Facebook, Inc. (FB)

$296.52 (As of 04/22/21)

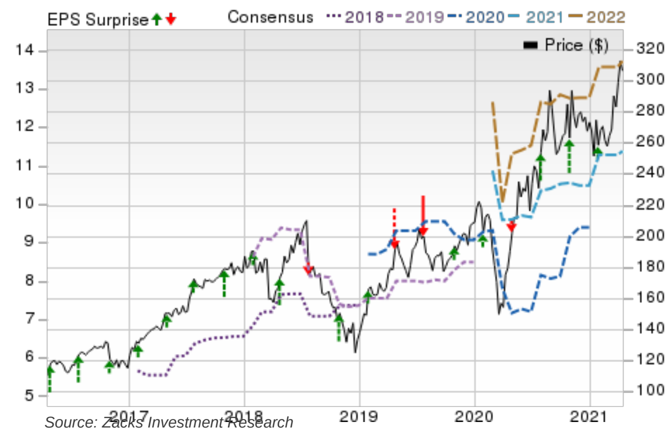
Price Target (6-12 Months): **$311.00**

Long Term: 6-12 Months	**Zacks Recommendation:** (Since: 03/22/21) Prior Recommendation: Outperform	**Neutral**
Short Term: 1-3 Months	**Zacks Rank:** (1-5) Zacks Style Scores: Value: C | Growth: B | Momentum: B	**3-Hold** VGM:B

Summary

Facebook is benefiting from steady user growth across all regions, particularly Asia Pacific. Increased engagement for its products like Instagram, WhatsApp and Messenger is a major growth driver. Strong advertising revenues were driven by a strong holiday shopping season for retail that benefited from the ongoing shift to online commerce. Facebook expects year-over-year growth rates in total revenues to remain stable or modestly accelerate on a sequential basis in the first and second quarters of 2021. However, the company expects changes made by Apple in its iOS 14 platform to limit the latter's ability to track user-activity trend. The company also believes that Apple has become its biggest competitor. Moreover, increasing regulatory headwinds in the EU and other countries is a concern. Shares have underperformed the industry year to date.

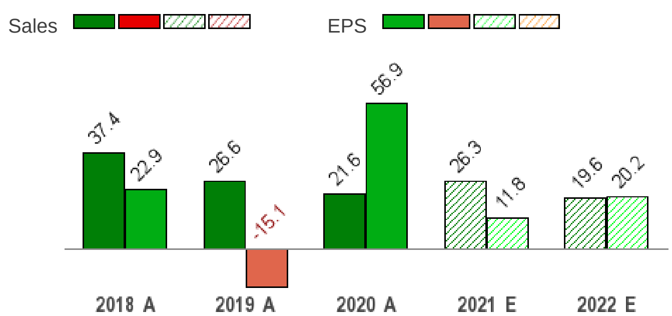
Price, Consensus & Surprise



Data Overview

52-Week High-Low	**$315.88 - $180.83**
20-Day Average Volume (Shares)	**16,589,669**
Market Cap	**$844.4 B**
Year-To-Date Price Change	**8.6%**
Beta	**1.28**
Dividend / Dividend Yield	**$0.00 / 0.0%**
Industry	**Internet - Services**
Zacks Industry Rank	**Bottom 26% (187 out of 254)**
Last EPS Surprise	**19.8%**
Last Sales Surprise	**6.2%**
EPS F1 Estimate 4-Week Change	**0.0%**
Expected Report Date	**04/28/2021**
Earnings ESP	**1.9%**
P/E TTM	**29.4**
P/E F1	**26.3**
PEG F1	**1.4**
P/S TTM	**9.8**

Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of $)

	Q1	Q2	Q3	Q4	Annual*
2022	28,244 E	29,790 E	31,896 E	40,844 E	129,938 E
2021	23,673 E	25,344 E	26,543 E	32,788 E	108,610 E
2020	17,737 A	18,687 A	21,470 A	28,072 A	85,965 A

EPS Estimates

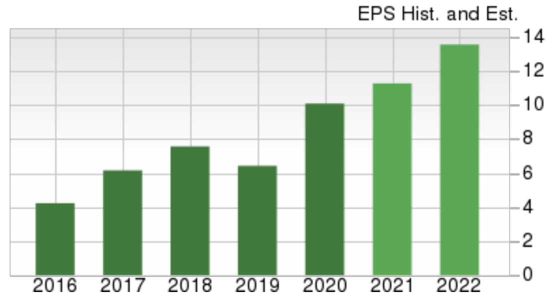
	Q1	Q2	Q3	Q4	Annual*
2022	$2.92 E	$2.91 E	$3.17 E	$4.70 E	$13.56 E
2021	$2.36 E	$2.48 E	$2.65 E	$3.77 E	$11.28 E
2020	$1.71 A	$1.80 A	$2.71 A	$3.88 A	$10.09 A

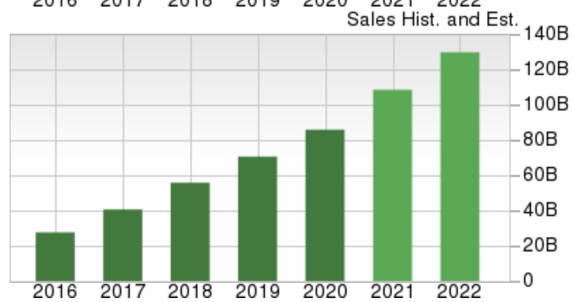
*Quarterly figures may not add up to annual.

The data in the charts and tables, including the Zacks Consensus EPS and sales estimates, is as of 04/22/2021. The report's text and the analyst-provided price target are as of 04/23/2021.

Overview

Facebook Inc. is the world's largest social media platform. The company's portfolio offering evolved from a single Facebook app to multiple apps like photo and video sharing app Instagram and WhatsApp messaging app owing to acquisitions. Along with in-house developed Messenger, these apps now form Facebook's family of products used by almost 3.30 billion people on a monthly basis as of Dec 31, 2020.





Facebook uses metrics like daily active users (DAUs) and monthly active users (MAUs) to measure its user base. As of Dec 31, 2020, DAUs and MAUs were 1.84 billion and 2.80 billion, respectively. Newly introduced metric, which is the family daily active people (DAP) that measures daily users of its family of products, was 2.60 billion.

Headquartered in Menlo Park, CA, Facebook generated revenues worth $85.97 billion in 2020. Advertisement accounted for 98% of revenues. Marketers buy ads that can appear on multiple platforms including Facebook, Instagram, Messenger and third-party applications and websites.

Facebook, thanks to its huge user base gained a significant market share in the advertising space wherein it faces tough competition from Google, Twitter, Amazon and Snapchat-parent Snap.

Facebook also faces significant competition from the likes of Apple (messaging), YouTube (advertising and video), Bytedance (social media) and Tencent (messaging and social media).

Facebook core app enables people to connect, share, discover and communicate with one other on mobile devices and personal computers. User engagement on core Facebook platform is fostered by News Feed that displays an algorithmically-ranked series of stories and advertisements customized for each user.

Instagram is a community for sharing photos, videos and messages, enabling people to discover interests that they care about. People can express themselves through photos, videos and private messaging via Instagram Feed and Stories.

Messenger helps people to connect with friends, family, groups and businesses across platforms and devices. WhatsApp is a simple, reliable and secure messaging application, used by people and businesses around the world to communicate in a private way.

Facebook also offers virtual reality (VR) products through its Oculus division.

Source: Zacks Investment Research

Reasons To Buy:

> Facebook benefits from increasing mobile ad revenues, growing adoption of Stories by advertisers across Instagram, core Facebook app and Messenger, and initiatives to improve security.

- Facebook continues to witness significant traction in online and mobile advertising spending. The company intends to capture the opportunity presented by ever-increasing video viewing on social media platforms. Online video is the most lucrative component of digital advertising. As video ads generate more revenues than its photo and text-based substitutes, Facebook is trying to incorporate more and more video-oriented content to bring in more ad dollars. The company launched Watch, a dedicated tab for video viewing, to achieve its goal.

- Instagram has emerged as an important cash cow for Facebook after introducing its ad platform to worldwide advertisers. To attract more advertisers (over 3 million and counting), Facebook has unveiled tools to promote posts and evaluate business performance directly on Instagram. Moreover, the Facebook is also looking for ways to monetize Instagram Stories, and adding the Checkout feature to the platform is a step toward that direction. The feature allows Instagram users to browse and purchase products from 23 top brands in the United States, all within Facebook's app. Further, solid adoption of the Explore tab, which is used by more than 50% of Instagram users every month, increases the platform's monetization opportunities. Recently, the company started placing ads on the Explore tab that is expected to drive the top line.

- Messenger and WhatsApp are the other extremely prized possessions. Facebook is aggressively working on monetizing the opportunities presented by its subsidiaries. The company is pretty excited as it opened the Messenger app, which has more than 1 billion users, to developers for creating chatbots that would enable businesses to extend customer service and other transactions. Facebook is rewriting the app from scratch to make it the fastest and most secure major messaging platform in the world. It is also working to bring end-to-end encryption and ephemerality to boost user experience.

- Ephemerality and end-to-end encryption are also driving popularity of WhatsApp. Per the company, WhatsApp Status is the most popular ephemeral Stories product in the world. Facebook continues to promote WhatsApp business as a private way of interaction between businesses and customers. Rapid adoption of WhatsApp Business by small and mid-sized businesses is noteworthy. The company is building new tools like product catalogs that entrepreneurs can use for free to attract prospective customers. Moreover, increased communication enhances chances of Facebook penetrating the lucrative payments market. The company continues to test the payments feature on WhatsApp in India and intend to launch the same in other countries soon.

- Oculus is the result of the company's ambitious augmented reality/virtual reality (AR/VR) efforts. AR/VR technology is fast emerging as a lucrative business opportunity. Plus, Facebook said it will be spending over $3 billion in the next 10 years on VR. The company is investing heavily to develop VR content ecosystem. Launch of VR headset, Rift and Oculus Quest, its first all-in-one headset with no wires and full freedom of movement are a step forward to that goal. On Sep 16, Facebook introduced Quest 2, its next-generation VR device starting at $299. The company also announced a multi-year partnership with Rayban-parent EssilorLuxottica. The two companies, in collaboration, will release a pair of Ray-Ban branded smart glasses in 2021. Facebook also unveiled Project Aria that will help it develop the first generation of wearable AR devices.

- Facebook is considered to have pioneered the concept of social networking, which is why it enjoys a first mover's advantage in this market. However, as developed regions mature, Facebook has taken measures to drive penetration in emerging markets of South East Asia, Latin America and Africa. Of all places, India deserves special mention in terms of user growth. The world's second largest populated country offers tremendous potential for the company. With China off the radar, India can prove to be a terrific growth engine for Facebook. This is primarily due to a burgeoning well-educated middle class, increasing spending power and rapid adoption of smartphones in the country. Facebook's investment in with Reliance Jio is a step towards gaining significant footprint in the country.

- Facebook has a strong balance sheet and generates significant cash flow, which makes it an attractive stock for investors.As of Dec 30, 2020, cash & cash equivalents and marketable securities were $61.95 billion compared with $55.64 billion as of Sep 30, 2020. The company continues to invest in developing its platform and products. We believe that its ability to generate strong cash flows will help it to make further investments in product development and acquisitions in the future.

Reasons To Sell:

> Stiff competition for ad dollars, a plethora of controversies over the company's treatment of user data and increasing regulations related to user privacy are key concerns.

- Facebook maintains a cautious stance on revenue growth due to the coronavirus-related headwinds. The company expects ad-sales to be hurt by weakness in the travel and automotive industries. Further, a number of companies including Starbucks, Coca Cola, Verizon among others have announced plans to freeze ad spending on the social media platform due to its failure to eradicate hate speech and misinformation. This is expected to hurt top-line growth, at least in the near term.

- Moreover, Facebook's focus on Stories, which generates lower revenues than News Feed, is a headwind. Further, as the company continues to ramp up investments on products (Video, AR/VR and AI) as well as security, costs are already on the rise. Facebook is already on a hiring spree, especially engineers and people involved in maintaining safety and security. This is expected to hurt profitability..

- Facebook currently faces stiff competition from other big and small social media players. In the ad space, we believe that Google continues to have a significant competitive edge, owing to its scale and diversified product offerings. YouTube, Snapchat and Pinterest offer tough competition as far as user growth is concerned. Moreover, Amazon's ad business is growing rapidly. Intensifying competition for ad dollar is a major concern for the company.

- As Facebook hosts a huge amount of personal data, it has been under constant scrutiny from privacy groups and federal agencies. This huge database is its primary asset for attracting advertisers. As a result, the company has been criticized for allegedly selling personal data to advertisers in order to boost its top line. Facebook also finds itself increasingly at loggerheads with authorities across different countries like Israel, who accuse the social media giant of repeatedly failing to co-operate with them on extremely sensitive matters. The Cambridge Analytica data fiasco sparked broader concerns about data privacy and security which led to increased scrutiny over data security and a relatively heavy regulatory pressure from all corners on Facebook.

- Moreover, Facebook is facing increased legal woes. Although it successfully settled the FTC inquiry, it paid a penalty of $5 billion. Notably, the company is being investigated by International Trade Commission (ITC) for violation of antirust principles. Moreover, it is also facing antitrust investigation from FTC. Furthermore, the company received significant backlash post the announcement of blockchain-based cryptocurrency, Libra, on Jun 18, 2019. These are major concerns for the company, at least in the near term.

- Although Facebook has significant growth opportunities in the emerging countries of South-East Asia and Africa, low internet penetration in these regions may negatively affect its expansion. Further, while the company can be accessed from Hong Kong, its usage has been restricted in mainland China due to excessive government regulations and censorship. This limits its growth opportunities in the Asian region (Facebook's fastest growing user base in terms of geography). The company is experiencing better growth in international markets than in the U.S. However, ARPU is significantly low in these regions compared with the U.S.

Last Earnings Report

Facebook's Q4 Earnings Beat Estimates, Revenues Up Y/Y

Quarter Ending	12/2020
Report Date	Jan 27, 2021
Sales Surprise	6.22%
EPS Surprise	19.75%
Quarterly EPS	3.88
Annual EPS (TTM)	10.10

Facebook's fourth-quarter 2020 earnings of $3.88 per share beat the Zacks Consensus Estimate by 19.8% and surged 51.6% year over year.

Revenues of $28.07 billion comfortably surpassed the Zacks Consensus Estimate by 6.2% and also rose 33.2% year over year. At constant currency (cc), the top line improved 32%.

Geographically, Asia-Pacific, Europe, the United States & Canada, and Rest of World (RoW) revenues grew 30.8%, 35.9%, 34% and 26.1%, on a year-over-year basis, respectively.

Average Revenue per User (ARPU) in Europe, the United States & Canada, Asia-Pacific and RoW grew 27.7%, 29.3%, 13.4% and 11.7% on a year-over-year basis, respectively.

Advertising Revenue Growth Strong

Facebook's fourth-quarter advertising revenues increased 31.1% year over year (21% at cc) to $27.19 billion. The robust year-over-year growth was driven by a strong holiday shopping season for retail that benefited from the ongoing shift to online commerce.

Meanwhile, Facebook's Asia-Pacific, Europe, the United States & Canada and ROW advertising revenues grew 29.1%, 34.5%, 31.2% and 25.5%, on a year-over-year basis, respectively.

Ad impressions served rose 25% and the average price per ad increased 5% from the year-ago quarter.

User Base Continues to Expand

Monthly active users (MAUs) were 2.740 billion, up 11.9% year over year. Daily Active Users (DAUs) were 1.845 billion, which increased 11.3% year over year and represented 66% of MAUs.

Family Daily Active People (DAP), defined as a registered and logged-in user who visited at least one of the Family products (Facebook, Instagram, Messenger and/or WhatsApp) on a given day, were 2.60 billion, up 15% year over year.

Family Monthly Active People (MAP) increased 14.2% year over year to 3.30 billion.

Asia-Pacific DAUs were up 16.1% year over year to 744 million. DAUs in the RoW, Europe, and the United States & Canada grew 12.4%, 4.8% and 2.6% to 598 million, 308 million and 195 million, respectively.

MAUs in Asia-Pacific, RoW, Europe, and the United States & Canada grew 15.5%, 12.7%, 6.3% and 4% to 1.20 billion, 921 million, 419 million and 258 million, respectively..

Quarter Details

Other revenues surged 155.8% year over year to $885 million, driven by strong Quest 2 holiday sales.

In the fourth quarter, total costs and expenses increased 25.1% year over year to $15.30 billion. Moreover, as percentage of revenues, total costs and expenses were 54.5%, down 350 basis points (bps) year over year.

As percentage of revenues, marketing & sales (M&S), and general & administrative expenses (G&A) decreased 270 bps and 300 bps, on a year-over-year basis, respectively. However, research & development (R&D) increased 20 bps from the year-ago quarter.

R&D expenses increased due to hiring and investments in core products as well as Facebook's consumer hardware efforts.

Notably, Facebook's employee base was 58,604 at the end of the fourth quarter, up 30% year over year.

Operating income of $12.78 billion increased 44.2% year over year. Operating margin expanded 350 bps year over year to 45.5%.

Balance Sheet & Cash Flow

As of Dec 30, 2020, cash & cash equivalents and marketable securities were $61.95 billion compared with $55.62 billion as of Sep 30, 2020.

Capital expenditures increased 13.6% year over year to $4.82 billion. Free cash flow surged 90.5% year over year to $9.22 billion in the reported quarter.

Guidance

Facebook expects year-over-year growth rates in total revenues to remain stable or modestly accelerate on a sequential basis in the first and second quarters of 2021.

Facebook expects changes made by Apple in its iOS 14 platform to limit the former's ability to track user-activity trend. The company also believes that Apple has become its biggest competitor.

Additionally, Facebook expects total expenses for the current year between $68 billion and $73 billion.

Moreover, in the ongoing year, Facebook expects capital expenditures between $21 billion and $23 billion, driven by higher spending on data centers, servers, network infrastructure and office facilities.

Recent News

On Apr 7, Facebook announced that it is adding Zoom and GoToMeeting to Portal TV, after it bought support for BlueJeans, GoToMeeting, Webex, and Zoom on Portal Mini, Portal, and Portal+, last year.

On Mar 16, Facebook announced the launch of corporate human rights policy and a fund to support human rights defenders.

On Mar 16, Facebook announced plethora of new updates and features aimed at keeping its young users safe. In the United States, the company has collaborated with The Child Mind Institute and ConnectSafely to publish a new Parents Guide. Moreover, to protect teens from unwanted contact from adults, the company is launching a new feature that prevents adults from sending messages to people under 18 who don't follow them.

On Mar 15, Facebook announced the launch of a global campaign to help bring 50 million people a step closer of getting Covid-19 vaccines. The company is working on tools to make it easier for everyone to get vaccinated.

On Mar 10, Facebook filed motions to dismiss the antitrust lawsuits brought by the Federal Trade Commission and state attorneys general.

On Jan 25, Facebook announced the launch Facebook News in the United Kingdom. The company also announced a number of new partners for Facebook News, including Channel 4 News, Daily Mail Group, DC Thomson, Financial Times, Sky News and Telegraph Media Group.

Valuation

Facebook shares are up 8.5% in the year-to-date period and 56% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Computer & Technology sector are up 19.8% and 12.1% in the year-to-date period, respectively. Over the past year, the Zacks sub-industry and the sector are up 66% and 65.8%, respectively.

The S&P 500 Index is up 12% in the year-to-date period and 50% in the past year.

The stock is currently trading at 24.5X forward 12-month earnings, which compares to 31.44X for the Zacks sub-industry, 29.25X for the Zacks sector and 23.01X for the S&P 500 index.

Over the past five years, the stock has traded as high as 43.06X and as low as 15.18X, with a 5-year median of 25.39X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our $311 price target reflects 25.73X forward 12-month earnings.

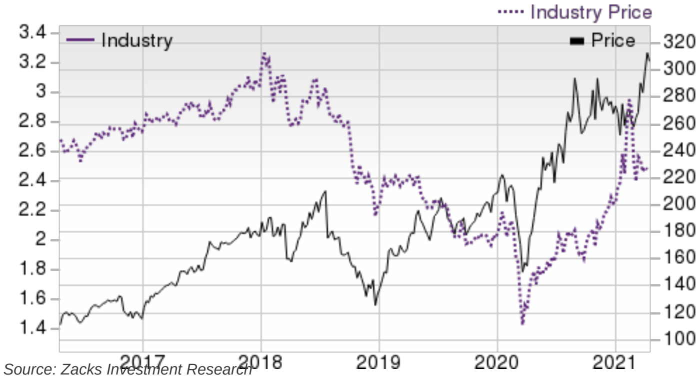
The table below shows summary valuation data for FB

Valuation Multiples - FB

		Stock	Sub-Industry	Sector	S&P 500
P/E F12M	Current	24.5	31.44	29.25	23.01
	5-Year High	43.06	39.06	29.25	23.83
	5-Year Low	15.18	22.09	16.95	15.30
	5-Year Median	25.39	31.44	20.09	18.01
P/S F12M	Current	7.35	7.69	5.00	4.81
	5-Year High	13.32	15.12	5.00	4.81
	5-Year Low	4.68	5.28	2.8	3.21
	5-Year Median	7.92	7.43	3.5	3.71
EV/Sales TTM	Current	9.1	8.99	5.78	4.99
	5-Year High	16.33	12.36	5.79	4.99
	5-Year Low	5.11	4.52	3.08	2.64
	5-Year Median	9.34	7.78	3.97	3.62

As of 04/22/2021 *Source: Zacks Investment Research*

Industry Analysis Zacks Industry Rank: Bottom 26% (187 out of 254)



Source: Zacks Investment Research

Top Peers

Company (Ticker)	Rec	Rank
Amazon.com, Inc. **(AMZN)**	Neutral	3
Activision Blizzard, Inc **(ATVI)**	Neutral	3
Baidu, Inc. **(BIDU)**	Neutral	4
Electronic Arts Inc. **(EA)**	Neutral	3
Microsoft Corporation **(MSFT)**	Neutral	2
Netflix, Inc. **(NFLX)**	Neutral	3
TakeTwo Interactive Software, Inc. **(TTWO)**	Neutral	3
Twitter, Inc. **(TWTR)**	Underperform	3

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

Industry Comparison Industry: Internet - Services

	FB	X Industry	S&P 500	BIDU	MSFT	TWTR
				Industry Peers		
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Underperform
Zacks Rank (Short Term)	3	-	-	4	2	3
VGM Score	B	-	-	B	F	D
Market Cap	844.39 B	718.22 M	30.25 B	72.01 B	1,939.63 B	51.36 B
# of Analysts	16	3	12	3	16	13
Dividend Yield	0.00%	0.00%	1.26%	0.00%	0.87%	0.00%
Value Score	C	-	-	B	F	D
Cash/Price	0.07	0.12	0.06	0.35	0.07	0.13
EV/EBITDA	19.54	1.11	17.17	7.51	27.22	66.48
PEG F1	1.38	1.84	2.40	NA	2.71	NA
P/B	6.58	4.04	4.12	2.53	14.89	6.42
P/CF	23.45	18.80	17.25	10.67	34.10	NA
P/E F1	26.29	29.17	22.18	20.68	34.90	72.07
P/S TTM	9.82	4.38	3.37	4.60	12.65	13.82
Earnings Yield	3.80%	0.14%	4.43%	4.84%	2.87%	1.38%
Debt/Equity	0.00	0.09	0.66	0.32	0.42	0.32
Cash Flow ($/share)	12.65	0.02	6.78	20.10	7.54	-0.55
Growth Score	B	-	-	B	C	C
Historical EPS Growth (3-5 Years)	31.67%	20.71%	9.39%	9.58%	21.45%	NA
Projected EPS Growth (F1/F0)	11.75%	23.34%	16.46%	5.89%	27.94%	202.56%
Current Cash Flow Growth	48.63%	-1.96%	0.72%	48.11%	17.66%	-120.57%
Historical Cash Flow Growth (3-5 Years)	42.26%	20.90%	7.37%	2.36%	10.19%	NA
Current Ratio	5.05	1.82	1.39	2.68	2.58	4.42
Debt/Capital	0.00%	10.52%	41.19%	25.16%	29.74%	24.38%
Net Margin	33.90%	-7.87%	11.06%	21.21%	33.47%	-26.52%
Return on Equity	25.25%	-2.36%	15.32%	10.10%	42.19%	-11.32%
Sales/Assets	0.59	0.50	0.51	0.34	0.51	0.28
Projected Sales Growth (F1/F0)	26.34%	13.79%	7.53%	24.34%	14.33%	29.45%
Momentum Score	B	-	-	D	D	D
Daily Price Change	-1.64%	0.00%	-0.64%	-0.04%	-1.31%	-4.49%
1-Week Price Change	-2.01%	0.00%	1.43%	-2.78%	1.91%	-1.50%
4-Week Price Change	6.38%	0.00%	4.90%	4.88%	10.69%	5.08%
12-Week Price Change	11.89%	3.30%	13.18%	-12.38%	7.63%	24.70%
52-Week Price Change	60.17%	78.94%	57.63%	114.88%	50.02%	130.83%
20-Day Average Volume (Shares)	16,589,669	341,040	1,772,423	17,969,276	24,855,352	14,069,810
EPS F1 Estimate 1-Week Change	0.61%	0.00%	0.00%	0.00%	0.00%	4.71%
EPS F1 Estimate 4-Week Change	0.01%	0.00%	0.09%	0.00%	0.00%	-0.28%
EPS F1 Estimate 12-Week Change	7.18%	0.00%	1.97%	-10.39%	9.53%	-23.44%
EPS Q1 Estimate Monthly Change	-1.17%	0.00%	0.00%	0.00%	0.00%	-25.00%

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	C
Growth Score	B
Momentum Score	B
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.

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 forwardlooking 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 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 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 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 long-term debt + book value of preferred shares - cash and marketable securities) divided by the trailing-12-month (TTM) operating cash flow. It's a measure of how long it would take to buy the entire business if you were able to use all the company's operating cash flow.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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