

Oshkosh Corporation(OSK)

\$77.01 (As of 08/31/20)

Price Target (6-12 Months): **\$81.00**

Long Term: 6-12 Months

Zacks Recommendation:
Neutral

(Since: 04/01/19)

Prior Recommendation: Outperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

3-Hold

Zacks Style Scores:

VGM:C

Value: B

Growth: F

Momentum: A

Summary

Solid backlogs across the Defense, and Fire & Emergency segments are expected to drive Oshkosh's financials in fiscal 2020. Further, in response to the uncertainties caused by the coronavirus pandemic, the company initiated a series of meaningful cost savings throughout the enterprise, including substantial staffing adjustments and reducing production levels to help mitigate the business disruption. Moreover, the company pays out regular dividends to boost shareholders' value. However, amid the coronavirus-led uncertainty, it refrained from providing 2020 guidance. Revenues from the firm's Access Equipment and Commercial segments are under much pressure. Also, rise in raw material costs, uncertain trade policies and tariffs are hurting the firm's bottom line. As such, investors are recommended to wait for a better entry point.

Data Overview

52-Week High-Low	\$95.62 - \$46.72
20-Day Average Volume (Shares)	313,156
Market Cap	\$5.2 B
Year-To-Date Price Change	-18.6%
Beta	1.65
Dividend / Dividend Yield	\$1.20 / 1.6%
Industry	Automotive - Original Equipment
Zacks Industry Rank	Top 47% (119 out of 251)

Last EPS Surprise	174.5%
Last Sales Surprise	2.6%
EPS F1 Estimate 4-Week Change	3.8%
Expected Report Date	11/04/2020
Earnings ESP	6.4%

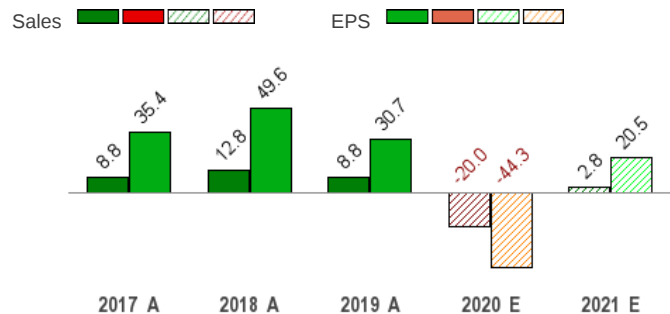
P/E TTM	13.3
P/E F1	16.6
PEG F1	1.4
P/S TTM	0.7

Price, Consensus & Surprise



Source: Zacks Investment Research

Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	1,500 E	1,794 E	1,816 E	1,813 E	6,898 E
2020	1,695 A	1,797 A	1,581 A	1,631 E	6,706 E
2019	1,803 A	1,990 A	2,393 A	2,196 A	8,382 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$0.87 E	\$1.45 E	\$1.68 E	\$1.45 E	\$5.58 E
2020	\$1.10 A	\$1.25 A	\$1.29 A	\$0.98 E	\$4.63 E
2019	\$1.61 A	\$1.82 A	\$2.72 A	\$2.17 A	\$8.31 A

*Quarterly figures may not add up to annual.

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 08/31/2020. The reports text is as of 09/01/2020.

Overview

Established in 1917, WI-based Oshkosh Corporation is a designer, manufacturer and seller of a varied range of vehicle bodies and specialty vehicles. The primary markets, which the company caters to, consist of defense, concrete placement, refuse hauling, access equipment, and fire and emergency. A few of the major brands that it offers include — Oshkosh, JLG, Pierce, McNeilus, IMT, Frontline, Jerr-Dan, CON-E-CO and London. Currently, the company employs approximately 15,000 people globally.

Oshkosh has manufacturing operations in Australia, Canada, China, France, Mexico, Romania and the United Kingdom, apart from the seven states of the United States.

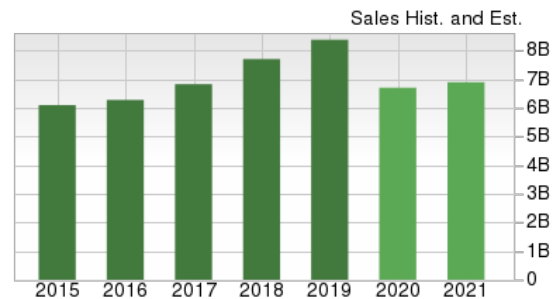
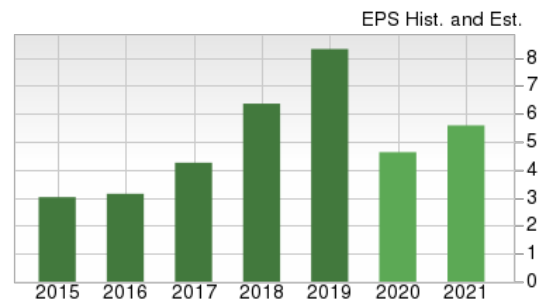
The four reportable segments of Oshkosh are-

Access Equipment (contributed 49% in consolidated net sales in fiscal 2019) - The segment operates under JLG and Jerr-Dan brands. JLG engages in the designing and manufacturing of aerial work platforms and telehandlers that are used for construction, industrial, institutional and general maintenance applications. JLG's customer base consists of equipment rental companies, construction contractors, manufacturing companies and home improvement centers. Further, Jerr-Dan offers tow trucks (wreckers) and roll-back vehicle carriers that cater towing companies in the United States and abroad.

The Defense (24%) unit designs, manufactures and markets military tactical wheeled vehicles. Oshkosh Defense offers a wide range of products, which include severe-duty, heavy- and medium-payload tactical trucks, hauling tanks, missile systems, ammunition, fuel, troops, and cargo for combat units.

The Fire & Emergency (15%) unit manufactures custom and commercial firefighting vehicles and equipment, simulators, and firefighting (ARFF) vehicles. Its products are sold to fire departments, airports and other governmental units in the United States and abroad.

The Commercial (12%) segment produces concrete mixers, refuse collection vehicles, and portable and stationary concrete batch plants for commercial and municipal waste haulers across the globe. Additionally, it manufactures field service vehicles and truck-mounted cranes that caters mining and construction.



Source: Zacks Investment Research

Reasons To Buy:

- ▲ Solid backlogs across the Defense, and Fire & Emergency segments bode well. During second-quarter fiscal 2020, the company received large orders for both the JLTV programs that not only positively impacted quarterly performance but also increased backlog. At the end of the second quarter, backlog for the Defense segment stood at more than \$3.3 billion, providing enough visibility into 2021 and 2022. The company is actively ramping up production of its new front discharge concrete mixer, S-Series 2.0, which was launched in March 2020. The vehicle is integrated with connectivity and productivity technology not previously seen in the concrete placement industry.
- ▲ Oshkosh engages in regular dividend payouts in almost every quarter, making it a safe stock for income investors. While many companies have tapped brakes on payouts amid coronavirus, Oshkosh maintained its dividend, thus preserving shareholders' value. Moreover, as of Jun 30, 2020, the company had long-term debt of \$817.6 million, down from \$819 million recorded as of Sep 30, 2019. Its total debt-to-capital ratio stands at 0.23, lower than its industry's 0.45. This favorable reading indicates that the firm is not a very leveraged company. Moreover, the company's times interest earned ratio of 9.27 is also favorable compared with the industry's 6.28.
- ▲ In response to the uncertainty caused by coronavirus pandemic, Oshkosh initiated a series of meaningful cost savings throughout the enterprise, including substantial staffing adjustments and reducing production levels to help mitigate the business disruptions. The focus on cost discipline is likely to result in potential savings of more than \$80-\$100 million for the second half of fiscal 2020.

Solid backlogs across the Defense, and Fire & Emergency segments bode well. Further, healthy balance sheet increases financial flexibility.

Reasons To Sell:

- ▼ The coronavirus pandemic has crippled the auto industry, and will lead to a decline in sales and production, hurting this automotive manufacturer. The pandemic has affected Oshkosh's customers in the United States and abroad, leading to temporary plant closures, changes in processes and cut in production levels, in line with the nationwide campaign addressing the crisis. Notably, the company has refrained from providing 2020 guidance in response to the uncertainties caused by the deadly virus. Weak consumer sentiment amid the COVID-19 outbreak is likely to hurt the firm's sales and earnings in the near future.
- ▼ The biggest risk that could impede Oshkosh from achieving estimates would be deterioration in the Access Equipment, Fire & Emergency, and Commercial segments. Net sales in the segments decreased 61%, 8.9% and 16.3% year over year in third-quarter fiscal 2020. Notably, these divisions are facing more volatility in consumer demand, given supply shortages and production interruptions. Any further deceleration in order activity could pose increased downside to consolidated results, given that the above mentioned segments are among the most profitable business segments.
- ▼ Oshkosh is facing a significant rise in raw material costs, specifically in its key components — steel and aluminum. Moreover, other material costs, freight rates and unstable foreign currency are increasing expenses. In order to tackle the situation, the company implemented steel and aluminum surcharges on its non-defense segments.

Increasing raw material costs, freight rates and unstable foreign currency are threats to Oshkosh's financial performance.

Last Earnings Report

Oshkosh's Q3 Earnings & Sales Top, Down Y/Y

Oshkosh Corporation recorded third-quarter fiscal 2020 (ended Jun 30, 2020) earnings of \$1.29 per share, down from \$2.72 recorded in the year-ago period amid coronavirus-led low demand.

However, fiscal third-quarter earnings handily surpassed the Zacks Consensus Estimate of 47 cents per share. This outperformance stemmed from stellar Defense segment revenues, which came in at \$548 million, beating the consensus mark of \$516 million. Notably, the Defense segment generated higher revenues and income than the year-ago period.

For the reported quarter, consolidated net sales declined 33.9% from the prior-year period to \$1,581 million. Nonetheless, revenues surpassed the Zacks Consensus Estimate of \$1,541 million.

For the fiscal second quarter, consolidated operating income slipped 54% year over to \$118.6 million (accounting for 7.5% of sales).

Segmental Details

For the reported quarter, net sales in Access equipment decreased 61% year over year to \$488 million. Operating income also plunged 82.4% from the prior-year quarter to \$33.5 million (6.9% of sales). This downside was primarily due to the impact of lower sales volume and adverse absorption amid slowdown in production due to the COVID-19 crisis.

The Defense segment's net sales increased 7.1% year over year to \$547.5 million for the fiscal third quarter on higher sales resulting from persistent ramp up of JLTV sales to the U.S. government. Operating income climbed 35.6% from the year-ago quarter to \$40 million (5.8% of sales) on higher sales volume and cost-cut efforts during the quarter.

Net sales in the Fire & Emergency segment dropped 8.9% from a year ago to \$310.7 million for the fiscal third quarter due to low production rates and supplier parts shortage as a result of the pandemic-related setbacks. Operating income also decreased 6.1% from the prior-year figure to \$47.6 million (15.3% of sales) due to the impact of lower sales volume, unfavorable product mix and product inefficiencies.

Net sales in the Commercial segment edged down 16.3% from the year-ago figure to \$247.7 million for the fiscal third quarter amid coronavirus woes. The segment's operating income was up 10.7% from the prior-year period to \$23.8 million (9.6% of sales), mainly owing to the absence of weather-related production disruptions that were experienced in the prior-year quarter.

Financials & Dividend

Oshkosh had cash and cash equivalents of \$331.6 million as of Jun 30, 2020. The company's long-term debt was \$817.6 million. Net cash provided by operating activities during the quarter was \$36.4 million.

Oshkosh's board announced a quarterly cash dividend of 30 cents per share for shareholders. The amount will be paid on Aug 31 to shareholders of record as of Aug 17, 2020.

Quarter Ending	06/2020
Report Date	Jul 30, 2020
Sales Surprise	2.58%
EPS Surprise	174.47%
Quarterly EPS	1.29
Annual EPS (TTM)	5.81

Valuation

Oshkosh's shares are down 18.7% in the year-to-date period and up 9.6% over the trailing 12-month period. Stocks in the Zacks Automotive - Original Equipment industry and the Zacks Automotive sector are down 2.3% and 1.8%, in the year-to-date period, respectively. Over the past year, the Zacks sub-industry and sector are up 9.7% and 14.5%, respectively.

The S&P 500 index is up 3.1% in the year-to-date period and 13.8% in the past year.

The stock is currently trading at 13.99X forward 12-month earnings, which compares to 20.79X for the Zacks sub-industry, 18.39X for the Zacks sector and 23.47X for the S&P 500 index.

Over the past five years, the stock has traded as high as 21.86X and as low as 6.38X, with a 5-year median of 13.06X. Our Neutral recommendation indicates that the stock will perform in line with the market. Our \$81 price target reflects 14.73X forward 12-month earnings per share.

The table below shows summary valuation data for OSK:

Valuation Multiples - OSK					
		Stock	Sub-Industry	Sector	S&P 500
P/E F12M	Current	13.99	20.79	18.39	23.47
	5-Year High	21.86	25.97	25.62	23.47
	5-Year Low	6.38	8.37	8.2	15.25
	5-Year Median	13.06	11.43	10.01	17.6
EV/EBITDA TTM	Current	8.28	8.03	17.12	13.29
	5-Year High	11.45	8.37	17.13	13.29
	5-Year Low	4.51	3.92	6.94	8.22
	5-Year Median	7.75	6.31	9.36	10.91
P/S F12M	Current	0.76	0.68	1.02	3.84
	5-Year High	0.98	0.78	1.02	3.84
	5-Year Low	0.36	0.43	0.49	2.53
	5-Year Median	0.67	0.61	0.61	3.07

As of 08/31/2020

Industry Analysis Zacks Industry Rank: Top 47% (119 out of 251)



Source: Zacks Investment Research

Top Peers

Company (Ticker)	Rec	Rank
Allison Transmission Holdings, Inc. (ALSN)	Neutral	3
BorgWarner Inc. (BWA)	Neutral	3
Daimler AG (DDAIF)	Neutral	3
General Dynamics Corporation (GD)	Neutral	3
Lockheed Martin Corporation (LMT)	Neutral	3
Navistar International Corporation (NAV)	Neutral	3
Terex Corporation (TEX)	Neutral	3
Textron Inc. (TXT)	Neutral	3

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

Industry Comparison Industry: Automotive - Original Equipment				Industry Peers		
	OSK	X Industry	S&P 500	DDAIF	GD	NAV
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	3	-	-	3	3	3
VGM Score	C	-	-	B	B	D
Market Cap	5.24 B	1.07 B	23.72 B	54.52 B	42.85 B	3.18 B
# of Analysts	10	3	14	3	7	3
Dividend Yield	1.56%	0.00%	1.65%	0.00%	2.95%	0.00%
Value Score	B	-	-	A	B	C
Cash/Price	0.06	0.19	0.07	0.67	0.05	0.50
EV/EBITDA	6.23	5.60	13.28	8.85	9.29	8.19
PEG F1	1.45	2.36	3.03	NA	2.60	NA
P/B	1.89	1.64	3.17	0.84	3.09	NA
P/CF	7.51	4.93	12.87	3.06	10.03	5.00
P/E F1	16.82	27.70	21.63	121.35	13.49	NA
P/S TTM	0.72	0.50	2.53	0.31	1.11	0.33
Earnings Yield	6.01%	2.05%	4.39%	0.82%	7.41%	-2.28%
Debt/Equity	0.30	0.58	0.70	1.63	0.75	-1.26
Cash Flow (\$/share)	10.26	2.94	6.93	16.67	14.89	6.40
Growth Score	F	-	-	B	B	F
Historical EPS Growth (3-5 Years)	29.37%	4.10%	10.41%	-15.08%	6.15%	93.61%
Projected EPS Growth (F1/F0)	-44.33%	-52.08%	-4.75%	-95.09%	-7.59%	-117.25%
Current Cash Flow Growth	17.40%	-4.87%	5.22%	8.72%	3.16%	9.70%
Historical Cash Flow Growth (3-5 Years)	9.98%	6.79%	8.49%	4.06%	6.36%	81.17%
Current Ratio	2.12	1.71	1.35	1.20	1.27	1.69
Debt/Capital	22.80%	41.53%	42.92%	61.97%	42.98%	NA
Net Margin	5.15%	-0.57%	10.25%	-0.18%	8.47%	1.92%
Return on Equity	14.93%	1.52%	14.66%	1.58%	24.10%	-5.82%
Sales/Assets	1.28	1.08	0.50	0.52	0.76	1.42
Projected Sales Growth (F1/F0)	-20.00%	-15.18%	-1.40%	-12.05%	-2.49%	-33.01%
Momentum Score	A	-	-	F	C	A
Daily Price Change	-2.23%	-0.94%	-0.82%	-0.07%	-1.92%	-1.14%
1-Week Price Change	1.48%	2.15%	2.59%	4.97%	1.64%	0.28%
4-Week Price Change	-3.53%	7.36%	3.55%	11.42%	1.10%	-0.87%
12-Week Price Change	-9.68%	2.18%	-0.44%	11.77%	-10.99%	8.08%
52-Week Price Change	9.59%	9.59%	2.80%	8.51%	-21.92%	39.04%
20-Day Average Volume (Shares)	313,156	228,333	1,839,384	30,101	1,113,726	518,562
EPS F1 Estimate 1-Week Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
EPS F1 Estimate 4-Week Change	3.84%	8.48%	0.20%	0.00%	-0.19%	0.00%
EPS F1 Estimate 12-Week Change	17.82%	16.67%	3.87%	-54.35%	-0.86%	58.50%
EPS Q1 Estimate Monthly Change	3.67%	5.26%	0.00%	NA	-1.51%	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	B
Growth Score	F
Momentum Score	A
VGM Score	C

As an investor, you want to buy stocks with the highest probability of success. That means buying stocks with a Zacks Recommendation of Outperform, which also has a Style Score of an A or a B.

Disclosures

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

Additional information on the securities mentioned in this report is available upon request. This report is based on data obtained from sources we believe to be reliable, but is not guaranteed as to accuracy and does not purport to be complete. Any opinions expressed herein are subject to change.

ZIR is not an investment advisor and the report should not be construed as advice designed to meet the particular investment needs of any investor. Prior to making any investment decision, you are advised to consult with your broker, investment advisor, or other appropriate tax or financial professional to determine the suitability of any investment. This report and others like it are published regularly and not in response to episodic market activity or events affecting the securities industry.

This report is not to be construed as an offer or the solicitation of an offer to buy or sell the securities herein mentioned. ZIR or its officers, employees or customers may have a position long or short in the securities mentioned and buy or sell the securities from time to time. ZIR is not a broker-dealer. ZIR may enter into arms-length agreements with broker-dealers to provide this research to their clients. Zacks and its staff are not involved in investment banking activities for the stock issuer covered in this report.

ZIR uses the following rating system for the securities it covers. **Outperform-** ZIR expects that the subject company will outperform the broader U.S. equities markets over the next six to twelve months. **Neutral-** ZIR expects that the company will perform in line with the broader U.S. equities markets over the next six to twelve months. **Underperform-** ZIR expects the company will underperform the broader U.S. equities markets over the next six to twelve months.

No part of this report can be reprinted, republished or transmitted electronically without the prior written authorization of ZIR.

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 forward-looking 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 medium-term price change metric and an indication of the stock gaining momentum.

12-Week Price Change: This is the percentage change of a stock's closing price over the last 60 trading days or past 12 weeks. Similar to 4-week price change, this is a medium-term price change metric. It shows whether a stock has been enjoying strong investor demand, or if it has been in consolidation, or distress over this period.

52-Week Price Change: This is the percentage change in a stock's closing price over the last 260 trading days or past 52 weeks. This long-term price change metric is a good reference point for investors. Some investors seek stocks with the best percentage price change over the last 52 weeks, expecting the momentum to continue.

Market Cap: The number of outstanding common shares of a company times its latest price per share. This figure represents a company's size, which indicates various characteristics, including price stability and risk, in which investors could be interested.

Year-To-Date Price Change: Change in a stock's daily closing price in the period of time beginning the first day of the current calendar year through to the previous trading day.

of Analysts: Number of EPS estimates used in calculating the current-quarter consensus. These estimates come from the brokerage analysts tracking this stock. However, the number of such analysts tracking this stock may not match the number of estimates, as all brokerage analysts may not come up with an estimate or provide it to us.

Beta: A measure of risk commonly used to compare the volatility of a stock to the overall market. The S&P 500 Index is the base for calculating beta and carries a value of 1. A stock with beta below 1 is less risky than the market as a whole. And a stock with beta above 1 is riskier.

Dividend: The portion of earnings a company is expected to distribute to its common shareholders in the next 12 months for each share they own. Dividends are usually paid quarterly. Dividend payments reflect positively on a company and help maintain investors' trust. Investors typically find dividend-paying stocks appealing because the dividend adds to any market price appreciation to result in higher return on investment (ROI). Moreover, a steady or increasing dividend payment provides investors a cushion in a down market.

Dividend Yield: The ratio of a company's annual dividend to its share price. The annual dividend used in the ratio is calculated based on the most recent dividend paid by the company. Dividend yield is an estimate of the dividend-only return from a stock in the next 12 months. Since dividend itself doesn't change frequently, dividend yield usually changes with a stock's price movement. As a result, often an unusually high dividend yield is a result of weak stock price.

S&P 500 Index: The Standard & Poor's 500 (S&P 500) Index is an unmanaged group of securities considered to be representative of the stock market in general. It is a market-capitalization-weighted index of stocks of the 500 largest U.S. companies. Each stock's weight in the index is proportionate to its market value.

Industry: One of the 250+ groups that Zacks classifies all stocks into based on the nature of business. These groups are termed as expanded (aka "X") industries and map to their respective (economic) sectors; Zacks has 16 sectors.

Zacks Industry Rank: The Zacks Industry Rank is determined by calculating the average Zacks Rank for all stocks in the industry and then assigning an ordinal rank to it. For example, an industry with an average Zacks Rank of 1.6 is better than an industry with an average Zacks Rank of 2.3. So, the industry with the better average Zacks Rank would get a better Zacks Industry Rank. If an industry has the best average Zacks Rank, it would be considered the top industry (1 out of 250+), which would place it at the top 1% of Zacks-ranked industries. Studies have shown that roughly half of a stock's price movement can be attributed to the industry group it belongs to. In fact, the top 50% of Zacks-ranked industries outperforms the bottom 50% by a factor of more than 2 to 1.

Last EPS Surprise: The percentage deviation of a company's last reported earnings per share from the Zacks Consensus Estimate. Companies with a positive earnings surprise are more likely to surprise again in the future (or miss again if they recently missed).

Last Sales Surprise: The percentage deviation of a company's last reported sales from the Zacks Consensus Estimate.

Expected Report Date: This is an estimated date of a company's next earnings release. The information originated or gathered by Zacks Investment Research from its information providers or publicly available sources is the basis of this estimate.

Earnings ESP: The Zacks Earnings ESP compares the Most Accurate Estimate to the Zacks Consensus Estimate for the yet-to-be reported quarter. The Most Accurate Estimate is the most recent version of the Zacks Consensus EPS Estimate. The idea here is that analysts revising their estimates closer to an earnings release have the latest information, which could potentially be more accurate than what they and others contributing to the consensus had predicted earlier. Thus, a positive or negative Earnings ESP reading theoretically indicates the likely deviation of the actual earnings from the consensus estimate. However, the model's predictive power is significant for positive ESP readings only. A positive Earnings ESP is a strong predictor of an earnings beat, particularly when combined with a Zacks Rank #1 (Strong Buy), #2 (Buy) or #3 (Hold). Our research shows that stocks with this combination produce a positive surprise nearly 70% of the time.

Periods:

TTM: Trailing 12 months. Using TTM figures is an effective way of analyzing the most-recent financial data in an annualized format that helps neutralize the effects of seasonality and other quarter-to-quarter variation.

F1: Current fiscal year. This period is used to analyze the estimates for the ongoing full fiscal year.

F2: Next fiscal year. This period is used to analyze the estimates for the next full fiscal year.

F12M: Forward 12 months. Using F12M figures is an effective way of analyzing the near-term (the following four unreported quarters) estimates in an annualized manner. Instead of typically representing estimates for the full fiscal year, which may not represent the nitty-gritty of each quarter, F12M figures suggest an all-inclusive annualized estimate for the following four quarters. The annualization helps neutralize the potential effects of seasonality and other quarter-to-quarter variations.

P/E Ratio: The price-to-earnings ratio measures a company's current market price per share relative to its earnings per share (EPS). Usually, the trailing-12-month (TTM) EPS, current-fiscal-year (F1) EPS estimate, or forward-12-month (F12M) EPS estimate is used as the denominator. In essence, this ratio shows what the market is willing to pay today for each dollar of EPS. In other words, this ratio gives a sense of what the relative value of the company is at the already reported level of earnings or at a future level of earnings.

It is one of the most widely-used multiples for determining the value of a company and helps comparing its valuation with that of a competitor, the industry group or a benchmark.

PEG Ratio: The price/earnings to growth ratio is a stock's P/E ratio using current fiscal year (F1) EPS estimate divided by its expected EPS growth rate over the coming 3 to 5 years. This ratio essentially determines a stock's value by factoring in the company's expected earnings growth and is thus believed to provide a more complete picture than just the P/E ratio, particularly for faster-growing companies.

P/S Ratio: The price-to-sales ratio is calculated as a company's current price per share divided by trailing 12 months (TTM) sales or revenues per share. This ratio shows what the market is willing to pay today for each dollar of TTM sales per share. The P/S ratio is at times the only valuation metric when the company has yet to become profitable.

Cash/Price Ratio: The cash-to-price ratio or Cash Yield is calculated as cash and marketable securities per share divided by the company's current share price. Like the earnings yield, which shows the anticipated yield (or return) on a stock from earnings for each dollar invested, the cash yield does the same, with cash being the source of return instead of earnings. For example, a cash/price ratio of 0.08 suggests a return of 8% or 8 cents for every \$1 investment.

EV/EBITDA Ratio: The EV/EBITDA ratio, also known as Enterprise Multiple, is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by EBITDA (earnings before interest, taxes, depreciation and amortization). Usually, trailing-12-month (TTM) or forward-12-month (F12M) EBITDA is used as the denominator.

EV/Sales Ratio: The enterprise value-to-sales ratio is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by annual sales. It is an expansion of the P/S valuation, which uses market value instead of enterprise value. The EV/Sales ratio is perceived as more accurate than P/S, in part, because the market capitalization does not take a company's debt into account when valuing it.

EV/CF Ratio: The enterprise value-to-cash flow ratio is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by the trailing-12-month (TTM) operating cash flow. It's a measure of how long it would take to buy the entire business if you were able to use all the company's operating cash flow.

The EV/CF ratio is perceived as more accurate than the P/CF ratio, in part, because the market price does not take a company's debt into account when valuing it.

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.

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.