

Johnson Controls (JCI)

\$66.44 (As of 06/23/21)

Price Target (6-12 Months): **\$70.00**

Long Term: 6-12 Months

Zacks Recommendation:

Neutral

(Since: 10/06/20)

Prior Recommendation: Outperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

2-Buy

Zacks Style Scores:

VGM:D

Value: C

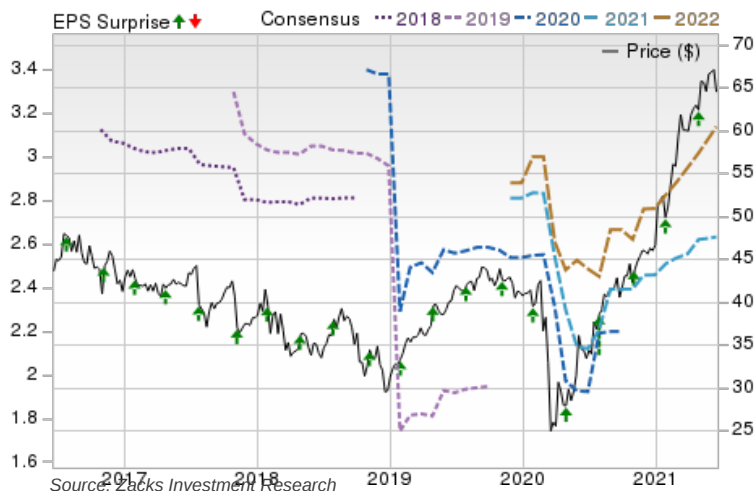
Growth: F

Momentum: C

Summary

Strategic buyouts of Synchrony, Qolsys, EasyIO Building and Energy Management System (BEMS), and Silent-Aire along with collaboration with Microsoft and partnership with Pelion are boosting Johnson Controls' growth prospects. OpenBlue digital platform and acceleration of new product launches are expected to bolster the company's top line. Strong company financials and initiatives to improve productivity by reducing net cost of goods sold (COGS) provides ample visibility to growth. However, coronavirus woes are likely to adversely impact the orders for the firm. Weaker construction demands in North America and China resulting in increased backlog cancellations may weigh heavily on Johnson Controls' margins. Stiff competition, forex woes and high commodity costs are other concerns. As such, the stock warrants a cautious stance.

Price, Consensus & Surprise



Data Overview

52-Week High-Low **\$68.33 - \$32.70**

20-Day Average Volume (Shares) **3,807,698**

Market Cap **\$47.6 B**

Year-To-Date Price Change **42.6%**

Beta **1.08**

Dividend / Dividend Yield **\$1.08 / 1.6%**

Industry **Security and Safety Services**

Zacks Industry Rank **Bottom 18% (207 out of 252)**

Last EPS Surprise **6.1%**

Last Sales Surprise **-0.1%**

EPS F1 Estimate 4-Week Change **0.2%**

Expected Report Date **07/30/2021**

Earnings ESP **1.0%**

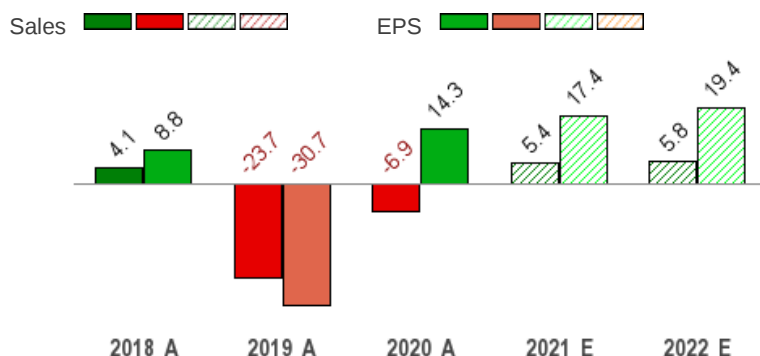
P/E TTM **27.9**

P/E F1 **25.3**

PEG F1 **3.2**

P/S TTM **2.1**

Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2022	5,757 E	6,010 E	6,672 E	6,653 E	24,894 E
2021	5,341 A	5,594 A	6,238 E	6,378 E	23,531 E
2020	5,576 A	5,444 A	5,343 A	5,954 A	22,317 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2022	\$0.55 E	\$0.62 E	\$0.97 E	\$1.01 E	\$3.14 E
2021	\$0.43 A	\$0.52 A	\$0.82 E	\$0.87 E	\$2.63 E
2020	\$0.40 A	\$0.42 A	\$0.67 A	\$0.76 A	\$2.24 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 06/23/2021. The report's text and the

analyst-provided price target are as of 06/24/2021.

Overview

Johnson Controls was originally incorporated in the state of Wisconsin in 1885 as Johnson Electric Service Company. In September 2016, Johnson Controls completed its merger with Tyco, a global fire protection and security company, and since then the company is headquartered in Ireland.

Johnson Controls International is a diversified technology company and a multi industrial leader, with customers spanning over 150 countries. The company's operations include creation of intelligent buildings, providing efficient energy solutions, integrated infrastructure that work seamlessly together to deliver on the promise of smart cities and communities. Johnson Controls provides building systems, including HVAC (heating, ventilation and air conditioning) controls and security and safety products.

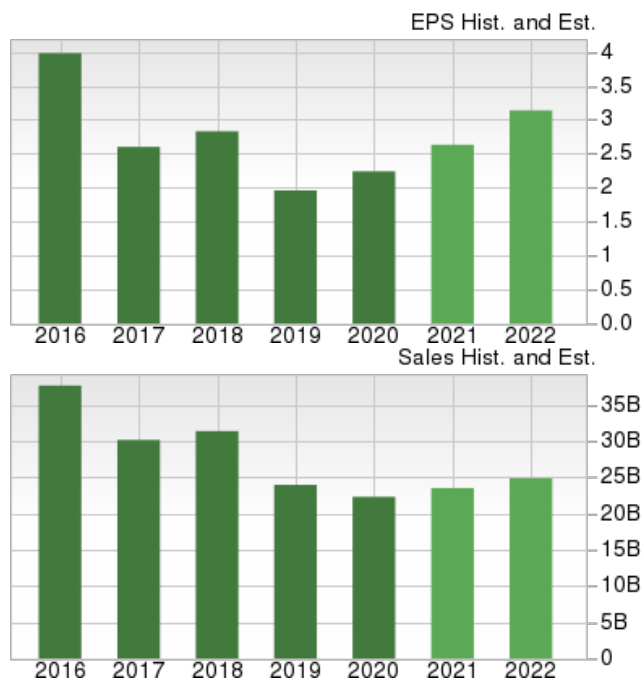
The company operates under four reportable segments:

Building Solutions North America (contributed 38.5% in consolidated net sales in fiscal 2020): This segment designs and sells HVAC and controls systems, integrated security systems, fire-detection systems, equipment and services for commercial, industrial, retail, small business, institutional and governmental customers in North America. It also provides energy efficiency solutions and technical services to non-residential building and industrial applications in the North American marketplace.

Building Solutions EMEA/ LA (15.5%): This segment designs and sells HVAC, fire detection and suppression systems, electronic security and refrigeration along with offering technical services to markets in Europe, Middle East, Africa/Latin America.

Building Solutions Asia Pacific (10.8%): This segment installs and sells HVAC, integrated security systems, fire-detection systems and offers technical services to Asia Pacific marketplace.

Global Products (39.2%): This segment designs heating and air conditioning for residential and commercial applications. It also sells products and refrigeration systems to replacement and new construction market customers globally. The unit is also engaged in producing and selling fire protection and security products for commercial, industrial, retail, residential, small business, institutional and governmental customers worldwide.



Reasons To Buy:

- ▲ Johnson Controls provides customers with world-class technologies through strong complementary brands and channels. Acquisitions of Synchrony, EasyIO BEMS product line, Qolsys and Silent-Aire are set to boost Johnson Controls' prospects and service offerings. In December 2020, Collaboration with Microsoft to build a comprehensive digital twin platform that supports the entire ecosystem of a building also bodes well. Further, partnership with Pelion will enable Johnson Controls to bring connected intelligence to all of the operational technology.
- ▲ The launch of OpenBlue, the company's latest digital platform, is likely to boost the firm's top line, going forward. Digital integration of OpenBlue with Johnson Controls' core building systems will optimize the performance of the full HVAC system, making the shared spaces safer and more sustainable. In fact, the firm launched seven new OpenBlue offerings in the fiscal first quarter, the most significant of which is OpenBlue healthy buildings, the industry's most comprehensive suite of connected solutions. Scaling up the OpenBlue digital platform is likely to accelerate the growth strategy of the firm. The company's ambitious set of new ESG commitments—including its target to achieve net zero carbon emissions before 2040 with its new OpenBlue digital products and services—are commendable.
- ▲ Acceleration of new product launches will buoy the firm's growth prospects. Johnson Controls has planned 150 new product launches for fiscal 2021 which are expected to boost its revenue pipeline. Encouragingly, the company expects fiscal third-quarter adjusted EPS of 80-82 cents per share, up 19-22% from a year earlier and anticipates fiscal 2021 adjusted EPS in the range of \$2.58-\$2.65, up 15-18% year on year. This upbeat earnings guidance for the fiscal 2021 is likely to strengthen investors' confidence. Additionally, Johnson Controls' initiative to improve its productivity by reducing net cost of goods sold (COGS) by \$250 million by fiscal 2023 along with its \$300 million savings from its selling, general and administrative (SG&A) initiatives is projected to generate \$550 million of lower cumulative cost reductions by the end of fiscal 2023.
- ▲ Johnson Controls' strong balance sheet allows it to return cash to shareholders through dividend payments and investment in growth opportunities. The company is targeting \$1 billion for share repurchase in fiscal 2021. As of Mar 31, 2020, the company's long-term debt amounted to \$7,323 million, with total debt-to-capital ratio of 0.28, lower than its industry's 0.45. The low leverage provides the firm with increased financial flexibility tap onto growth opportunities.

Strong balance sheet, COGS reduction initiative and OpenBlue digital platform are set to aid Johnson Controls, going forward.

Reasons To Sell:

- ▼ Coronavirus woes are expected to weigh on demand for Johnson Controls' products as new construction and renovation projects may get delayed amid depressed spending for commercial buildings.
- ▼ Weaker construction demands in North America and China may weigh heavily on the margins of Johnson Controls. This can also lead to increased backlog cancellations, thereby denting the earnings and sales of the company.
- ▼ Johnson Controls' wide exposure to global markets makes it more vulnerable to forex woes. Adverse foreign currency translations may impact the company's earnings and margins. Additionally, the firm's products and operations are excessively reliant on information technology infrastructure, creating increased cyber security risks, which could materially impact its competitive position. Moreover, high competition from other building systems providers also remains a headwind for Johnsons Controls.
- ▼ Commercial HVAC markets remain under pressure amid coronavirus woes, which may impact the overall results of the firm. Johnson Controls is also exposed to volatility in commodity prices, especially as a result of trade tensions. Commodities with highly volatile prices include steel, aluminum, copper and fuel in the Building Efficiency business. Rising tariffs in China remains a concern, since Johnson Controls has been focusing on market expansion in China.

Weaker construction demands in North America and China is likely to hurt margins for Johnson Controls.

Last Earnings Report

Johnson Controls Reports Strong Q2 Earnings

Johnson Controls International reported adjusted second-quarter fiscal 2021 earnings per share of 52 cents, outpacing the Zacks Consensus Estimate of 49 cents. The outperformance stemmed from higher-than-expected contribution from Global Products and Building Solutions North America segments. The bottom line also rose 23.8% year over year. Johnson Controls reported fiscal second-quarter revenues of \$5,594 million, up 2.7% year over year. The revenue figure, however, narrowly missed the Zacks Consensus Estimate of \$5,598.5 million.

Quarter Ending

03/2021

Report Date	Apr 30, 2021
Sales Surprise	-0.08%
EPS Surprise	6.12%
Quarterly EPS	0.52
Annual EPS (TTM)	2.38

Segmental Results

Building Solutions North America: This segment's adjusted revenues came in at \$2,092 million, down from the year-ago quarter's \$2,175 million on a decline in HVAC & Controls and Fire & Security. The segment's EBITA increased to \$266 million from \$253 million reported in second-quarter fiscal 2020, thanks to cost-containment efforts and restructuring benefits. The metric also topped the consensus mark of \$263 million.

Building Solutions Europe, Middle East, Africa/Latin America: Revenues in this segment came in at \$897 million, up 6% year over year due to moderate increase in project installations. The segment's EBITA inched up 1% year over year to \$86 million on cost-containment efforts and higher revenues.

Building Solutions Asia Pacific: Revenues grew to \$603 million from the year-ago quarter's \$525 million on higher project installations and services, driven by strong growth in Applied HVAC & Controls. The segment's EBITA came in at \$74 million, up from the second-quarter fiscal 2020 level of \$65 million on favorable mix and cost-cut efforts.

Global Products: Revenues in this segment climbed to \$2,002 million from the prior year's \$1,894 million, mainly due to higher sales in residential HVAC and Fire & Security. This segment's EBITA was \$285 million, up 32% year over year, thanks to operational efficiency and higher sales. The metric topped the Zacks Consensus Estimate of \$244 million.

Financial Position

Johnson Controls had cash and cash equivalents of \$1,883 million as of Mar 31, 2021, down from \$1,951 million on Sep 30, 2020. Long-term debt decreased to \$7,323 million for the reported quarter from \$7,526 million as of Sep 30, 2020. Free cash flow for second-quarter fiscal 2021 came in at \$539 million, jumping from \$31 million in the corresponding period of 2020. During the quarter under review, Johnson Controls bought back 6 million shares for \$315 million. It raised its regular annual cash dividend to \$1.08 per share and share repurchase authorization by \$4 billion.

Guidance

The company projects mid-teens sales growth and EBITDA to rise marginally on a year-over-year basis for third-quarter fiscal 2021. It also expects adjusted EPS in the range of 80-82 cents per share, indicating 19-22% year-over-year growth.

For fiscal 2021, adjusted EPS is expected in the band of \$2.58-2.65 a share versus the prior guided range of \$2.45-\$2.55. The revised forecast implies 15-18% increase on a year-over-year basis. Organic revenues are expected to scale up in mid-single digits year over year.

Recent News

Jonhson Controls Declares Quarterly Dividend

On **Jun 9**, the board of directors of Johnson Controls declared a quarterly cash dividend of 27 cents per common share, payable on Jul 16, 2021 to shareholders as of Jun 21.

Johnson Controls Rolls Out Next Phase of Sustainability Initiative

On **May 26**, Johnson Controls and the City of La Crosse rolled out the next phase aimed at expanding the city's sustainability initiative. The new phase involves infrastructure updates throughout the city and is expected to generate an additional \$3.2 million in total cost savings over the next 15 years. The initial phases, begun in 2019 and completed in Spring 2021, will generate \$7.98 million in total savings and reduce energy consumption by 35% over the next 20 years.

Valuation

Johnson Controls' shares are up 42.7% and 98.5% year to date and in the trailing 12-month period, respectively. Year to date, stocks in the Zacks Security and Safety Services industry and the Zacks Industrial Products sector are up 25.7% and 11.7%, respectively. Over the past year, the Zacks sub industry and sector are up 58.3% and 52.1%, respectively.

The S&P 500 index is up 13.8% and 39.6% year to date and in the past year, respectively.

The stock is currently trading at 22.13X forward 12-month earnings, which compares to 23.29X for the Zacks sub-industry, 21.1X for the Zacks sector and 21.7X for the S&P 500 index.

Over the past five years, the stock has traded as high as 23.01X and as low as 9.11X, with a 5-year median of 15.32X. Our Neutral recommendation indicates that the stock will perform in line with the market. Our \$70 price target reflects 23.33X forward 12-month earnings per share.

The table below shows summary valuation data for JCI:

Valuation Multiples - JCI					
		Stock	Sub-Industry	Sector	S&P 500
P/E F12M	Current	22.13	23.29	21.1	21.7
	5-Year High	23.01	23.29	23.58	23.83
	5-Year Low	9.11	11.09	12.66	15.31
	5-Year Median	15.32	16.84	18.3	18.05
EV/EBITDA TTM	Current	18.62	15.76	23.34	17.44
	5-Year High	20.28	15.79	27.95	17.74
	5-Year Low	9.02	7.15	11.11	9.63
	5-Year Median	12.89	12.58	15.55	13.47
P/S F12M	Current	1.94	2.48	3.46	4.72
	5-Year High	4.56	2.88	3.58	4.74
	5-Year Low	0.73	1.02	1.61	3.21
	5-Year Median	1.29	1.52	2.12	3.72

As of 06/23/2021

Source: Zacks Investment Research

Industry Analysis Zacks Industry Rank: Bottom 18% (207 out of 252)



Top Peers

Company (Ticker)	Rec	Rank
ADT Inc. (ADT)	Neutral	4
Allegion PLC (ALLE)	Neutral	3
Assa Abloy AB (ASAZY)	Neutral	3
HALMA PLC (HLMAF)	Neutral	3
MSA Safety Incorporated (MSA)	Neutral	4
NortonLifeLock Inc. (NLOK)	Neutral	NA
Resideo Technologies, Inc. (REZI)	Neutral	4
Applied DNA Sciences Inc (APDN)	Underperform	4

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

Industry Comparison Industry: Security And Safety Services				Industry Peers		
	JCI	X Industry	S&P 500	ADT	ALLE	ASAZY
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	2	-	-	4	3	3
VGM Score	D	-	-	A	B	C
Market Cap	47.62 B	268.65 M	29.87 B	8.82 B	12.43 B	32.75 B
# of Analysts	8	2	12	1	3	2
Dividend Yield	1.63%	0.00%	1.35%	1.30%	1.04%	0.96%
Value Score	C	-	-	A	C	B
Cash/Price	0.04	0.10	0.06	0.01	0.03	0.01
EV/EBITDA	30.76	11.98	17.12	9.99	22.47	19.77
PEG F1	3.16	3.04	2.05	1.79	4.70	NA
P/B	2.54	5.12	4.07	2.96	17.00	4.32
P/CF	19.71	19.53	17.35	5.08	19.36	24.73
P/E F1	25.26	25.24	20.98	14.53	26.65	27.23
P/S TTM	2.14	3.32	3.36	1.68	4.54	3.32
Earnings Yield	3.96%	2.91%	4.69%	6.88%	3.75%	3.67%
Debt/Equity	0.39	0.02	0.66	3.17	1.96	0.35
Cash Flow (\$/share)	3.37	0.69	6.83	2.12	7.14	0.63
Growth Score	F	-	-	A	B	B
Historical EPS Growth (3-5 Years)	-4.32%	11.21%	9.59%	NA	10.64%	1.32%
Projected EPS Growth (F1/F0)	17.52%	8.90%	21.62%	305.56%	1.43%	39.02%
Current Cash Flow Growth	-1.14%	1.16%	0.99%	-16.98%	19.48%	-6.45%
Historical Cash Flow Growth (3-5 Years)	6.64%	10.06%	7.28%	101.32%	13.60%	4.21%
Current Ratio	1.17	2.72	1.39	0.66	2.07	1.25
Debt/Capital	28.08%	16.90%	41.51%	76.03%	66.17%	26.11%
Net Margin	4.74%	2.01%	11.95%	-7.24%	15.40%	10.11%
Return on Equity	9.31%	10.62%	16.48%	-8.80%	63.36%	14.72%
Sales/Assets	0.54	0.71	0.51	0.33	0.92	0.72
Projected Sales Growth (F1/F0)	5.44%	5.61%	9.54%	-1.40%	2.61%	13.19%
Momentum Score	C	-	-	B	B	D
Daily Price Change	-0.42%	0.00%	-0.11%	-5.04%	-0.39%	-1.15%
1-Week Price Change	-3.88%	0.00%	0.43%	-6.28%	-2.92%	-2.29%
4-Week Price Change	0.76%	0.76%	1.09%	4.98%	-0.66%	1.35%
12-Week Price Change	11.35%	6.82%	6.77%	27.37%	9.97%	7.93%
52-Week Price Change	99.58%	48.69%	39.06%	38.17%	41.21%	51.41%
20-Day Average Volume (Shares)	3,807,698	167,570	1,889,295	2,665,581	647,121	79,885
EPS F1 Estimate 1-Week Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
EPS F1 Estimate 4-Week Change	0.24%	0.00%	0.01%	0.00%	0.00%	0.00%
EPS F1 Estimate 12-Week Change	3.59%	0.44%	3.54%	-1.37%	7.82%	0.88%

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

EPS Q1 Estimate Monthly Change	0.24%	:	0.00%	0.00%	:	0.00%	0.00%	NA
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.

Value Score	C
Growth Score	F
Momentum Score	C
VGM Score	D

Disclosures

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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 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.