its existing operations and drive shareholders value. The acquisition allows the company to boost its compounding business globally along with adding the vital specialty products and technology to the current portfolio.
- The company is seeing healthy global demand for its major products. It is witnessing strong demand trends for polyethylene as reflected by higher sales volumes. The company expects healthy demand in its polyethylene business to continue on account of its focus in specialty applications, especially food packaging. Demand for PVC resin and construction-related downstream vinyl products is also improving with the easing of coronavirus-induced restrictions. Rising housing starts in the United States also augur well for the company's downstream vinyl products business and domestic demand for PVC. The company's investments

Westlake Chemical is benefiting from synergies of Axiall acquisition and strong demand for its major products. It should also benefit from its capacity expansion projects.

▲ Westlake Chemical should also benefit from its capacity expansion projects. The company completed the 750-million pound PVC expansion (in Burghausen, Germany, and Geismar, LA) in its Vinyls segment in fourth-quarter 2019. The company, in 2018, also announced a 200-million pound vinyl chloride monomer (VCM) expansion in Geismar and Gendorf, Germany. This additional production capacity will help the company to address the growing needs of its global customers.

to improve the reliability and operational efficiency of its assets will also allow it to fully leverage the improving Vinyls market fundamentals.

▲ Westlake Chemical is taking actions to reduce its debt. At the end of the second quarter of 2020, its total long-term debt was \$3,745 million, down from \$4,432 million in the sequentially prior quarter. Moreover, its net debt fell to around \$2.6 billion at the end of the second quarter from \$2.9 billion in the prior quarter. The company also ended the second quarter with a strong cash balance of \$1,109 million. Its strong liquidity position should allow it to meet its debt obligations.

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Reasons To Sell:

■ Westlake Chemical faces downward pressure on pricing for major products. The coronavirus pandemic and a sharp decline in oil prices weighed on its prices in the second quarter of 2020. Lower polyethylene sales prices hurt margins in the Olefins segment in the quarter. Polyethylene prices are expected to remain under pressure over the near term. The impacts of the pandemic and oil prices also hurt prices of the company's major products in the second quarter. While oil prices have recovered from their lows, the coronavirus outbreak is likely to continue to impact global industrial activities and demand, thereby hurting the company's prices. As such, pricing pressure is expected to sustain in third-quarter 2020.

The company faces headwinds from lower pricing for a number of its products. Its operations are also exposed to maintenance outages. The Olefins unit also faces headwinds from new capacity additions.

- ▼ The company's Olefins segment faces headwinds from new capacity additions. New ethylene and polyethylene capacity additions across North America and Asia have led to additional supply of ethylene and polyethylene in the market. This is hurting profitability of the Olefins segment. The company expects new capacity additions in North America, Asia and the Middle East to further add to supply and weigh on margins in the Olefins unit moving ahead.
- ▼ Westlake Chemical's operations are exposed to planned turnarounds and unplanned outages. Turnaround activities unfavorably impacted its olefins operating margins in fourth-quarter 2019. The company also idled some of its small integrated facilities in first-quarter 2020. It is planning to execute the turnaround of its Petro 2 ethylene unit in the first half of 2021 and expects the outage to last for around 60 days. The company expects associated maintenance costs of roughly \$100 million. This may pose some margin headwinds.

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Last Earnings Report

Westlake Chemical's Q2 Earnings and Sales Beat Estimates

Westlake Chemical posted earnings of 11 cents per share for the second quarter of 2020, down from 92 cents per share it earned in the year-ago quarter. The Zacks Consensus Estimate for the quarter was a loss of a penny per share.

The bottom line in the reported quarter was hurt by lower demand due to the impacts of the coronavirus pandemic and a sharp decline in oil prices. Lower demand and oil prices led to reduced global sales prices for the company's major products as well as lower sales volumes for caustic soda and downstream vinyls products.

Quarter Ending	06/2020
Report Date	Aug 06, 2020
Sales Surprise	3.34%
EPS Surprise	1,200.00%
Quarterly EPS	0.11
Annual EPS (TTM)	2.35

Sales fell roughly 20% year over year to \$1,709 million. The figure surpassed the Zacks Consensus Estimate of \$1,653.8 million.

Segment Highlights

Sales in the Olefins segment fell roughly 24% year over year to \$361 million in the reported quarter. Operating income in the segment declined around 70% to \$25 million. The decrease was mainly due to lower sales prices for polyethylene resulting from the pandemic and reduced oil prices, partly offset by increased polyethylene volumes and lower feedstock and fuel costs.

The Vinyls segment generated sales of \$1,348 million, down around 19% year over year. Operating income in the segment was \$20 million, down roughly 84% year over year. The decline was caused by the impacts coronavirus and lower oil prices.

Financial Position

Westlake Chemical ended the quarter with cash and cash equivalents of \$1,109 million, up nearly three fold year over year. Long-term debt was \$3,745 million, up around 40% year over year.

Cash flow from operations was \$448 million in the quarter, up 40% year over year.

Outlook

Westlake Chemical said that it is well placed to continue to serve its customers' needs while reducing operating costs, managing working capital and lowering capital expenditures. The company expects the prudent management of its business through the pandemic along with its strong business fundamentals to enable it to deliver long-term value to shareholders.

Recent News

Westlake Chemical Declares Pricing of Senior Notes Due 2030

Westlake Chemical, on Jun 9, 2020, announced the pricing of underwritten public offering of \$300 million total principal amount of senior unsecured notes due 2030. The notes will carry an interest rate of 3.375% per year and will mature on Jun 15, 2030.

The company plans to employ a portion of the net proceeds to fund the purchase of three series of tax-exempt revenue bonds. The revenue bonds are issued by the Louisiana Local Government Environmental Facilities and Community Development Authority on behalf of Westlake Chemical with a total principal amount of \$254 million. The company plans to use the remaining net proceeds for general corporate purposes.

The notes offering will be sold only pursuant to an effective shelf registration statement, which was earlier filed with the Securities and Exchange Commission.

Valuation

Westlake Chemical's shares are down 4.8% in the year-to-date period and down 3.4% over the trailing 12-month period. Stocks in the Zacks Chemicals-Plastics industry and Zacks Basic Materials sector are down 9.7% and up 4.1% in the year-to-date period, respectively. Over the past year, the Zacks sub-industry and sector are down 18% and up 9.7%, respectively.

The S&P 500 index is up 5.1% in the year-to-date period and up 13.4% in the past year.

The stock is currently trading at 32.6X forward 12-month earnings, which compares to 29.9X for the Zacks sub-industry, 14.39X for the Zacks sector and 22.4X for the S&P 500 index.

Over the past five years, the stock has traded as high as 39.8X and as low as 7.28X, with a 5-year median of 13.27X.

Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$71 price target reflects 34.68X forward 12-month earnings per share.

The table below shows summary valuation data for WLK:

Valuation Multiples - WLK						
		Stock	Sub-Industry	Sector	S&P 500	
	Current	32.6	29.9	14.39	22.4	
P/E F12M	5-Year High	39.8	40.67	21.06	23.44	
	5-Year Low	7.28	5.61	9.84	15.26	
	5-Year Median	13.27	9.01	13.5	17.63	
	Current	10.31	8.7	7.64	14.46	
EV/EBITDA TTM	5-Year High	14.41	10.4	18.55	15.61	
	5-Year Low	4.25	3.13	6.49	9.51	
	5-Year Median	7.72	6.17	10.28	13	
	Current	1.32	0.93	2.3	5.75	
P/B TTM	5-Year High	3.02	2.24	3.07	6.17	
	5-Year Low	0.6	0.43	1.23	3.75	
	5-Year Median	1.72	1.45	2.21	4.84	

As of 09/14/2020

Source: Zacks Investment Research

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Industry Analysis Zacks Industry Rank: Top 50% (126 out of 251)



Source: Zacks Investment Research

Top Peers

Company (Ticker)	Rec F	Rank
Ashland Global Holdings Inc. (ASH)	Outperform	2
PolyOne Corporation (AVNT)	Neutral	3
Celanese Corporation (CE)	Neutral	3
Eastman Chemical Company (EMN)	Neutral	3
Huntsman Corporation (HUN)	Neutral	3
LyondellBasell Industries N.V. (LYB)	Neutral	3
ShinEtsu Chemical Co. (SHECY)	Neutral	3
Olin Corporation (OLN)	Underperform	5

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

Industry Comparison Industry: Chemical - Plastic			Industry Peers	Industry Peers		
	WLK	X Industry	S&P 500	AVNT	LYB	OLN
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Underperforn
Zacks Rank (Short Term)	3	-	-	3	3	5
VGM Score	В	-	-	В	А	В
Market Cap	8.52 B	986.57 M	23.63 B	2.50 B	25.54 B	1.80 E
# of Analysts	4	2	13	6	7	4
Dividend Yield	1.62%	0.00%	1.61%	2.96%	5.49%	7.01%
Value Score	В	-	-	В	Α	В
Cash/Price	0.14	0.19	0.07	0.81	0.13	0.13
EV/EBITDA	8.20	5.86	13.23	9.42	6.29	7.02
PEG F1	4.46	34.13	2.98	2.61	2.36	NA
P/B	1.32	1.45	3.24	1.61	3.46	0.82
P/CF	7.55	6.47	12.74	9.62	5.39	2.62
P/E F1	36.32	29.11	21.70	18.47	15.90	NA
P/S TTM	1.12	0.64	2.48	0.93	0.85	0.32
Earnings Yield	2.77%	2.77%	4.46%	5.41%	6.29%	-13.57%
Debt/Equity	0.64	0.54	0.70	1.22	1.85	1.86
Cash Flow (\$/share)	8.84	2.29	6.93	2.84	14.19	4.35
Growth Score	С	-	-	D	В	С
Historical EPS Growth (3-5 Years)	-2.25%	-8.17%	10.41%	3.98%	-2.41%	11.74%
Projected EPS Growth (F1/F0)	-43.40%	-35.09%	-4.75%	-12.33%	-50.00%	-357.92%
Current Cash Flow Growth	-31.71%	-33.97%	5.26%	-23.71%	-16.46%	-22.35%
Historical Cash Flow Growth (3-5 Years)	3.87%	1.71%	8.49%	38.26%	-3.48%	22.28%
Current Ratio	2.85	2.11	1.35	4.14	2.36	1.75
Debt/Capital	39.01%	34.90%	42.95%	54.91%	65.15%	65.05%
Net Margin	5.14%	0.04%	10.25%	21.01%	6.79%	-4.14%
Return on Equity	4.74%	2.85%	14.59%	10.78%	29.99%	-4.60%
Sales/Assets	0.56	0.69	0.50	0.75	0.97	0.62
Projected Sales Growth (F1/F0)	-11.45%	-11.45%	-1.43%	-4.57%	-22.90%	-10.87%
Momentum Score	С	-	-	Α	Α	В
Daily Price Change	4.13%	0.34%	1.47%	2.28%	2.93%	0.35%
1-Week Price Change	2.05%	0.00%	-1.87%	-3.98%	3.12%	-5.87%
4-Week Price Change	11.14%	-1.11%	-0.20%	5.31%	11.61%	5.06%
12-Week Price Change	21.61%	6.42%	6.74%	10.64%	14.66%	-7.61%
52-Week Price Change	-3.41%	-6.75%	0.79%	-18.69%	-14.70%	-40.77%
20-Day Average Volume (Shares)	403,484	67,311	1,845,187	432,429	1,888,974	3,023,495
EPS F1 Estimate 1-Week Change	-1.99%	0.00%	0.00%	2.30%	3.16%	0.00%
EPS F1 Estimate 4-Week Change	34.18%	0.00%	0.00%	3.73%	3.16%	-5.45%
EPS F1 Estimate 12-Week Change	50.98%	4.23%	4.00%	8.25%	-2.99%	-29.50%
EPS Q1 Estimate Monthly Change	8.58%	4.29%	0.00%	8.72%	4.19%	-11.52%

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.

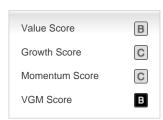
Zacks Rank

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.

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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