Momentum: F



# Crown Castle (CCI) Long Term: 6-12 Months Zacks Recommendation: (Since: 02/24/21) Neutral \$179.47 (As of 04/15/21) Prior Recommendation: Underperform Price Target (6-12 Months): \$191.00 Short Term: 1-3 Months Zacks Rank: (1-5) 2-Buy Zacks Style Scores: VGM:F

## Summary

Crown Castle's portfolio of towers has a significant presence in the top 100 basic trading areas ("BTAs"). This along with the ability to offer a holistic network solution with towers, fiber and small cells provides the company with a competitive edge over peers. Going forward, positive demand trends in the wireless market will propel leasing for the company's towers. In fact, Crown Castle has signed new tower and small cell lease agreements with carriers as they continue to roll out their 5G networks. However, shares of the company have underperformed the industry in the past year. Also, customer concentration is very high for Crown Castle and loss of any customer or consolidation among them is likely to hinder its revenue growth. Moreover, a highly-leveraged balance sheet limits its ability to withstand any credit crisis.

#### Price, Consensus & Surprise



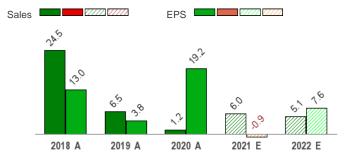
Value: F

Growth: C

## **Data Overview**

52-Week High-Low	\$180.00 - \$146.15
20-Day Average Volume (Shares)	1,857,754
Market Cap	\$75.9 B
Year-To-Date Price Change	10.4%
Beta	0.33
Dividend / Dividend Yield	\$5.32 / 3.0%
Industry	REIT and Equity Trust - Other
Zacks Industry Rank	Bottom 20% (202 out of 254)

Sales and	<b>EPS</b>	Growth	Rates (	(Y/Y	%)



Last EPS Surprise	41.2%
Last Sales Surprise	-1.9%
EPS F1 Estimate 4-Week Change	0.1%
Expected Report Date	04/21/2021

Earnings ESP	0.5%
P/E TTM	26.0
P/E F1	26.7
PEG F1	1.7
P/S TTM	13.0

# Sales Estimates (millions of \$)

\*Quarterly figures may not add up to annual.

	Q1	Q2	Q3	Q4	Annual*
2022	1,587 E	1,608 E	1,639 E	1,666 E	6,509 E
2021	1,499 E	1,529 E	1,570 E	1,593 E	6,192 E
2020	1,421 A	1,440 A	1,486 A	1,493 A	5,840 A

# **EPS Estimates**

	Q1	Q2	Q3	Q4	Annual*
2022	\$1.72 E	\$1.77 E	\$1.86 E	\$1.91 E	\$7.23 E
2021	\$1.61 E	\$1.65 E	\$1.73 E	\$1.75 E	\$6.72 E
2020	\$1.42 A	\$1.45 A	\$1.56 A	\$2.33 A	\$6.78 A

The data in the charts and tables, including the Zacks Consensus EPS and sales estimates, is as of 04/15/2021. The report's text and the analyst-provided price target are as of 04/16/2021.

#### Overview

Houston-based Crown Castle International Corp. is a leading independent operator of wireless communication towers in the United States. The company is engaged in ownership, management and leasing of more than 40,000 cell towers and around 80,000 route miles of fiber supporting small cells, and fiber solutions spread across key markets in the nation.

On Sep 9, 2013, the board of directors of Crown Castle approved the steps needed to reorganize the company to qualify as a real estate investment trust (REIT) for tax purposes. Crown Castle became a REIT on Jan 1, 2014.

The company's operating segment consists of towers (70% of site-rental revenues in 2020) and fiber (30%).

Crown Castle reports revenues under site rental (91% of net revenues in 2020), and services and other (9%). The company generates site-rental revenues from its core business by entering long-term tenant contracts in various forms, including lease, licensing, sublease and service agreements with its tenants, for space or capacity at its shared communications infrastructures.



Revenues from services and other segment are generated by offering 2016 2017 2018 2019 certain services primarily relating to its towers segment, consisting of site-development and installation services.

Importantly, as of Dec 31, 2020, three major U.S. wireless carriers — Verizon, AT&T and T-Mobile — contributed 76% of the REIT's 2020 site-rental revenues.

Note: All EPS numbers presented in this report represent funds from operations ("FFO") per share. FFO, a widely used metric to gauge the performance of REITs, is obtained after adding depreciation and amortization and other non-cash expenses to net income.



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# **Reasons To Buy:**

▲ Crown Castle's unmatched portfolio of towers has significant presence in the top 100 BTAs. Moreover, investment in fiber and small cell business on the back of acquisitions, constructions and new deployments complements its tower business and offers meaningful upside potential to its 5G growth strategy. The company ended 2020 with around 50,000small cells on air. In January, it secured a small cell commitment for leasing 15,000 nodes to Verizon over the next four years to support the latter's 5G build-out. While this will not materially contribute to Crown Castle 2021 revenues, it has significantly increased the backlog of small cells committed or under construction to around 30,000. Also, the acquisition of a number of fiber operators over the past few years have helped the company gain significant scale and expand portfolio.

Crown Castle's efforts to augment its towers business with fiber and small cells bode well for growth. Strong demand from wireless carriers and recurring site rental cash flows are positives.

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- ▲ Crown Castle's strong internally-generated cash flow, supported by its tower and fiber segments, is impressive. The company has long-term (typically 5-15 year) tower lease agreements with top U.S. carriers, which contribute to recurring site rental cash flows over the long term. In fact, such long-term leases enable it to enjoy recurring revenues that provides top-line stability, while contracted rent escalators on the majority of its revenues offer embedded growth. In fact, as of the fourth-quarter 2020 end, the company had \$27 billion remaining in contracted customer receivables. Moreover, a strong and creditworthy tenant base adds resiliency to its business.
- 🛕 Wireless services are advancing rapidly in terms of additional features and capabilities. Much of the infrastructure and upgrades require effective site management of cell towers and equipment. Crown Castle effectively addresses this opportunity as majority of its revenues come from wireless service providers. Moreover, wireless data consumption is expected to increase considerably over the next several years, driven by increased innovation and adoption of data-driven mobile devices and applications such as machine-to-machine (M2M) connections, social networking and streaming of video. The company believes its extensive portfolio of towers and small cells has the network density required to meet such demands. This is expected to bolster the company's top-line growth going forward.
- ▲ The deployment of 5G will drive growth on both the company's tower and small-cell assets, as the wireless carriers look to expand and enhance their networks to provide the coverage, capacity and speed needed to support mobile video, the Internet of Things (IoT), fixed wireless broadband. Notably, IoT space is touted as the next big thing in the evolution of technology and higher investment by the wireless carriers will, in turn, bring increased revenues. In fact, for 2021, site-rental revenue growth will likely be driven by tenant additions, as wireless carriers and fiber solutions tenants continue to focus to cater to the increasing demand for data.
- 🔺 As data volume for wireless and wired network is growing rapidly amid the widespread adoption of smartphones and applications, the company's customers continue to invest more in their networks in a bid to improve and densify their cell sites. Specifically, T-Mobile and Sprint have completed merger on Apr 1, 2020, and the new T-Mobile integrating its network with Sprint's network is likely to accelerate activity levels across the industry in the upcoming period. Moreover, in November 2020, the company sealed a long-term lease agreement with DISH Network to rent out space to the latter on up to 20,000 of its communication towers and this will support DISH's nationwide, first open, standalone and virtualized 5G network deployments. While minimum contracted payments that will be received from this deal enhances long-term earnings visibility, activity and revenues from this deal is anticipated to start in the second half of 2021. Additionally, Crown Castle's carrier customers are ramping up 5G investments, while deploying additional spectrum. This is likely to boost demand and leasing
- 🛕 Crown Castle has sufficient liquidity and a decent balance sheet. The company exited fourth-quarter 2020 with cash and cash equivalents of \$232 million, and \$4.6 billion of undrawn capacity in its revolver. During 2020, it enhanced balance-sheet flexibility by extending the weighted average debt maturities and reducing average borrowing costs. Further, as of the fourth-quarter end, Crown Castle enjoyed investment-grade credit ratings of BBB-, BBB+ and Baa3 from Standard & Poor's, Fitch, and Moody's, respectively, which facilitates access to debt markets at attractive terms.
- ▲ Solid dividend payouts are arguably the biggest enticement for REIT shareholders and Crown Castle is committed to that. Notably, the company's dividends are supported by high-quality, long-term contracted lease payments and the company benefits from being a provider of mission critical shared communication infrastructure assets. In fact, on Oct 21, 2020, it announced an 11% sequential hike in the quarterly cash dividend to \$1.33 per common share. Including this, over the last six years, Crown Castle has increased dividend per share at a CAGR of more than 8% and expects the same to be up 7-8% annually over the long term.

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

▼ Crown Castle has a substantially leveraged balance sheet and significant amount of debt relative to its cash flows. The company's debt and other long-term obligations aggregated \$19.3 billion at 2020 end, up from \$18.1 billion witnessed at the end of 2019. Moreover, for 2021, it expects to fund projected capital expenditure of \$1.5 billion, with free cash flow and additional borrowings, and this will likely inflate the company's debt. Additionally, Crown Castle's debt-to-equity ratio is significantly higher than its industry's ratio. This limits the company's strength to withstand any credit crisis and unexpected negative externalities in the future.

Evolution of new technologies may reduce the demand for site leases, while consolidation in the wireless industry may impact cell-tower deployments, thereby unfavorably impacting top-line growth.

- ▼ Customer concentration is very high for Crown Castle. Historically, the top three among its customers, namely, Verizon, AT&T and T-Mobile, accounted for majority of its total revenue, of which AT&T contributes a handful amount of site rental revenues. Loss of any of these customers or consolidation among them will significantly affect the company's top line. Notably, in December 2020, T-Mobile US, Inc. canceled approximately 5,700 small cells contracted between Sprint Corporation and Crown Castle prior to its merger with T-Mobile, as it would have resulted in site overlap. This affected Crown Castle's fourth-quarter 2020 results. Moreover, any pullback or rationalization in network spending by carriers might affect Crown Castle's performance.
- ▼ Evolution of new technologies may reduce the demand for site leases. Further, the recent developments of satellite-delivered radio and video services will weigh on the need for tower-based broadcast transmission. In addition, frequent changes in demand for network services will tend to increase volatility in Crown Castle's revenues.
- ▼ Shares of Crown Castle have gained 7.5% over the past year, underperforming the industry's growth of 17.8%. Also, the trend in estimate revisions for 2021 FFO per share is not favorable for the company. In fact, the Zacks Consensus Estimate for 2021 FFO per share has been revised marginally downward over the past week. Therefore, given the above-mentioned concerns and downward estimate revisions, the stock is unlikely to perform well in the near term.

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#### **Last Earnings Report**

#### Crown Castle Tops on Q4 FFO, Maintains '21 Guidance

Crown Castle's fourth-quarter 2020 adjusted funds from operations (AFFO) per share of \$2.33 surpassed the Zacks Consensus Estimate of \$1.65. Moreover, the figure was 68.8% higher than the prior-year quarter figure of \$1.38.

Net revenues of \$1.49 billion improved 4.7% year over year in the reported quarter. However, the revenue figure missed the Zacks Consensus Estimate of 1.52 billion.

Growth in site-rental revenues aided the top-line performance. The company also maintained its outlook for 2021.

Quarter Ending	12/2020
Report Date	Jan 27, 2021
Sales Surprise	-1.85%
EPS Surprise	41.21%
Quarterly EPS	2.33
Annual EPS (TTM)	6.76

For 2020, it reported AFFO per share of \$6.78, up 19% from \$5.68 in the prior year. The company also beat the Zacks Consensus Estimate of \$6.08. Total revenues of \$5.8 billion grew 1.3% year over year.

Per management, "We expect our growth trend to continue with approximately 6% growth in Organic Contribution to Site Rental Revenue for our Towers segment in 2021, supporting the previously announced 11% increase in our dividend per share."

Notably, in December 2020, T-Mobile US, Inc. canceled approximately 5,700 small cells contracted between Sprint Corporation and Crown Castle prior to the merger of the carriers. While the majority of the canceled small cells were not yet constructed, upon completion, it would have resulted in site overlap with other T-Mobile small cells locations. The cancellation resulted in T-Mobile accelerating payment of all contractual rental obligations associated with 5,700 small cells and the payment of capital costs incurred to date. This resulted in incremental operating expenses in fourth-quarter 2020 and impacted Crown Castle's fourth-quarter and 2020 results.

Nonetheless, along with the earnings release, the company announced signing a long-term lease with Verizon to rent out 15,000 new small cells over the coming four years. After installation, the small cell leases will have an initial term of 10 years.

#### **Quarter in Detail**

Site-rental revenues were \$1.3 billion, up 4% year over year. Organic contribution to site rental revenues was \$74 million. Further, services and other revenues rose 12% year over year to \$141 million.

Quarterly operating expenses flared up 12.2% year over year to \$1.17 billion. Nonetheless, operating income surged 79.4% year over year to \$680 million. Quarterly adjusted EBITDA of \$1.18 billion marked a 44.3% year-over-year rise.

The company reported capital expenditure of \$386 million for the fourth quarter. This included \$365 million of discretionary capital expenditure and \$21 million of sustaining capital expenditure.

#### **Balance Sheet**

Crown Castle exited fourth-quarter 2020 with cash and cash equivalents of \$232 million, up from \$196 million reported at the end of 2019.

Furthermore, for the three months ended Dec 31, 2020, the company generated \$985 million of net cash from operating activities compared with \$808 million reported in the year-ago period.

Also, debt and other long-term obligations aggregated \$19.3 billion, up from \$18.1 billion witnessed at the end of 2019.

#### 2021 Guidance

The company expects site-rental revenues of 5,532-\$5,577 million, indicating 4% year-over-year growth at mid point. This includes 6% growth in the organic contribution, consisting of 6%, 15% and 3% growth from towers, small cells and fiber solutions, respectively.

Adjusted EBITDA is projected at \$3,584-\$3,629 million indicating 5% year-over-year growth at mid point. AFFO per share is anticipated to be \$6.64-\$6.74, indicating 10% year-over-year growth at mid point.

#### **Recent News**

#### Crown Castle Signs Small-Cell Lease Agreement With Verizon - Jan 27, 2021

Crown Castle has bagged a long-term agreement to lease 15,000 new small cells to Verizon Communications Inc. to support the carrier's 5G Ultra Wideband and 5G nationwide deployment.

Specifically, Verizon will rent out the small cells from Crown Castle over the next four years, with an initial term of 10 years. The agreement is a crucial component of the carrier's 5G expansion plans and will enable it to advance the infrastructure needed to access 5G.

#### Crown Castle Bags Lease With DISH for 20,000 Towers - Nov 16, 2020

Crown Castle bagged a long-term lease agreement with DISH Network to rent out space to the latter on up to 20,000 of its communication towers.

Additionally, as part of the multi-year anchor tenant tower agreement, DISH will have access to specific fiber transport services and the option to use Crown Castle for pre-construction.

The agreement is for tower leases spanning across the nation and will support DISH's nationwide, first open, standalone and virtualized 5G network deployments.

While DISH announced several wireless vendor relations, this marks the first infrastructure partnership announced by the company. Such progress provides visibility to DISH's 5G network rollout.

Per Crown Castle management, "DISH's 5G network buildout marks an important development for the industry, and we believe our ability to offer towers, small cells and fiber solutions at scale provides us the best opportunity to deliver value as we support their wireless infrastructure needs."

#### **Dividend Update**

On Feb 18, Crown Castle announced quarterly cash dividend of \$1.33 per common share. The dividend was paid out on Mar 31 to common stockholders of record as of the close of business on Mar 15, 2021.

#### Valuation

Crown Castle's shares have been up 7.5% over the trailing 12-month period. Stocks in the Zacks sub-industry have gained 17.8%, while the Zacks Finance sector has rallied 46.8% over the past year.

The S&P 500 Index has been up 46.4% in the past year.

The stock is currently trading at 26.97X forward 12-month FFO, which compares to 21.25X for the Zacks sub-industry, 7.21X for the Zacks sector and 23.28X for the S&P 500 Index.

Over the past five years, the stock has traded as high as 28.80X and as low as 17.24X, with a 5-year median of 20.90X. Our neutral recommendation indicates that the stock will perform in line with the market. Our \$191 price target reflects 28.70X FFO.

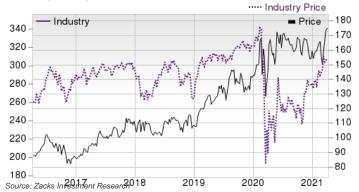
The table below shows summary valuation data for CCI.

Valuation Multiples - CCI					
		Stock	Sub-Industry	Sector	S&P 500
	Current	26.97	21.25	17.21	23.28
P/E F12M	5-Year High	28.80	21.25	17.21	23.83
	5-Year Low	17.24	14.57	11.60	15.30
	5-Year Median	20.90	16.35	14.81	18.00
	Current	12.36	8.23	7.89	4.82
P/S F12M	5-Year High	12.36	8.23	7.89	4.82
	5-Year Low	7.08	5.45	5.03	3.21
	5-Year Median	8.73	6.36	6.16	3.71
	Current	8.20	2.52	3.19	7.08
P/B TTM	5-Year High	8.20	2.72	3.19	7.08
	5-Year Low	3.20	1.63	1.74	3.83
	5-Year Median	4.67	2.33	2.61	4.99

As of 04/15/2021

Source: Zacks Investment Research

# Industry Analysis Zacks Industry Rank: Bottom 20% (202 out of 254)



# **Top Peers**

Company (Ticker)	Rec Rank
American Tower Corporation (AMT)	Neutral 4
CorEnergy Infrastructure Trust, Inc. (CORR)	Neutral 3
Digital Realty Trust, Inc. (DLR)	Neutral 3
Equinix, Inc. (EQIX)	Neutral 3
Iron Mountain Incorporated (IRM)	Neutral 3
QTS Realty Trust, Inc. (QTS)	Neutral 3
SBA Communications Corporation (SBAC)	Neutral 3
Uniti Group Inc. (UNIT)	Underperform 4

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

Industry Comparison Industry: Reit And Equity Trust - Other			Industry Peers			
	CCI	X Industry	S&P 500	АМТ	SBAC	UNIT
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Underperform
Zacks Rank (Short Term)	2	-	-	4	3	4
VGM Score	E	-	-	С	E	С
Market Cap	75.93 B	3.07 B	30.05 B	107.40 B	30.72 B	2.48 B
# of Analysts	6	4	12	7	5	1
Dividend Yield	3.03%	3.05%	1.29%	2.05%	0.83%	5.64%
Value Score	F	-	-	C	D	В
Cash/Price	0.00	0.04	0.06	0.02	0.01	0.03
EV/EBITDA	28.51	17.97	17.02	30.13	37.84	12.36
PEG F1	1.72	3.74	2.38	1.79	NA	NA
P/B	8.01	1.45	4.02	23.51	NA	NA
P/CF	28.99	16.41	16.96	30.46	41.35	NA
P/E F1	26.61	17.75	22.12	25.92	27.54	6.56
P/S TTM	13.00	7.14	3.42	13.36	14.75	2.33
Earnings Yield	3.82%	5.20%	4.46%	3.86%	3.63%	15.24%
Debt/Equity	2.02	0.88	0.66	6.24	-2.29	-0.01
Cash Flow (\$/share)	6.19	1.70	6.78	8.12	6.98	-1.16
Growth Score	(C)	-	-	С	C	F
Historical EPS Growth (3-5 Years)	8.24%	0.87%	9.34%	11.26%	NA	-7.54%
Projected EPS Growth (F1/F0)	-0.93%	5.94%	15.70%	10.48%	8.09%	-5.81%
Current Cash Flow Growth	9.61%	-2.35%	0.61%	-2.34%	-11.37%	-158.58%
Historical Cash Flow Growth (3-5 Years)	12.24%	10.49%	7.37%	12.77%	8.76%	NA
Current Ratio	0.56	1.51	1.39	1.27	0.77	0.03
Debt/Capital	66.93%	47.17%	41.26%	86.18%	NA	NA
Net Margin	18.08%	9.13%	10.59%	21.02%	1.16%	-66.27%
Return on Equity	10.86%	2.56%	14.98%	40.06%	-0.54%	NA
Sales/Assets	0.15	0.11	0.51	0.19	0.23	0.22
Projected Sales Growth (F1/F0)	6.03%	5.64%	7.41%	10.26%	5.61%	1.65%
Momentum Score	F	-	-	В	F	В
Daily Price Change	2.15%	0.97%	0.87%	2.27%	2.64%	2.26%
1-Week Price Change	0.45%	-0.21%	1.54%	0.14%	-1.95%	-4.96%
4-Week Price Change	8.64%	0.79%	4.60%	11.08%	7.76%	-5.40%
12-Week Price Change	12.63%	12.17%	10.58%	11.23%	5.78%	-14.81%
52-Week Price Change	10.92%	39.59%	57.94%	-1.83%	-6.56%	111.48%
20-Day Average Volume (Shares)	1,857,754	602,290	1,960,937	2,018,247	616,733	1,396,446
EPS F1 Estimate 1-Week Change	-0.16%	0.00%	0.00%	0.38%	-0.26%	0.00%
EPS F1 Estimate 4-Week Change	0.09%	0.00%	0.04%	0.38%	-0.26%	0.00%
EPS F1 Estimate 12-Week Change	0.16%	-1.00%	1.93%	-0.58%	-2.42%	-10.92%
EPS Q1 Estimate Monthly Change	0.32%	0.00%	0.00%	-0.07%	-1.08%	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.

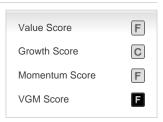
#### **Zacks Rank**

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.



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

#### **Disclosures**

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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.

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#### **Additional Disclosure**

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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 mediumterm price change metric and an indication of the stock gaining momentum.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

#### Periods:

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

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

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

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

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

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

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

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

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

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

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

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

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

**EV/FCF Ratio:** The enterprise value-to-free cash flow metric compares a company's enterprise value to its trailing-12-month (TTM) free cash flow (FCF). This metric is very similar to the EV/CF ratio, but is considered a more exact measure owing to the fact that it uses free cash flow, which subtracts capital expenditures (CAPEX) from a company's total operating cash flow, thereby reflecting the actual cash flow available for funding growth activities and payments to shareholders.

**P/EBITDA Ratio:** The P/EBITDA ratio is calculated as a company's per share market value divided by EBITDA (earnings before interest, taxes, depreciation, and amortization). This metric is very similar to the EV/EBITDA ratio, but is considered a little less exact measure as it uses market price, which does not take a company's debt into account. However, since EBITDA is often considered a proxy for cash income, the metric is used as a measure of what the market is willing to pay today for each dollar of the company's cash profitability in the trailing 12 months (TTM) or forward 12 months (F12M).

**P/B Ratio:** The price-to-book ratio is calculated as a company's current price per share divided by its book value (total assets – liabilities – preferred stocks) per share. In short, the book value is how much a company is worth. In other words, it reflects the total value of a company's assets that its common shareholders would receive if it were to be liquidated. So, the P/B ratio indicates whether you're paying higher or lower than what would remain if the company went bankrupt immediately. Investors typically use this metric to determine how a company's stock price stacks up to its intrinsic value.

**P/TB Ratio:** The price-to-tangible-book value ratio is calculated as a the per share market value of a company divided by the value of its tangible assets (total assets – liabilities – preferred stocks – intangible assets) per share. Tangible book value is the same thing as book value except it excludes the value of intangible assets to get a step closer to the baseline value of the company.

**P/CF Ratio:** The price-to-cash flow ratio measures a company's per share market price relative to its trailing-12-month (TTM) operating cash flow per share. This metric is used to determine whether a company is undervalued or overvalued relative to another stock, industry or sector. And like the P/E ratio, a lower number is typically considered better from the value perspective.

One of the reasons why P/CF ratio is often preferred over P/E ratio is the fact that operating cash flow adds back non-cash expenses such as depreciation and amortization to net income. This feature helps valuing stocks that have positive cash flow but are not profitable because of large noncash charges.

**P/FCF Ratio:** The price-to-free cash flow ratio is an extension of P/CF ratio, which uses trailing-12-month (TTM) free cash flow per share instead of operating cash flow per share. This metric is considered a more exact measure than P/CF ratio, as free cash flow subtracts capital expenditures (CAPEX) from a company's total operating cash flow, thereby reflecting the actual cash flow available for funding activities that generate additional revenues.

Earnings Yield: The earnings yield is calculated as current fiscal year (F1) EPS estimate divided by the company's current share price. The ratio, which is the inverse of the P/E ratio, measures the anticipated yield (or return) from earnings for each dollar invested in a stock today.

For example, earnings yield for a stock, which is trading at \$35 and expected to earn \$3 per share in the current fiscal year (F1), would be 0.0857 (3/35 = 0.0857) or 8.57%. In other words, for \$1 invested in the stock today, the yield from earnings is anticipated to be 8.57 cents.

Investors most commonly compare the earnings yield of a stock to that of a broad market index (such as the S&P 500) and prevailing interest rates, such as the current 10-year Treasury yield. Since bonds and stocks compete for investors' dollars, stock investors typically demand a higher yield for the extra risk they assume compared to investors of U.S. Treasury-backed securities that offer virtually risk-free returns. This additional return is referred to as the risk premium.

**Debt/Equity Ratio:** The debt-to-equity ratio is calculated as a company's total liabilities divided by its shareholder equity. This metric is used to gauge a company's financial leverage. In other words, it is a measure of the degree to which a company is financing its operations through debt versus its own funds. The higher the ratio, the higher the risk for shareholders.

However, this ratio is difficult to compare across industry groups where ideal amounts of debt vary. Some businesses are more capital intensive than others and typically require higher debt to finance their operations. So, a company's debt-to-equity ratio should be compared with other companies in the same industry.

Cash Flow (\$/share): Cash flow per share is calculated as operating cash flow (after-tax earnings + depreciation + other non-cash charges) divided by common shares outstanding. It is used by many investors as a measure of a company's financial strength. Since cash flow per share takes into consideration a company's ability to generate cash by adding back non-cash expenses, it is regarded by some as a more accurate measure of a company's financial situation than earnings per share, which could be artificially deflated.

Current Ratio: The current ratio or liquidity ratio is a company's current assets divided by its current liabilities. It measures a company's ability to pay short-term obligations. A current ratio that is in line with the industry average or slightly higher is generally considered acceptable. A current ratio that is lower than the industry average would indicate a higher risk of distress or default. A higher number is usually better. However, a very high current ratio compared to the industry average could be an indication of inefficient use of assets by management.

**Debt/Capital Ratio:** Debt-to-capital ratio is a company's total debt (interest-bearing debt + both short- and long-term liabilities) divided its total capital (interest-bearing debt + shareholders' equity). It is a measure of a company's financial leverage. All else being equal, the higher the debt-to-capital ratio, the riskier the stock.

However, this ratio can vary widely from industry to industry, the ideal amount of required debt being different. Some businesses are more capital intensive than others and typically require higher debt to finance their operations. So, a company's debt-to-capital ratio should be compared with the same for its industry.

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**Net Margin:** Net margin is calculated as net income divided by sales. It shows how much of each dollar in sales generated by a company translates into profit. For example, if a company's net margin is 15%, its net income is 15 cents for every \$1 of sales it makes.

A change in margin can reflect either a change in business conditions, or a company's cost controls, or both. If a company's expenses are growing faster than sales, its net margin will decline. However, different net margin rates are considered good for different industries, so it's better to compare net margin rates of companies in the same industry group.

Return on Equity: Return on equity (ROE) is calculated as trailing-12-month net income divided by trailing-12-month average shareholder equity (including reinvested earnings). This metric is considered a measure of how effectively management is using a company's assets to generate profits. For example, if a company's ROE is 10%, it creates 10 cents profits for every \$1 shareholder equity, which is basically the company's assets minus debt. A company's ROE deemed good or bad depends on what's normal for its peers or industry group.

Sales/Assets Ratio: The sales-to-assets ratio or asset utilization ratio or asset turnover ratio is calculated as a company's annual sales divided by average assets (average of assets at the beginning of the year and at the year's end). This metric helps investors understand how effectively a company is using its assets to generate sales. For example, a sales-to-assets ratio of 2.5 indicates that the company generated \$2.50 in sales for every \$1 of assets on its books.

The higher the sales-to-assets ratio, the better the company is performing. However, similar to many other ratios, the asset turnover ratio tends to be higher for companies in certain industries/sectors than in others. So, a company's sales-to-assets ratio should be compared with the same for its industry/sector.

**Historical EPS Growth (3-5 Years):** This is the average annual (trailing-12-month) EPS growth rate over the last 3-5 years. This metric helps investors see how a company's EPS has grown from a long-term perspective.

Note: There are many factors that can influence short-term numbers — a recession will reduce this number, while a recovery will inflate it. The longterm perspective helps smooth out short-term events.

**Projected EPS Growth (F1/F0):** This is the estimated EPS growth rate for the current financial year. It is calculated as the consensus estimate for the current fiscal year (F1) divided by the reported EPS for the last completed fiscal year (F0).

**Current Cash Flow Growth:** It measures the latest year-over-year change in operating cash flow. Cash flow growth tells an investor how quickly a company is generating inflows of cash from operations. A positive change in the cash flow is desired and shows that more 'cash' is coming in than going out.

**Historical Cash Flow Growth (3-5 Years):** This is the annualized change in cash flow over the last 3-5 years. The change in a longer period helps put the current reading into proper perspective. By looking at the rate, rather than the actual dollar value, the comparison across the industry and peers becomes easier.

**Projected Sales Growth (F1/F0):** This metric looks at the estimated sales growth for the current year. It is calculated as sales estimate for the current fiscal year (F1) divided by the reported sales for the last completed fiscal year (F0).

Like EPS growth, a higher rate is better for sales growth. A look at a company's projected sales growth instantly tells you what the outlook is for their products and services. However, different sales growth rates are considered good for different industries, so it's better to compare sales growth rates of companies in the same industry group.

**EPS F1 Estimate 1-Week Change:** The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past week. The change in a company's consensus EPS estimate (or earnings estimate revision) has proven to be strongly correlated with the near-term price movement of its shares. It is an integral part of the Zacks Rank.

If a stock's consensus EPS estimate is \$1.10 now versus \$1.00 a week ago, that will be reflected as a 10% upward revision. If, on the other hand, it went from \$1.00 to 90 cents, that would be a 10% downward revision.

EPS F1 Estimate 4-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past four weeks.

A stock's earnings estimate revision in a 1-week period is important. But it's more meaningful to look at the longer-term revision. And, of course, the 4-week change helps put the 1-week change into proper perspective.

EPS F1 Estimate 12-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past 12 weeks

This metric essentially shows how the consensus EPS estimate has changed over a period longer than 1 week or 4 weeks.

EPS Q1 Estimate Monthly Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal quarter over the past four weeks

While the revision in consensus EPS estimate for the current fiscal year is strongly correlated with the near-term price movement of its shares, the estimate revision for the current fiscal quarter is an important metric as well, especially over the short term, and particularly as a stock approaches its earnings date. If a stock's Q1 EPS estimate decreases ahead of its earnings release, it's usually a negative sign, whereas an increase is a positive sign.