

Charter Communications (CHTR)

\$582.13 (As of 10/26/20)

Price Target (6-12 Months): \$611.00

Long Term: 6-12 Months	Zacks Recommendation: (Since: 01/31/19) Prior Recommendation: Outperform	Neutral
Short Term: 1-3 Months	Zacks Rank: (1-5)	3-Hold
	Zacks Style Scores:	VGM:B
	Value: B Growth: B Mo	mentum: B

Summary

Shares of Charter have outperformed the industry year to date. It benefits from growth in Internet and mobile revenues as well as an expanding user base. The company continues to witness strong spike in Internet usage due to the coronavirus-induced work-from-home and online-learning wave. Charter's expanding mobile-subscriber base is also a key catalyst. Charter's broadband service has gained traction among SMBs and enterprises. However, Charter persistently suffers video-subscriber attrition, primarily due to cord-cutting and stiff competition from streamers like Netflix, Disney+ and Amazon prime video. Moreover, due to rising job cuts, cord cutting and subscription dues are expected to shoot up, which doesn't bode well for Charter's top line. Additionally, Charter has a leveraged balance sheet, which is a concern.

Data Overview

Last EPS Surprise

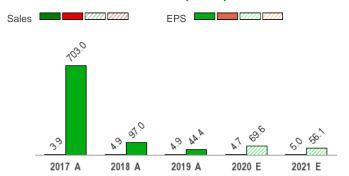
52-Week High-Low	\$663.70 - \$345.67
20-Day Average Volume (Shares)	943,627
Market Cap	\$119.3 B
Year-To-Date Price Change	20.0%
Beta	1.04
Dividend / Dividend Yield	\$0.00 / 0.0%
Industry	Cable Television
Zacks Industry Rank	Top 46% (114 out of 248)

Last Sales Surprise	0.8%
EPS F1 Estimate 4-Week Change	0.7%
Expected Report Date	10/30/2020
Earnings ESP	-0.3%
P/E TTM	54.4
P/E F1	45.5
PEG F1	1.1
P/S TTM	2.6

Price, Consensus & Surprise



Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	12,344 E	12,395 E	12,566 E	12,870 E	50,323 E
2020	11,738 A	11,696 A	12,041 E	12,404 E	47,914 E
2019	11.206 A	11.347 A	11.450 A	11.761 A	45.764 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$4.31 E	\$4.73 E	\$4.62 E	\$6.01 E	\$19.96 E
2020	\$1.96 A	\$3.63 A	\$3.05 E	\$4.43 E	\$12.79 E
2019	\$1.11 A	\$1.39 A	\$1.74 A	\$3.37 A	\$7.54 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 10/26/2020. The reports text is as of 10/27/2020.

43.5%

Overview

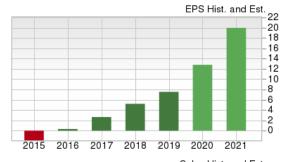
Charter Communications is the second largest cable operator in the United States and a leading broadband communications company providing video, Internet and voice services. The company serves approximately 29.7 million residential and small and medium business customers as of Mar 31, 2020.

Charter's high-capacity, two-way telecommunications network passes over 52 million households and small and medium businesses across the United States. The company also estimates that more than 300 million devices are wirelessly connected to its network through WiFi.

Moreover, the company's mobile offering – Spectrum Mobile - reached 1.4 million subscriber lines at the end of first-quarter 2020.

Charter also sells video and online advertising to local, regional and national advertising customers and fiber-delivered communications and managed information technology ("IT") solutions to large enterprise customers. The company also own and operate regional sports networks and local sports, news and community channels and sell security and home management services in the residential marketplace.

Headquartered in Stamford, CT, Charter reported revenues of \$45.76 billion in 2019. The company operates through five reportable segments:





Residential (79.1% of total revenues): The segment comprises Video, Internet and Voice sub-segments. The company also generates revenues from franchise fees, equipment and video installation.

Commercial (14% of total revenues): The segment consists of small and medium business (SMB) and enterprise sub-segments.

Advertising (3.4% of total revenues): Charter generates revenues from commercial advertising customers, programmers and other vendors, as well as local cable and advertising on regional sports and news channels.

Mobile (1.6% of total revenues): As of Dec 31, Charter had 1.082 million residential, and small and medium business mobile lines.

Other (1.9% of total revenues): The segment consists of revenues from regional sports and news channels, home shopping, late payment fees, wire maintenance fees and other miscellaneous revenues.



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

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Reasons To Buy:

▲ Charter's residential and commercial Internet and small & medium business (SMB) customer growth continues to drive the top line. In second-quarter 2020, total residential and SMB customer relationships increased 755K. Moreover, the company added 842K residential and 8K SMB Internet customers. In 2019, Internet revenues increased 9.8% from the preceding year reported figure. Notably, leveraging DOCSIS 3.1 technology, Charter offers 940 Mbps speed service (Spectrum Internet Gig) in nearly its entire footprint. Further, the company doubled minimum Internet speed to 200 Mbps in a number of markets for new and existing Spectrum Internet customers at no extra cost. This is expected to boost new customers' thereby expanding subscriber base.

Charter's expanding residential and commercial Internet plus small & medium business (SMB) customer base and new 5G service offerings are key catalysts.

- ▲ Charter saw a substantial increase in network traffic, particularly during the daytime, owing to the coronavirus-led work-from-home and online-learning wave. Residential data usage for Internet-only customers was more than 600 gigabytes per month in June, up more than 20% since the fourth quarter of 2019. Also, Charter's Remote Education Offer (REO) that began in March provided free Internet for 60 days to households with K-12 and college students as well as educators not having Spectrum Internet service witnessed good reception. The company added 448K Internet customers through this promotional program that ended on Jun 30. Moreover, approximately 50% of the REO chose to subscribe to additional services (video, voice, mobile) from Charter.
- ▲ Charter launched its Spectrum Mobile service on Jun 30, 2018 under MVNO reseller agreement with Verizon. As of Jun 30, 2020, subscriber base was 1.697 million as the company added 325K lines in the second-quarter. Moreover, Spectrum Mobile has expanded 5G coverage nationwide. Earlier in 2020, Spectrum Mobile partnered with Samsung to offer the latter's new line of 5G-enabled Galaxy S20 series phones. Moreover, Spectrum Mobile has extended partnership with Apple to offer the latest 5G-enabled iPhone 12 series including iPhone 12 Pro, iPhone 12 Pro Max, iPhone 12, and iPhone 12 mini.
- ▲ Charter's broadband service has gained traction among SMBs and enterprises. In 2019, segmental revenues from SMB and Enterprise increased 5.6% and 1.1%, respectively. Through Spectrum Business, the company offers Internet, voice and video services to SMBs over its hybrid fiber coaxial network. In 2019, the company began offering Spectrum Mobile service to SMBs. The company's enterprise portfolio offerings have expanded with the launch of hybrid Software-Defined Wide Area Network (SD-WAN). The company has also launched Spectrum Total Connect, a new high-speed internet offering for large national businesses.
- ▲ Charter has initiated the rollout of its Spectrum WiFi, which provides unlimited Internet access to residential customers even when they are outdoors. At the end of 2019, the company launched its advanced in-home WiFi product in select service areas and plans to continue to rollout this product to its entire footprint throughout 2020 and 2021. Additionally, the Spectrum WiFi, combined with MVNO opportunities and other wireless building blocks will allow the company to create products and services with a high value proposition.

Reasons To Sell:

- ▼ The multi-channel video market in the United States is almost saturated. This significantly lowers room for growth for cable TV operators like Charter in an intensely competitive market. Moreover, the company's voice revenues continue to decrease due to the launch of Spectrum pricing and packaging. Customers are increasingly migrating to Spectrum products due to its better performance.
- ▼ Moreover, Charter face triple play competition, consisting of wireline multichannel video, wireline Internet, and wireline voice service, from three primary competitors, AT&T, Frontier and Verizon. As of Dec 31, 2019, AT&T, Frontier and Verizon offered these triple play packages in approximately 33%, 7% and 5% of Charter's operating areas.
- Charter operates in a saturated & competitive multi-channel U.S. video market. Intense competition, eroding video subscriber base and leveraged balance sheet are key concerns.
- ▼ Charter continues to lose video subscribers primarily due to cord-cutting and intense competition from streaming service providers such as Netflix, Hulu, HBO, Amazon Prime and YouTube. These over-the-top (OTT) providers are now offering a variety of alternative packages, including skinny bundles, which are delivered at lower costs than traditional offerings. They are also innovating in terms of original content to sustain competitive advantage against traditional cable-TV operators.
- ▼ Charter has a leveraged balance sheet. As of Jun 30, 2020, total debt was \$77.8 billion compared with debt of \$79.69 billion as of Mar 31. Although the company generates a significant free cash flow of \$1.9 billion in the second quarter compared with \$1.1 billion in the year-ago quarter, high debt-level amid the coronavirus-led recessionary backdrop is a major concern. Markedly, total debt-to-capital of 68.3% is much higher than industry's 56.4%. Moreover, times interest earned of 1.8X is less than industry's 4X.

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Last Earnings Report

Charter's Q2 Earnings and Revenues Beat Estimates

Charter reported second-quarter 2020 earnings of \$3.63 per share that beat the Zacks Consensus Estimate by 43.5% and jumped 161.2% year over year.

Revenues of \$11.70 billion increased 3.1% on a year-over-year basis owing to growth in Residential, Internet and mobile segment revenues. The figure comfortably beat the consensus mark of \$11.61 billion.

Quarter Ending	06/2020
Report Date	Jul 31, 2020
Sales Surprise	0.78%
EPS Surprise	43.48%
Quarterly EPS	3.63
Annual EPS (TTM)	10.70

Segmental Details

Residential revenues came in at \$9.35 billion, up 4.1% from the year-ago quarter.

Monthly Residential revenue per Residential Customer (excluding mobile) totaled \$110.82, down 1.2% year over year.

Internet revenues grew 10.4% year over year to \$4.53 billion.

Video revenues fell 0.4% to \$4.37 billion. Moreover, voice revenues decreased 7.7% to \$451 million.

Commercial revenues decreased 1.7% year over year to \$1.59 billion. Small and medium business revenues rose 2% year over year to \$983 million. Enterprise revenues dropped 7.1% to \$606 million.

Moreover, advertising sales plunged 37% year over year to \$249 million primarily due to lower local and national sales amid coronavirus pandemic.

Mobile revenues surged 96.1% year over year to \$310 million.

Other revenues came in at \$196 million, flat year over year.

Subscriber Statistics

As of Jun 30, 2020, Charter had 30.476 million total customer relationships, up 6.3% year over year.

Moreover, the company had 26.313 million residential Internet customers, up 8.5% year over year. More than 85% of customers were subscribers to tiers that provided 100 Mbps or more speed. Currently, 200 Mbps is the slowest speed offered to new Spectrum Internet customers in roughly 60% of Charter's footprint, with 100 Mbps being the slowest speed offered in the remaining 40% of its footprint.

Charter added 842K residential Internet customers in the reported quarter.

Further, Charter added 325K mobile lines in the second quarter. As of Jun 30, 2020, the company served a total of 1.697 million mobile lines.

Moreover, Charter added 102K video customers and 38K wireline voice customers in the quarter under review.

Operating Details

Total operating costs and expenses increased 0.6% from the year-ago quarter to \$7.21 billion.

Programming costs inched up1.6% year over year to \$2.87 billion due to a rise in renewals and contractual programming. Regulatory, connectivity and produced-content costs were down 18.3% to \$488 million.

Costs to service customers increased 4.6% year over year to \$1.85 billion. Marketing costs were \$719 million, down 6.3% year over year.

Notably, mobile costs jumped 48.6% year over year to \$413 million.

Adjusted EBITDA increased 7.3% year over year to \$4.40 billion. Moreover, adjusted EBITDA margin expanded 150 basis points (bps) to 38.4%.

Balance Sheet & Cash Flow

As of Jun 30, 2020, cash and cash equivalents were \$2.10 billion compared with \$2.91 billion as of Mar 31, 2020. The company's credit facilities provided roughly \$4.7 billion of additional liquidity.

Further, as of Jun 30, 2020, total debt was \$77.8 billion compared with debt of \$79.69 billion as of Mar 31.

Cash flows from operating activities totaled \$3.5 billion compared with \$2.8 billion in the year-ago quarter.

Property, plant and equipment expenditures totaled \$1.9 billion in the reported quarter compared with \$1.6 billion in the year-ago quarter, primarily driven by increases in scalable infrastructure, line extensions and Internet CPE.

Charter currently expects 2020 cable capital expenditures to decline as a percentage of cable revenues versus 2019.

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

Free cash flow was \$1.9 billion compared with \$1.1billion in the year-ago quarter.

Recent News

On Oct 16, Charter Communications' Spectrum Enterprise announced expansion of 5G coverage nationwide. Spectrum Mobile is offering the entire iPhone 12 line-up from Apple, including iPhone 12 Pro, iPhone 12 Pro Max, iPhone 12, and iPhone 12 mini, with 5G. Customers can place orders for the iPhone 12 Pro and iPhone 12, with availability on Oct 23 while orders can be placed for iPhone 12 Pro Max and iPhone 12 mini beginning on Nov 6, with availability on Nov 13.

On Oct 1, Charter Communications announced the launch of Wireless Internet Backup for small- and medium-sized Spectrum business customers throughout the company's 41-state footprint.

Moreover, it launched Stay Connected K-12, a new Spectrum Enterprise solution that enables schools to offer high-speed, cable broadband Internet access directly to students, educators and staff in their own homes so that learning and teaching remains uninterrupted. Residences are not billed for the service.

On Sep 21, Charter Communications announced a relaunch of its Remote Education Offer, providing free Spectrum Internet – with speeds up to 200 Mbps in most markets – and WiFi access for 60 days to households with K-12th graders, college students and/or educators.

On Sep 3, Charter Communications' Spectrum Enterprise unit announced a multi-year extension deal with the University of Hawai'i (UH) to continue with Spectrum as the official TV home of UH Athletics. With the partnership, Spectrum Sports will air live games and programming of UH men's and women's sports, and will continue to make UH football games available on Spectrum Sports Pay-Per-View in Hawai'i. The terms of the deal were not disclosed.

On Aug 26, Charter Communications announced adding Chromecast compatibility to the Spectrum TV App. This enhancement allows customers to take video content playing on the Spectrum TV App and cast it on a larger screen or TV.

Valuation

Charter shares are up 20.5% in the year-to-date period and 25.1% over the trailing 12-month period. Stocks in the Zacks sub-industry are up 2.1%, while the same in the Zacks Consumer Discretionary sector are down 3.6% in the year-to-date period. Over the past year, the Zacks sub-industry and the sector are up 2.5% and 4.1%, respectively.

The S&P 500 Index is up 5.9% in the year-to-date period and 12.2% in the past year.

As of 10/26/2020

The stock is currently trading at trailing 12-month EV/EBITDA of 11.78X, which compares to 10.06X for the Zacks sub-industry, 10.95X for the Zacks sector and 14.91X for the S&P 500 index.

Over the past five years, the stock has traded as high as 105.92X and as low as 8.94X, with a 5-year median of 16.15X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$611 price target reflects 2.56X forward 12-month sales.

The table below shows summary valuation data for CHTR

Valuation Multiples - CHTR						
		Stock	Sub-Industry	Sector	S&P 500	
	Current	11.78	10.06	10.95	14.91	
EV/EBITDA TTM	5-Year High	105.92	19.25	17.86	15.68	
	5-Year Low	8.94	8.27	8.3	9.55	
	5-Year Median	16.15	10.39	12.22	13.12	
	Current	4.23	3.3	3.1	3.91	
EV/Sales TTM	5-Year High	9.87	3.81	3.76	4.14	
	5-Year Low	3.05	2.64	2.27	2.61	
	5-Year Median	3.84	3.27	3.37	3.56	
	Current	2.44	2.06	2.29	4.05	
P/S F12M	5-Year High	6.07	2.59	2.96	4.31	
	5-Year Low	1.35	1.61	1.7	3.18	
	5-Year Median	1.93	2.04	2.48	3.67	

Source: Zacks Investment Research

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Industry Analysis Zacks Industry Rank: Top 46% (114 out of 248)



Source: Zacks Investment Research

Top Peers

Company (Ticker)	Rec Rank
DISH Network Corporation (DISH)	Outperform 1
Cable One, Inc. (CABO)	Neutral 4
Comcast Corporation (CMCSA)	Neutral 3
Liberty Global PLC (LBTYA)	Neutral 3
Rogers Communication, Inc. (RCI)	Neutral 2
Shaw Communications Inc. (SJR)	Neutral 2
ATT Inc. (T)	Neutral 3
Verizon Communications Inc. (VZ)	Neutral 3

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

Industry Comparison Industry: Cable Television				Industry Peers	Industry Peers			
	CHTR	X Industry	S&P 500	CMCSA	DISH	LBTYA		
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Outperform	Neutra		
Zacks Rank (Short Term)	3	-	-	3	1	3		
VGM Score	В	-	-	А	В	В		
Market Cap	119.28 B	11.48 B	23.46 B	199.95 B	13.79 B	12.22 E		
# of Analysts	9	4.5	13	14	5	3		
Dividend Yield	0.00%	0.00%	1.66%	2.10%	0.00%	0.00%		
Value Score	В	-	-	В	Α	Α		
Cash/Price	0.02	0.09	0.07	0.07	0.18	0.57		
EV/EBITDA	12.06	8.52	13.28	8.46	8.52	3.96		
PEG F1	1.06	2.84	2.69	1.82	NA	N.A		
P/B	3.28	2.32	3.42	2.36	1.13	0.97		
P/CF	10.52	7.28	13.02	7.28	6.76	5.97		
P/E F1	45.73	28.95	21.07	17.75	12.32	N/		
P/S TTM	2.56	1.97	2.56	1.89	1.08	1.07		
Earnings Yield	2.20%	2.53%	4.47%	5.64%	8.11%	-0.15%		
Debt/Equity	2.13	0.87	0.70	1.25	0.90	0.83		
Cash Flow (\$/share)	55.31	2.72	6.93	6.01	3.88	3.45		
Growth Score	В	-	-	В	D	F		
Historical EPS Growth (3-5 Years)	115.41%	9.43%	10.10%	17.39%	-2.69%	N.A		
Projected EPS Growth (F1/F0)	69.68%	30.13%	-1.80%	-21.20%	-18.08%	98.61%		
Current Cash Flow Growth	0.57%	-1.41%	5.49%	21.54%	-11.24%	-8.34%		
Historical Cash Flow Growth (3-5 Years)	43.34%	2.08%	8.50%	11.76%	0.07%	-15.92%		
Current Ratio	0.52	0.98	1.37	0.97	0.71	1.99		
Debt/Capital	68.09%	48.41%	42.02%	55.83%	48.81%	45.26%		
Net Margin	4.85%	11.15%	10.35%	10.91%	9.90%	104.07%		
Return on Equity	6.05%	3.89%	14.88%	16.66%	11.14%	-3.19%		
Sales/Assets	0.32	0.36	0.50	0.40	0.39	0.24		
Projected Sales Growth (F1/F0)	4.70%	0.00%	-0.40%	-6.16%	12.47%	-0.74%		
Momentum Score	В	-	-	Α	D	Α		
Daily Price Change	-1.88%	-1.65%	-2.29%	-2.86%	-3.63%	-0.34%		
1-Week Price Change	-6.41%	-1.14%	0.01%	-1.10%	-1.52%	-5.30%		
4-Week Price Change	-7.34%	-2.12%	2.49%	-6.39%	-12.13%	-3.52%		
12-Week Price Change	-1.28%	-1.25%	3.88%	2.08%	-22.70%	-11.67%		
52-Week Price Change	24.63%	-11.86%	1.66%	-3.68%	-24.85%	-16.73%		
20-Day Average Volume (Shares)	943,627	148,030	1,767,276	16,157,808	2,266,437	1,370,361		
EPS F1 Estimate 1-Week Change	-0.04%	0.00%	0.00%	0.00%	0.00%	9.92%		
EPS F1 Estimate 4-Week Change	0.72%	0.28%	0.25%	1.23%	0.28%	9.92%		
EPS F1 Estimate 12-Week Change	15.81%	5.35%	3.29%	4.24%	16.65%	30.13%		
EPS Q1 Estimate Monthly Change	1.29%	0.00%	0.00%	2.68%	3.39%	-150.00%		

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.

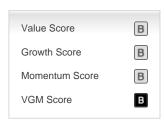
Zacks Rank

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.

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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.