

Comcast Corporation (CMCSA)

\$46.46 (As of 09/15/20)

Price Target (6-12 Months): **\$49.00**

Long Term: 6-12 Months

Zacks Recommendation:
Neutral

(Since: 07/14/20)

Prior Recommendation: Underperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

3-Hold

Zacks Style Scores:

VGM:B

Value: B

Growth: B

Momentum: D

Summary

Comcast is benefiting from solid high-speed Internet customer wins. Its strategy to provide high-speed Internet at an affordable price plays a pivotal role in providing connectivity and improving customer experience. Moreover, coronavirus-led increased media consumption, work-from-home and online-learning wave bode well for Comcast. Peacock's launch has been a key catalyst. However, Comcast persistently suffers video-subscriber attrition due to cord cutting. Theme-park revenues are expected to suffer from lower footfall and indefinite closure of Hollywood park. Further, Sky's third and fourth quarter EBITDA on a combined basis is expected to decline roughly 60% year over year. Weakness in film business is also a headwind. Moreover, a leveraged balance sheet is a concern. Shares have underperformed the industry year to date.

Data Overview

52-Week High-Low	\$47.74 - \$31.71
20-Day Average Volume (Shares)	14,749,968
Market Cap	\$212.2 B
Year-To-Date Price Change	3.3%
Beta	0.95
Dividend / Dividend Yield	\$0.92 / 2.0%
Industry	Cable Television
Zacks Industry Rank	Bottom 26% (186 out of 251)

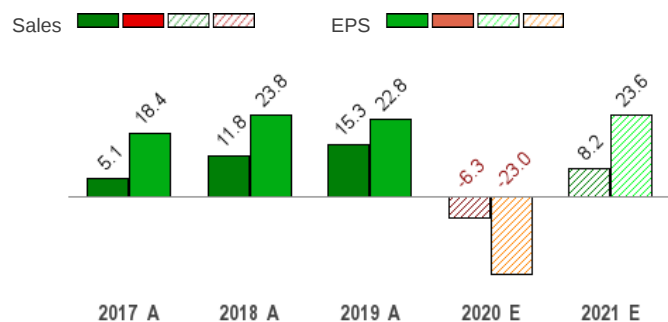
Last EPS Surprise	25.5%
Last Sales Surprise	0.2%
EPS F1 Estimate 4-Week Change	-0.3%
Expected Report Date	10/22/2020
Earnings ESP	0.0%

P/E TTM	15.6
P/E F1	19.3
PEG F1	1.6
P/S TTM	2.0

Price, Consensus & Surprise



Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	27,269 E	26,925 E	27,804 E	28,763 E	110,403 E
2020	26,609 A	23,715 A	24,531 E	27,243 E	102,034 E
2019	26,859 A	26,858 A	26,827 A	28,398 A	108,942 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$0.73 E	\$0.77 E	\$0.75 E	\$0.76 E	\$2.98 E
2020	\$0.71 A	\$0.69 A	\$0.47 E	\$0.56 E	\$2.41 E
2019	\$0.76 A	\$0.78 A	\$0.79 A	\$0.79 A	\$3.13 A

*Quarterly figures may not add up to annual.

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 09/15/2020. The reports text is as of 09/16/2020.

Overview

Comcast Corporation is a global media and technology company with three primary businesses: Comcast Cable, NBCUniversal and Sky.

The Philadelphia, PA-based company reported revenues of \$108.94 billion in 2019. The company reports in three revenue generating segments:

Cable Communications (53.3% of total revenues): It consists of the operations of Comcast Cable. This segment offers high-speed Internet, video, voice, and security and automation services in the United States individually and as bundled services at a discounted rate over its cable distribution system to residential and business customers.

Cable Communications generates revenues primarily from residential and business customers that subscribe to Comcast's cable services and from the sale of advertising. The company also offers a wireless phone service (Xfinity Mobile brand) as a component of its bundled services, which is reported in Corporate and Other.

NBC Universal Segment (31.2% of total revenues): This segment comprises four reportable segments – Cable Networks, Broadcast Television, Filmed Entertainment and Theme Parks.

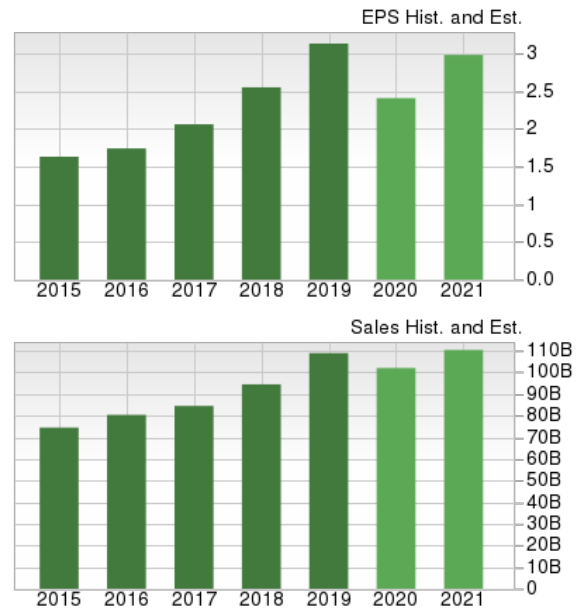
Cable Networks consists primarily of Comcast's national cable networks. Broadcast Television comprises NBC and Telemundo broadcast networks.

Filmed Entertainment consists primarily of the operations of Universal Pictures. Films are also produced under the Illumination, DreamWorks Animation and Focus Features brands.

Comcast has theme parks in Orlando, Florida; Hollywood, California; and Osaka, Japan.

Sky (17.6% of total revenues): Acquired in 2018, Sky includes a direct-to-consumer business that provides video, high-speed Internet, voice and wireless phone services, and a content business. The business, one of Europe's leading entertainment companies, also operates the Sky News broadcast network and Sky Sports networks. Sky has 23.99 million customers.

Comcast faces significant competition from streaming-service providers including Netflix, Disney+, Apple TV+ and HBO Max. In the theme park segment, the company faces competition from Disney.



Source: Zacks Investment Research

Reasons To Buy:

- ▲ Comcast offers 1 Gbps high-speed Internet services across its network, which supports high-bandwidth applications, be it gaming and/or Internet TV. Upgrading to DOCSIS 3.1 has enabled the company to compete against AT&T's Fiber-to-the-Home (FTTH) program. Moreover, strong adoption of xFi is a key catalyst. For 2019, Comcast added 1.4 million net broadband customers with increasing ARPU and solid margins. Further, the Flex is allowing broadband customers to enjoy the most popular streaming apps on X1 platform, without requiring a linear content subscription. These factors are expected to boost growth prospects for the Cable Communications segment.
- ▲ Coronavirus has been a tailwind to Comcast's broadband business. The company added 323K high-speed internet customers in the second quarter. In the six months ended Jun 30, 2020, Comcast's high-speed internet customer base surged 37% year over year to 800K. The momentum is expected to continue in the remainder of 2020. Comcast's wireless business also benefited from the addition of 126K lines, bringing total connections to 2.39 million lines at the end of the second quarter.
- ▲ In an attempt to stay competitive, Comcast has ventured into the U.S. wireless industry with the nationwide rollout of its wireless services under the Xfinity Mobile brand. Based on a Mobile Virtual Network Operator (MVNO) agreement with Verizon, Xfinity Mobile uses Verizon's 4G LTE wireless network. Xfinity Mobile is expected to be the nation's first wireless service combining the nation's largest and most reliable 4G LTE network with 19 million Xfinity Wi-Fi hotspots to deliver a great wireless experience, which is cost effective. Comcast claims that customers can save up to 30% on their monthly wireless bills with Xfinity Mobile service.
- ▲ Sky's acquisition helps Comcast to expand in Europe and diversifies its top-line source as the North-American pay-TV market saturates. Sky reaches 23.7 million customers and its streaming service Now TV has almost 2 million users. Notably, Sky added 394K customer relationships in 2019, driven by popular sports and entertainment offerings. Notably, Sky's original content *Chernobyl* has been a major hit and received 10 Emmy awards. The launch of Sky Studio and Comcast's plans to double investment in local regional content in Europe are expected to drive Sky's top line and expand user base in the long haul.
- ▲ Comcast has gained the rights to offer online TV services nationwide from several unnamed cable networks. The cable MSO reportedly got the rights using the 'most favored nation' clauses in its contracts. This allows Comcast to sell its video services for the first time outside its regional territories to new cities like New York and Los Angeles. Moreover, the company launched Peacock, its streaming platform, on Jul 15, 2020. It is focused on expanding its streaming content portfolio and is pulling in shows like *The Office* from Netflix. Comcast is leveraging Sky's Now TV model to launch the NBC service. Despite stiff competition in the streaming space, Comcast is well poised to grow, owing to its vast library of IP and new productions.

Growing high-speed Internet user base due to coronavirus, solid demand for Xfinity X1 and Flex services and newly launched Peacock ad-supported streaming service are key catalysts.

Reasons To Sell:

- ▼ Coronavirus affected Comcast's top line and profitability. The company closed its theme parks in Orlando and Japan due to the coronavirus outbreak. Although these parks have reopened, reduced visitor count is expected to hurt the top line. Moreover, the company's Hollywood theme park remains closed. Although the company currently expects Universal Beijing Resort to open in 2021, it has delayed certain construction projects, including the development of the Epic Universe theme park in Orlando.
- ▼ Moreover, film revenues took a hit in the second quarter due to the closure of movie theaters globally amid the coronavirus pandemic. The company expects film revenues and EBITDA to decline substantially in the rest of 2020 as the much-anticipated movies, namely the next installment of *Fast and Furious* and *Minions 2* were rescheduled for a 2021 release. Further, postponement of sporting events globally hurt Sky's results. Comcast expects Sky's third and fourth-quarter EBITDA on a combined basis to decline roughly 60% year over year..
- ▼ The internal dynamics of the U.S. pay-TV industry has been gradually shifting from cable TV operators to large telecom operators and low-cost over-the-top service providers. Online video streaming service providers such as Netflix, Hulu, YouTube etc., have become a severe threat to cable TV operators because of their extremely cheap source of TV programming and solid content. Moreover, the U.S. pay-TV industry is affected by the ongoing massive consolidation between telecom and cable-TV operators. The multi-channel video market in the U.S. is almost saturated. This doesn't bode well for Comcast, as cord cutting and intensifying competition has severely hurt its business.
- ▼ The industry-wide trend of declining profitability of residential video services due to increasing programming costs and retransmission fees has made it difficult for traditional companies like Comcast to survive. Moreover, residential voice services have witnessed significant decline in revenues due to increasing usage of wireless voice services. This also does not bode well for the company. In the six months ended Jun 30, 2020, Comcast lost 887K video customers compared with 345K in the year-ago period.
- ▼ We view Comcast's high-debt level as a potential hazard. The Sky acquisition further elevated its indebtedness, which worsens its risk ratio. As of Jun 30, 2020, consolidated total debt was \$104.81 billion, up from \$103.58 billion as of Mar 31, 2020. In comparison, as of Jun 30, 2020, cash and cash equivalents were \$13.94 billion, up from \$8.52 billion as of Mar 31, 2020. Comcast does not expect to resume share buybacks in 2020 due to the negative impact of coronavirus on NBCUniversal and Sky's EBITDA, which is expected to keep Comcast's leverage ratio (debt-to-EBITDA) under pressure.

Comcast continues to suffer from video and voice customer loss due to cord-cutting and stiff competition from Netflix. Impact of coronavirus on theme parks and film business is a major concern.

Last Earnings Report

Comcast Q2 Earnings Beat, Internet User Base Rises

Comcast reported second-quarter 2020 adjusted earnings of 69 cents per share, beating the Zacks Consensus Estimate by 25.5% but decreasing 11.5% year over year.

Consolidated revenues slid 11.7% year over year to \$23.72 billion but beat the Zacks Consensus Estimate of \$23.66 billion.

Cable Communication Revenue Details

Revenues declined 0.2% from the year-ago quarter to \$14.43 billion. Total Customer Relationships increased 217K to 32.1 million.

High-speed Internet revenues grew 7.2% year over year to \$5 billion, primarily driven by increased residential high-speed Internet customers and average rate. Total high-speed Internet customer net additions were 323K.

Cable Communications extended its 60 days of free Internet service offer to eligible new Internet Essentials Customers and free access to public Xfinity WiFi hotspots through year-end.

Business Services revenues were up 3.6% to \$2.04 billion, driven by customer-base expansion and higher average rates.

Wireless revenues jumped 33.9% to \$326 million, supported by an increase in the number of customer lines. Comcast added 126K wireless lines in the reported quarter.

Advertising revenues plunged 29.6% to \$428 million, primarily due to coronavirus-induced lower advertiser spending.

Voice revenues were \$877 million, down 10.7% year over year due to a declining number of residential voice customers.

Video revenues slipped 3.2% to \$5.42 billion, reflecting a decline in the residential video customer count.

Total video customer net losses were 477K while total voice customer net losses were 158K.

Other revenues decreased 11% from the year-ago quarter to \$378 million, owing to lower security and automation services revenues as well as waived late fees.

NBCUniversal Revenues Decrease Y/Y

Revenues declined 25.4% year over year to \$6.12 billion. The company launched its streaming service Peacock free to Xfinity X1 and Flex Customers on Apr 15. The service debuted nationally on Jul 15 and has already gained 10 million sign-ups.

Cable Networks' revenues dipped 14.7% from the year-ago quarter to \$2.52 billion, primarily due to lower advertising revenues (down 27%) and distribution revenues (down 14.8%).

The year-over-year fall in advertising revenues reflects reduced advertiser spending due to postponement of sports events in the wake of the coronavirus pandemic and continued ratings decline.

Content licensing & other revenues increased 23.1% year over year.

Broadcast Television revenues declined 1.6% from the year-ago quarter to \$2.36 billion, courtesy of lower advertising revenues (down 27.9%), partially offset by higher content-licensing revenues (up 58.5%) and distribution & other revenues (up 9.2%).

Filmed Entertainment revenues decreased 18.1% from the year-ago quarter to \$1.19 billion. Theatrical revenues fell 96.8% from the year-ago quarter. However, content-licensing revenues increased 19.5% on a year-over-year basis.

Theme Parks revenues were \$87 million, down 94.1% year over year. Universal Orlando Resort and Universal Studios Japan reopened with limited capacity in June, while Universal Studios Hollywood remains closed.

Sky Revenue Details

Sky's revenues deteriorated 15.5% year over year to \$4.08 billion. At constant currency (cc), revenues softened 12.9%.

Direct-to-consumer revenues were down 9.4% (down 6.7% at cc) from the year-ago quarter to \$3.52 billion. This decline primarily reflected a decrease in average revenue per customer relationship due to the impact of coronavirus, which resulted in lower sports-subscription revenues.

Content revenues fell 37.7% (down 35.7% at cc) to \$234 million. This downside reflects lower revenues from sports programming due to suspension of sports events following the coronavirus outbreak.

Advertising revenues deteriorated 43% (down 41.2% at cc) from the year-ago quarter to \$321 million, primarily due to overall market weakness, which worsened due to coronavirus as well as the negative impact of a change in legislation related to gambling advertisements in the United Kingdom and Italy.

Quarter Ending	06/2020
Report Date	Jul 30, 2020
Sales Surprise	0.24%
EPS Surprise	25.45%
Quarterly EPS	0.69
Annual EPS (TTM)	2.98

Pro-forma Total Customer Relationships decreased 214K to 23.7 million in the reported quarter. Markedly, Sky retained 99% of total customers and 95% of sports subscribers since the beginning of the coronavirus pandemic. Moreover, Bundesliga returned in May and the Premier League and Serie A in June.

Operating Details

Consolidated programming & production costs slipped 17.4% from the year-ago quarter to \$6.82 billion.

Consolidated adjusted EBITDA fell 9.1% from the year-ago quarter to \$7.93 billion.

Segment wise, Cable Communications' adjusted EBITDA rose 5.5% from the year-ago quarter to \$6.18 billion. Cable Communications operating expenses declined 4% year over year on lower programming (down 5%) and non-programming costs (down 3.4%) expenses.

Cable Communications results include a loss of \$37 million from the wireless business compared with a loss of \$88 million in the year-ago quarter.

NBCUniversal's adjusted EBITDA decreased 29.5% from the year-ago quarter to \$1.64 billion, reflecting a significant decline in Theme Parks (down 167.7%)-adjusted EBITDA partially offset by Cable Networks (up 3.5%), Filmed Entertainment (up 20%) and Broadcast Television-adjusted EBITDA (up 24.8%).

Sky's adjusted EBITDA declined 2.9% year over year (up 0.2% at cc) to \$749 million. Notably, Sky's operating costs and expenses fell 17.9% (down 15.5% at cc) to \$3.33 billion.

Consolidated operating income declined 13.2% year over year to \$4.65 billion.

Cash Flow & Liquidity

As of Jun 30, 2020, cash and cash equivalents were \$13.94 billion, up from \$8.52 billion as of Mar 31, 2020.

Moreover, as of Jun 30, 2020, consolidated total debt was \$104.81 billion, up from \$103.58 billion as of Mar 31, 2020.

In second-quarter 2020, Comcast generated cash from operations of \$8.64 billion, up 22.8% year over year.

Capital expenditures were down 8.3% to \$2.08 billion. NBCUniversal's capital expenditures decreased 20.9% to \$375 million. Moreover, Cable Communications' capital expenditures decreased 8.9% to \$1.5 billion. However, Sky reported capital expenditures of \$215 million, up 22.1%.

Free cash flow was \$5.97 billion in the reported quarter, up 40.5% year over year.

Dividends paid out in the second quarter were worth \$1.1 billion.

Recent News

On Sep 15, Comcast CEO Brian L. Roberts stated that Peacock sign-ups are now more than 15 million.

On Aug 24, Comcast announced a partnership with the City of Sumner, WA. Under the terms of the agreement, Comcast Business will provide increased bandwidth and high-performance connectivity to support the municipality's ongoing remote-work plan.

On Aug 20, Comcast announced a new Xfinity Internet offer for K-12 teachers and administrators as well as university faculty and staff. Per the latest offer, eligible faculty, staff and administrators in the Comcast footprint will receive a Visa prepaid card worth \$150 (about two months of Internet service) when they sign up for an Xfinity package.

On Aug 13, Comcast announced a new program for cities, schools, and nonprofits to connect large numbers of low-income K-12 students to the Internet at home. The company's Internet Essentials Partnership Program offers households low-cost broadband Internet service for \$9.95 per month, the option to purchase a heavily subsidized computer and multiple options for digital-literacy training. Comcast is also giving all Internet Essentials customers its innovative xFi platform, which enables parents to control and manage their children's WiFi-connected devices.

On Aug 5, Comcast announced that Xfinity Mobile will offer the new, highly anticipated Samsung Galaxy Note20 5G and Note20 Ultra 5G devices.

On Aug 4, Comcast Business announced that it is working with Amazon Web to simplify sign-up and billing for Comcast Business customers who wish to add Amazon Chime video conferencing and collaboration capabilities to their communications-services package. Additionally, Comcast Business is offering businesses in the United States an extended free trial of Amazon Chime Pro (till Oct 31, 2020), an enterprise-grade communication service that allows businesses to video conference, chat and collaborate from a single, secure application.

On Jul 30, Comcast announced a quarterly dividend of 23 cents a share, payable Oct 28 to its shareholders of record as of Oct 7, 2020.

On Jul 24, Comcast and Sinclair Broadcast Group announced the multi-year renewal of their content-carriage agreement. The latest agreement includes continued retransmission consent of 78 Sinclair television stations in 51 major markets across Comcast's cable-television footprint, as well as continued distribution of the Tennis Channel, 18 Fox-branded regional sports networks, and YES Network for Xfinity TV customers.

On Jul 15, Comcast division NBCUniversal's ad-supported streaming service Peacock was launched. Peacock offers an ad-supported free tier and an ad-supported premium tier for \$4.99 per month. An ad-free version of the premium tier is also available for \$9.99 per month.

Valuation

Comcast shares are up 3.3% in the year-to-date period but down 0.5% over the trailing 12-month period. Stocks in the Zacks sub-industry are up 6%, while the same in the Zacks Consumer Discretionary sector are down 2.5% in the year-to-date period. Over the past year, the Zacks sub-industry and the sector are up 7.3% and 3.5%, respectively.

The S&P 500 Index is up 5.1% in the year-to-date period and 13.1% in the past year.

The stock is currently trading at 16.52X forward 12-month earnings, which compares to 20.47X for the Zacks sub-industry, 33.37X for the Zacks sector and 22.39X for the S&P 500 index.

Over the past five years, the stock has traded as high as 20.32X and as low as 10.1X, with a 5-year median of 15.49X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$49 price target reflects 17.35X forward 12-month earnings.

The table below shows summary valuation data for CMCSA

Valuation Multiples - CMCSA					
		Stock	Sub-Industry	Sector	S&P 500
P/E F12M	Current	16.52	20.47	33.37	22.39
	5-Year High	20.32	29.11	34.64	23.44
	5-Year Low	10.1	15.32	16.13	15.26
	5-Year Median	15.49	20.73	19.86	17.63
P/S F12M	Current	1.97	2.18	2.43	4.12
	5-Year High	2.28	2.59	2.95	4.29
	5-Year Low	1.3	1.61	1.68	3.11
	5-Year Median	1.83	2.04	2.47	3.66
EV/EBITDA TTM	Current	8.8	10.35	11.23	14.64
	5-Year High	17.66	19.25	17.8	15.61
	5-Year Low	6.9	8.27	8.28	9.51
	5-Year Median	8.91	10.37	12.22	13

As of 09/15/2020

Source: Zacks Investment Research

Industry Analysis Zacks Industry Rank: Bottom 26% (186 out of 251)



Top Peers

Company (Ticker)	Rec	Rank
Cable One, Inc. (CABO)	Neutral	3
Charter Communications, Inc. (CHTR)	Neutral	3
The Walt Disney Company (DIS)	Neutral	3
Discovery, Inc. (DISCA)	Neutral	3
DISH Network Corporation (DISH)	Neutral	2
Liberty Global PLC (LBTYA)	Neutral	3
Rogers Communication, Inc. (RCI)	Neutral	4
Shaw Communications Inc. (SJR)	Neutral	2

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

Industry Comparison Industry: Cable Television				Industry Peers		
	CMCSA	X Industry	S&P 500	CABO	CHTR	DISH
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	3	-	-	3	3	2
VGM Score	B	-	-	C	B	B
Market Cap	212.23 B	11.96 B	23.70 B	11.04 B	127.56 B	17.20 B
# of Analysts	13	5	13.5	5	8	5
Dividend Yield	1.98%	0.00%	1.61%	0.55%	0.00%	0.00%
Value Score	B	-	-	D	C	B
Cash/Price	0.07	0.08	0.07	0.06	0.02	0.16
EV/EBITDA	8.81	9.29	13.22	22.95	12.57	9.84
PEG F1	1.63	3.21	2.98	NA	1.10	NA
P/B	2.50	2.41	3.26	7.93	3.50	1.41
P/CF	7.73	8.44	12.81	25.33	11.26	8.44
P/E F1	19.28	31.00	21.70	40.55	49.46	14.40
P/S TTM	2.01	2.01	2.45	8.81	2.73	1.34
Earnings Yield	5.19%	2.47%	4.39%	2.47%	2.02%	6.93%
Debt/Equity	1.25	0.83	0.70	1.28	2.13	0.90
Cash Flow (\$/share)	6.01	2.72	6.93	72.36	55.31	3.88
Growth Score	B	-	-	B	B	C
Historical EPS Growth (3-5 Years)	17.39%	4.27%	10.41%	22.47%	115.41%	-2.69%
Projected EPS Growth (F1/F0)	-23.10%	22.44%	-4.75%	35.17%	66.92%	-12.54%
Current Cash Flow Growth	21.54%	-3.39%	5.26%	12.71%	0.57%	-11.24%
Historical Cash Flow Growth (3-5 Years)	11.76%	2.34%	8.49%	7.98%	43.34%	0.07%
Current Ratio	0.97	0.98	1.35	3.47	0.52	0.71
Debt/Capital	55.83%	46.84%	42.95%	56.22%	68.09%	48.81%
Net Margin	10.91%	11.89%	10.25%	18.78%	4.85%	9.90%
Return on Equity	16.66%	1.72%	14.66%	24.87%	6.05%	11.14%
Sales/Assets	0.40	0.34	0.50	0.39	0.32	0.39
Projected Sales Growth (F1/F0)	-6.34%	0.00%	-1.40%	13.58%	4.53%	16.27%
Momentum Score	D	-	-	C	B	D
Daily Price Change	2.63%	1.56%	0.14%	1.85%	2.11%	0.24%
1-Week Price Change	0.54%	-0.21%	-1.87%	-3.83%	-0.41%	-4.96%
4-Week Price Change	6.71%	-0.03%	0.12%	-4.03%	1.94%	-4.71%
12-Week Price Change	18.52%	1.49%	7.05%	2.98%	19.48%	-6.88%
52-Week Price Change	-0.45%	-7.53%	1.26%	46.14%	46.43%	-7.25%
20-Day Average Volume (Shares)	14,749,968	169,105	1,845,558	34,187	851,905	2,145,110
EPS F1 Estimate 1-Week Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
EPS F1 Estimate 4-Week Change	-0.30%	0.00%	0.00%	0.00%	2.06%	0.00%
EPS F1 Estimate 12-Week Change	2.68%	5.65%	4.10%	9.76%	12.80%	27.28%
EPS Q1 Estimate Monthly Change	-2.09%	0.00%	0.00%	0.00%	1.47%	0.00%

Source: Zacks Investment Research

Zacks Stock Rating System

We offer two rating systems that take into account investors' holding horizons: Zacks Rank and Zacks Recommendation. Each provides valuable insights into the future profitability of the stock and can be used separately or in combination with each other depending on your investment style.

Zacks Recommendation

The Zacks Recommendation aims to predict performance over the next 6 to 12 months. The foundation for the quantitatively determined Zacks Recommendation is trends in the company's estimate revisions and earnings outlook. The Zacks Recommendation is broken down into 3 Levels; Outperform, Neutral and Underperform. Unlike many Wall Street firms, we maintain a balance between the number of Outperform and Neutral recommendations. Our team of 70 analysts are fully versed in the benefits of earnings estimate revisions and how that is harnessed through the Zacks quantitative rating system. But we have given our analysts the ability to override the Zacks Recommendation for the 1200 stocks that they follow. The reason for the analyst over-rides is that there are often factors such as valuation, industry conditions and management effectiveness that a trained investment professional can spot better than a quantitative model.

Zacks Rank

The Zacks Rank is our short-term rating system that is most effective over the one- to three-month holding horizon. The underlying driver for the quantitatively-determined Zacks Rank is the same as the Zacks Recommendation, and reflects trends in earnings estimate revisions.

Zacks Style Scores

The Zacks Style Score is as a complementary indicator to the Zacks rating system, giving investors a way to focus on the highest rated stocks that best fit their own stock picking preferences.

Academic research has proven that stocks with the best Value, Growth and Momentum characteristics outperform the market. The Zacks Style Scores rate stocks on each of these individual styles and assigns a rating of A, B, C, D and F. We also produce the VGM Score (V for Value, G for Growth and M for Momentum), which combines the weighted average of the individual Style Scores into one score. This is perfectly suited for those who want their stocks to have the best scores across the board.

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

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

Disclosures

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

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

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

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

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

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

Additional Disclosure

This material represents an assessment of the market and economic environment at a specific point in time and is not intended to be a forecast of future events, or a guarantee of future results. Forward-looking statements are subject to certain risks and uncertainties. Any statements that refer to expectations, projections or characterizations of future events or circumstances, including any underlying assumptions, are forward-looking statements. Actual results, performance, or achievements may differ materially from those expressed or implied.

Returns quoted represent past performance which is no guarantee of future results. Investment returns and principal value will fluctuate so that when shares are redeemed, they may be worth more or less than their original cost. Current performance may be higher or lower than the performance shown.

Investing involves risk; principal loss is possible. There is no guarantee that companies that can issue dividends will declare, continue to pay or increase dividends.

Glossary of Terms and Definitions

52-Week High-Low: The range of the highest and lowest prices at which a stock has traded during the past year. This range is determined based on the stock's daily closing price which may differ from the intra-day high or low. Many investors use it as a technical indicator to determine a stock's current value and future price movement. The idea here is that if price breaks out from the 52-week range, in either direction, the momentum may continue in the same direction.

20-Day Average Volume (Shares): The average number of shares of a company traded in a day over the last 20 days. It is a direct indication of a security's overall liquidity. The higher the average daily trading volume, the easier it is to enter or exit the stock at a desired price with more buyers and sellers being available.

Daily Price Change: This is the percentage difference between a trading day's closing price and the prior trading day's closing price. This item is updated at 9 p.m. EST each day.

1-Week Price Change: This is the percentage change in a stock's closing price over the last 5 trading days. This change reflects the collective buying and selling sentiment over the 1-week period.

A strong weekly price increase for the stock, especially when accompanied by increased volume, is an indication of it gaining momentum.

4-Week Price Change: This is the percentage change in a stock's closing price over the last 20 trading days or past 4 weeks. This is a medium-term price change metric and an indication of the stock gaining momentum.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Periods:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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