

Arrow Electronics (ARW)

\$78.94 (As of 09/11/20)

Price Target (6-12 Months): **\$83.00**

Long Term: 6-12 Months

Zacks Recommendation:

Neutral

(Since: 04/26/20)

Prior Recommendation: Underperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

2-Buy

Zacks Style Scores:

VGM:A

Value: A

Growth: B

Momentum: D

Summary

Arrow is benefiting from strong uptrend in design activity across all regions. Strong momentum in infrastructure software, next-generation hardware and hybrid cloud architectures is encouraging as well. Arrow's core strength of providing best-in-class services and easy-to-acquire technologies will bolster its growth in the future. Also, strong uptrend in order backlogs is a tailwind. However, softness in demand for electronic components and IT amid the coronavirus-led business and economic disruptions remain concerns. Also, consumption of Arrow's European exports continues to decline. Foreign-exchange headwinds and weaker demand from smaller customers is likely to impact near-term results. Moreover, U.S. tariffs are impeding the company's top-line growth. Shares of the company have underperformed the industry in the past year.

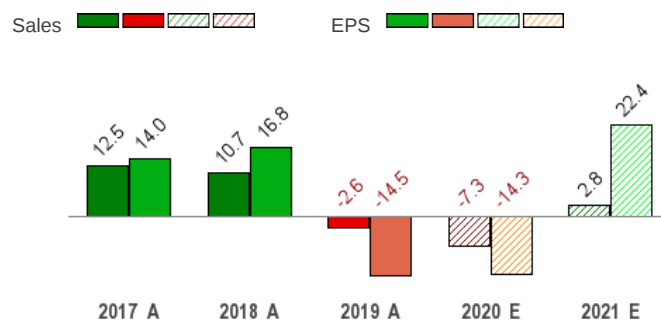
Price, Consensus & Surprise



Data Overview

52-Week High-Low	\$85.80 - \$39.25
20-Day Average Volume (Shares)	556,768
Market Cap	\$6.1 B
Year-To-Date Price Change	-6.8%
Beta	1.48
Dividend / Dividend Yield	\$0.00 / 0.0%
Industry	Electronics - Parts Distribution
Zacks Industry Rank	Top 3% (7 out of 251)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	9.7%
Last Sales Surprise	3.7%
EPS F1 Estimate 4-Week Change	0.0%
Expected Report Date	10/29/2020
Earnings ESP	0.0%
P/E TTM	11.9
P/E F1	12.2
PEG F1	4.6
P/S TTM	0.2

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	6,371 E	6,768 E	6,963 E	7,464 E	27,565 E
2020	6,381 A	6,606 A	6,636 E	7,178 E	26,802 E
2019	7,156 A	7,345 A	7,078 A	7,338 A	28,917 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$1.50 E	\$1.85 E	\$1.95 E	\$2.56 E	\$7.92 E
2020	\$0.97 A	\$1.59 A	\$1.64 E	\$2.31 E	\$6.47 E
2019	\$1.84 A	\$1.60 A	\$1.86 A	\$2.20 A	\$7.55 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 09/11/2020. The reports text is as of 09/14/2020.

Overview

New York-based Arrow Electronics Inc. is one of the world's largest distributors of electronic components and enterprise computing products. Arrow provides one of the broadest product ranges in the electronic components and enterprise computing solutions distribution industries. Along with these, the company provides a wide range of value-added services to help customers reduce their marketing time, lower the total cost of ownership, introduce innovative products through demand creation opportunities and enhance their overall competitiveness.

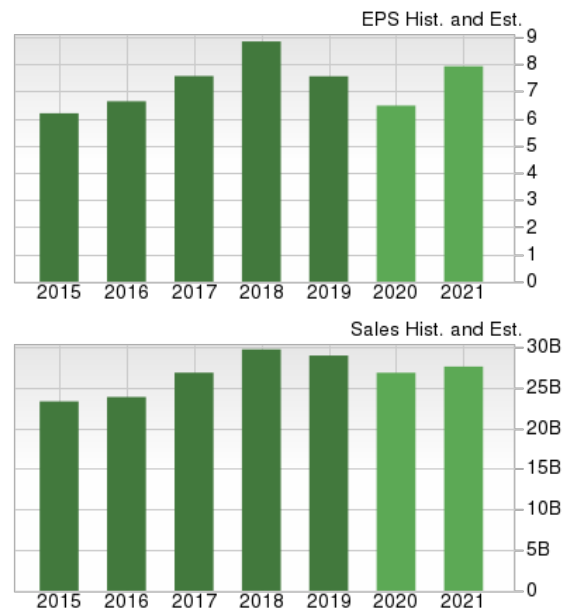
The company serves over 150,000 customers — original equipment manufacturers (OEMs), contract manufacturers (CMs) and commercial customers — through 300 sales facilities and 45 distribution centers in over 80 countries. The company's customer base comprises OEMs, CMs, value-added resellers (VARs) and other commercial users. The company's products primarily target the industrial sector (companies manufacturing machine tools, factory automation equipment or robotics equipment).

Arrow's offerings can be broadly divided into two categories:

1) Global Components (70% of 2019 revenues): Arrow distributes electronic components to OEMs and CMs through its global components business segment. This segment deals in semiconductor products and related services; passive, electro-mechanical and interconnect products such as capacitors, resistors, potentiometers, power supplies, relays, switches and connectors; and computing and memory. Within this segment, semiconductor products and related services contributed nearly 72% of total Global Components sales in 2019.

2) Global Enterprise Computing Solutions (30%): Arrow provides enterprise computing solutions to VARs through its global ECS business segment. The computing segment includes products like servers, workstations, storage products, microcomputer boards and systems, design systems, desktop computer systems, software, monitors, printers, flat panel displays, system chassis and enclosures, controllers and communication control equipment.

Total adjusted revenues generated in 2019 were \$28.9 billion, down 2.6% year over year. Moreover, 60% of the revenues came from its operations outside the United States, reflecting the influence of foreign exchange rate on its revenues.



Source: Zacks Investment Research

Reasons To Buy:

- ▲ A significant portion of the company's revenues comes from the sales of semiconductors. Despite the recent uncertainties and slowdown in the semiconductor market, per the recent predictions of WSTS, the semiconductor industry is expected to return to modest growth in 2020. Arrow Electronics' sale of semiconductor products accounted for approximately 42%, 46% and 45% of consolidated sales in 2017, 2018 and 2019, respectively. Therefore, an improvement in this market indicates an improvement in the company's business.
- ▲ Arrow's core strength of providing best-in-class services and easy-to-acquire technologies is expected to bolster growth in the future. Moreover, the company has secured significant market share through its broad portfolio of products and services and continued efforts to maximize consumer satisfaction. The company's diverse product range includes ArrowSphere, UC in the Cloud solutions, engineering design capabilities and remote infrastructure-management (Live Virtual Help Desk) services. This platform is particularly designed for aggregating, merchandizing and delivering cloud-related services to system integrators, autonomous software dealers and IT service providers all over the world. There is a huge scope for the company to earn additional revenues through the enhancement of the cloud-related portal. We believe its expertise in understanding market dynamics and strong product portfolio will continue to support growth.
- ▲ Arrow has been active on the acquisitions front. Over the last three decades, the company had acquired as many as 45 businesses. In January 2018, the company acquired eInfochips which is specialized in chip designing for products and IoT solutions. The acquisition of eInfochips will not only broaden Arrow Electronics' IoT capabilities but will also add a large skilled talent pool. Apart from this, the acquisition will be accretive to the electronic parts distributor's top and bottom lines. Acquisitions are likely to enable Arrow to enter markets, diversify and broaden its product portfolio and maintain its leading position. We believe, the company's continued acquisitions are expected to be a significant contributor to its revenue stream.
- ▲ Arrow returns cash to investors through share repurchases. Share buybacks are a good way to return cash to investors when growth opportunities are limited. These also have a positive effect on earnings per share. The company repurchased shares worth nearly \$390 million in 2019, reducing its outstanding shares by approximately 6%. In the first two quarters of 2020, the company returned approximately \$223 million through share buyback. Also, it announced a new share-repurchase program worth \$600 million on Jul 30.

We believe that Arrow's core strength of providing best-in-class services and easy-to-acquire technologies will bolster its growth in the future.

Reasons To Sell:

- ▼ Arrow's near-term financial results are likely to be impacted by the demand and supply chain disruptions of electronics components due to rapidly spreading coronavirus outside of China. Furthermore, organizations are pushing back their big and expensive technology investments due to global economic slowdown concerns, which is anticipated to hamper Arrow's sales in the near-term.
- ▼ The latest forecast for worldwide IT spending by Gartner might dampen Arrow's growth prospects. Worldwide IT spending is anticipated to be \$3.4 trillion in 2020, a decrease of 8% from 2019. The research firm expects worldwide spending on IT services to decline 7.7% year-over-year to \$1.032 trillion in 2020. Gartner pointed out that companies are prioritizing technology spending that are mission-critical instead of on growth and transformation initiatives amid the ongoing coronavirus crisis and effects of the global economic recession.
- ▼ Arrow has a highly leveraged balance sheet. The company has always had a good amount of debt on its balance sheet. Its long-term debt was \$2.1 billion as of Jun 30, 2020. Liquidity is low, since cash and liquid assets are just a fraction of its total assets. We think that the company has limited financial flexibility because of its high debt burden and further increases in debt could make investment in the shares risky. Thus, the company has to generate substantial amount of cash flow to effectively service its debt.
- ▼ Arrow derived approximately 60% of total revenue from outside the U.S. in 2019, in the form of key currencies such as pound, Euro, Australian Dollar and Yen. Thus, currency fluctuations can impact overall profitability of the company.
- ▼ Arrow's competitors are also keen on solidifying their respective positions in the electronics distribution market through strategic acquisitions. In the past few years, Avnet acquired RTI Holdings, TSSLink, Nexicore Assets, Ascendant Technology, Seamless Technologies, Inc. and MSC Investoren GmbH (or MSC Group).
- ▼ Arrow is significantly dependent on sales of semiconductors for revenues. The fears of trade war have been an overhang on chip stocks. With China being one of the biggest markets for semiconductors, investors are apprehensive about the impact of a full-fledged trade war on chip stocks. This makes us anxious about the near-term prospects of the company.

An uncertain economic condition, competition from Avnet and Ingram Micro, and a highly leveraged balance sheet remain concerns.

Last Earnings Report

Arrow's Second-Quarter Results

Arrow Electronics reported second-quarter 2020 adjusted earnings per share of \$1.59, which beat the Zacks Consensus Estimate \$1.45. However, quarterly earnings were down a penny on a year-over-year basis.

Revenues came in at \$6.61 billion, down 11% from the year-ago quarter. Adjusted revenues dropped 8% year over year. The revenue figure, however, beat the consensus mark of \$6.37 billion.

The company witnessed impressive demand for software, cloud and security solutions during the second quarter as firms needed to enable business continuity and remote working amid social-distancing measures.

Segmental Details

Adjusted revenues from Global Components decreased 8% year over year to \$4.72 billion. On a reported basis, revenues declined 10%. Region wise, the segment's adjusted revenues from the Americas decreased 18% year over year. Adjusted sales from the Asia Pacific declined 7% year over year. Global Components' contribution from Europe fell 18% on an adjusted basis.

Adjusted revenues from Global Enterprise Computing Solutions (ECS) came in at \$1.89 billion, down 8% year over year. Region wise, the segment's adjusted revenues from the Americas slid 11% year on year. Global ECS's contribution from Europe fell 4% on an adjusted basis.

Margins

Arrow's non-GAAP gross profit slipped 12.1% from the prior-year quarter to \$739.8 million.

Operating income dropped 17.5% to \$200.3 million.

Balance Sheet and Cash Flow

Arrow exited the June-end quarter with cash and cash equivalents of \$203 million compared with the previous quarter's \$201 million.

Long-term debt was \$2.1 billion compared with the \$2.22 billion witnessed at the end of the prior quarter.

The company's cash flow from operations was \$418.2 million.

In the second quarter, Arrow returned \$72.8 million to shareholders through the stock-repurchase program. The company, on Jul 30, announced a new share-repurchase program worth \$600 million.

Guidance

For the third quarter of 2020, sales are estimated between \$6.325 billion and \$6.925 billion.

Global Components sales are projected at \$4.675-\$4.975 billion. Global ECS sales are estimated to be \$1.65-\$1.95 billion.

Interest expenses will presumably be about \$33 million. As a result, the company projects non-GAAP earnings per share at \$1.54-\$1.70.

Quarter Ending	06/2020
Report Date	Jul 30, 2020
Sales Surprise	3.69%
EPS Surprise	9.66%
Quarterly EPS	1.59
Annual EPS (TTM)	6.62

Recent News

On Sep 1, Arrow Electronics announced that Norwegian telecoms provider Telenor has chosen ArrowSphere as its strategic multi-cloud brokerage platform.

On Jun 25, Arrow Electronics announced teaming with the Semiconductor Industry Association (SIA) to facilitate technology innovation and advance related policy initiatives.

On May 15, 2020, Arrow Electronics announced that William F. Austen has been elected to the company's board of directors.

On Jan 30, 2020, Arrow Electronics partnered with Microchip Technology on an engineering services project to simplify connectivity and security across industrial, smart building and energy markets.

On Jan 21, 2020, Arrow Electronics revealed that it has again been named to FORTUNE's "World's Most Admired Companies" list, topping the "Wholesalers: Electronics and Office Equipment" category for the seventh consecutive year.

On Jan 16, 2020, Arrow Electronics announced that W. Victor Gao has been named to its executive leadership team as senior vice president and chief marketing officer.

Valuation

Arrow's shares have plunged 6.9% in the year-to-period (YTD) while has increased 3.7% over the trailing 12 months. Stocks in the Zacks sub-industry have plunged 19.8% while the Zacks Computer & Technology sector has gained 19.8% YTD. Over the past year, the Zacks sub-industry has decreased 13.9%, while the sector increased 31.5%.

The S&P 500 Index has gained 3.8% YTD and 12% in the past year.

The stock is currently trading at 10.54X forward 12-month earnings, which compares with 10.35X for the Zacks sub-industry, 25.68X for the Zacks sector and 22.15X for the S&P 500 Index.

Over the past five years, the stock has traded as high as 11.62X and as low as 5.33X, with a 5-year median of 9.28X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$83 price target reflects 11.07X forward 12-months earnings.

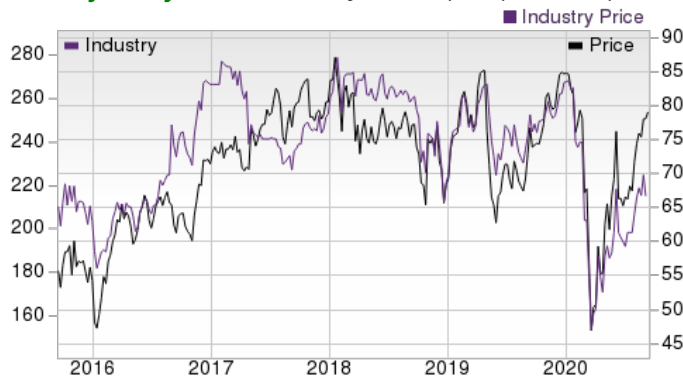
The table below shows summary valuation data for ARW

Valuation Multiples - ARW					
		Stock	Sub-Industry	Sector	S&P 500
P/E F 12M	Current	10.54	10.35	25.68	22.15
	5-Year High	11.62	11.81	27.95	23.44
	5-Year Low	5.33	7.61	16.75	15.26
	5-Year Median	9.28	9.59	19.93	17.63
EV/Sales TTM	Current	0.29	0.31	4.70	3.80
	5-Year High	0.40	0.43	5.23	4.14
	5-Year Low	0.20	0.17	2.84	2.60
	5-Year Median	0.34	0.33	3.81	3.55
EV/EBITDA TTM	Current	7.35	8.26	14.23	14.46
	5-Year High	8.51	8.89	15.82	15.61
	5-Year Low	5.14	4.23	8.27	9.51
	5-Year Median	7.13	6.77	11.81	13.00

As of 09/11/2020

Source: Zacks Investment Research

Industry Analysis Zacks Industry Rank: Top 3% (7 out of 251)



Source: Zacks Investment Research

Top Peers

Company (Ticker)	Rec	Rank
CDW Corporation (CDW)	Outperform	1
KLA Corporation (KLAC)	Outperform	2
WESCO International, Inc. (WCC)	Outperform	1
Applied Materials, Inc. (AMAT)	Neutral	2
AMETEK, Inc. (AME)	Neutral	3
Avnet, Inc. (AVT)	Neutral	3
NVIDIA Corporation (NVDA)	Neutral	4
Teledyne Technologies Incorporated (TDY)	Neutral	2

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

Industry Comparison Industry: Electronics - Parts Distribution				Industry Peers		
	ARW	X Industry	S&P 500	AVT	NVDA	TDY
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	2	-	-	3	4	2
VGM Score	A	-	-	A	C	D
Market Cap	6.13 B	2.48 B	23.09 B	2.70 B	300.22 B	11.55 B
# of Analysts	4	4	14	4	13	1
Dividend Yield	0.00%	0.00%	1.65%	3.07%	0.13%	0.00%
Value Score	A	-	-	A	F	D
Cash/Price	0.03	0.14	0.07	0.17	0.04	0.03
EV/EBITDA	24.85	13.96	13.07	9.57	87.04	19.64
PEG F1	4.55	1.02	2.93	1.02	2.98	NA
P/B	1.29	0.73	3.19	0.73	21.58	4.01
P/CF	7.41	6.99	12.63	5.00	92.63	22.57
P/E F1	12.20	12.20	21.25	18.31	53.74	32.12
P/S TTM	0.22	0.25	2.44	0.15	22.98	3.65
Earnings Yield	8.20%	8.20%	4.52%	5.48%	1.86%	3.11%
Debt/Equity	0.44	0.41	0.70	0.38	0.50	0.26
Cash Flow (\$/share)	10.65	6.18	6.93	5.48	5.25	13.88
Growth Score	B	-	-	A	A	C
Historical EPS Growth (3-5 Years)	5.11%	5.11%	10.41%	-10.31%	37.24%	19.33%
Projected EPS Growth (F1/F0)	-14.27%	-9.61%	-4.75%	-2.92%	56.37%	-7.23%
Current Cash Flow Growth	-14.43%	-24.54%	5.26%	-34.65%	-20.70%	14.47%
Historical Cash Flow Growth (3-5 Years)	1.86%	-1.05%	8.49%	-5.16%	28.68%	11.00%
Current Ratio	1.45	2.57	1.35	2.78	6.09	1.97
Debt/Capital	30.64%	29.15%	42.95%	27.66%	33.34%	20.68%
Net Margin	1.41%	0.62%	10.25%	-0.18%	25.93%	12.59%
Return on Equity	11.39%	6.20%	14.59%	4.05%	30.41%	14.45%
Sales/Assets	1.74	1.48	0.50	2.10	0.64	0.69
Projected Sales Growth (F1/F0)	-7.31%	-3.62%	-1.42%	-7.24%	44.80%	-2.56%
Momentum Score	D	-	-	C	B	F
Daily Price Change	1.58%	0.00%	0.39%	-0.18%	-1.20%	1.69%
1-Week Price Change	0.06%	0.00%	-1.28%	0.18%	-3.99%	0.52%
4-Week Price Change	3.91%	-1.52%	-1.42%	-3.05%	6.31%	-5.55%
12-Week Price Change	19.99%	1.17%	4.86%	1.26%	31.96%	-4.45%
52-Week Price Change	2.04%	-3.74%	-1.17%	-38.88%	164.06%	0.33%
20-Day Average Volume (Shares)	556,768	293,044	1,834,261	604,622	15,646,419	203,830
EPS F1 Estimate 1-Week Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
EPS F1 Estimate 4-Week Change	0.00%	0.00%	0.00%	0.00%	4.08%	0.00%
EPS F1 Estimate 12-Week Change	8.51%	8.51%	4.05%	-7.86%	4.16%	4.46%
EPS Q1 Estimate Monthly Change	0.00%	0.00%	0.00%	0.00%	10.36%	0.00%

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.

Value Score	A
Growth Score	B
Momentum Score	D
VGM Score	A

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.

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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 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.