

Facebook, Inc. (FB)

\$264.65 (As of 10/05/20)

Price Target (6-12 Months): **\$278.00**

Long Term: 6-12 Months

Zacks Recommendation:
Neutral

(Since: 04/04/19)

Prior Recommendation: Underperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

3-Hold

Zacks Style Scores:

VGM:B

Value: C

Growth: B

Momentum: C

Summary

Facebook is benefiting from steady user growth across all regions, particularly Asia Pacific. The coronavirus-led lockdowns and shelter-at-place guidelines have increased engagement of its products like Instagram, WhatsApp, Messenger and Facebook Watch. Shares have outperformed the industry year to date. However, Facebook expects user-base growth to be flat or slightly down in most of its regions in the third quarter of 2020, sequentially. The company expects ad-revenue growth on a year-over-year basis to be roughly 10%. Facebook assumes some of the recent surge in community engagement to normalize as regions reopen. Further, a number of companies have announced plans to freeze ad spending on Facebook due to its failure to eradicate hate speech and misinformation. This is expected to hurt top-line growth, at least in the near term.

Price, Consensus & Surprise

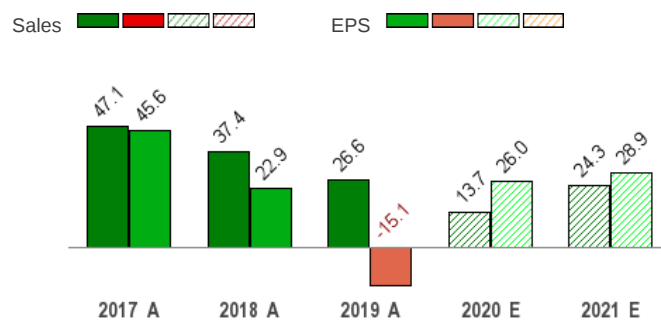


Source: Zacks Investment Research

Data Overview

52-Week High-Low	\$304.67 - \$137.10
20-Day Average Volume (Shares)	22,204,380
Market Cap	\$753.9 B
Year-To-Date Price Change	28.9%
Beta	1.29
Dividend / Dividend Yield	\$0.00 / 0.0%
Industry	Internet - Services
Zacks Industry Rank	Top 48% (121 out of 252)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	25.0%
Last Sales Surprise	8.1%
EPS F1 Estimate 4-Week Change	0.5%
Expected Report Date	10/29/2020
Earnings ESP	4.9%
P/E TTM	32.3
P/E F1	32.7
PEG F1	1.7
P/S TTM	10.0

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	21,821 E	24,119 E	24,963 E	29,203 E	99,916 E
2020	17,737 A	18,687 A	19,717 E	24,148 E	80,366 E
2019	15,077 A	16,886 A	17,652 A	21,082 A	70,697 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$2.10 E	\$2.36 E	\$2.49 E	\$3.26 E	\$10.44 E
2020	\$1.71 A	\$1.80 A	\$1.91 E	\$2.63 E	\$8.10 E
2019	\$0.85 A	\$0.91 A	\$2.12 A	\$2.56 A	\$6.43 A

*Quarterly figures may not add up to annual.

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 10/05/2020. The reports text is as of 10/06/2020.

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 billion people on a monthly basis as of Mar 31, 2020.

Facebook uses metrics like daily active users (DAUs) and monthly active users (MAUs) to measure its user base. As of Mar 31, 2020, DAUs and MAUs were 1.734 billion and 2.603 billion, respectively. Newly introduced metric, which is the family daily active people (DAP) that measures daily users of its family of products, was 2.36 billion.

Headquartered in Menlo Park, CA, Facebook generated revenues worth \$70.70 billion in 2019. Advertisement accounted for 98.5% 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.

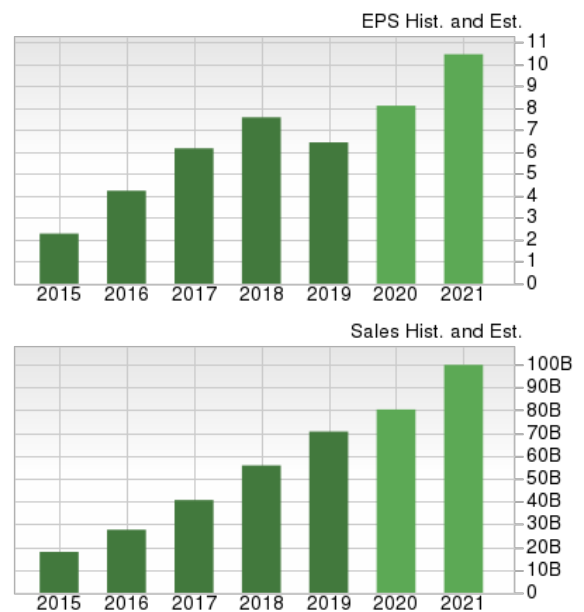
Facebook also faces significant competition from the likes of Apple (messaging), YouTube (advertising and video), Bytedance (social media) and Tencent (messaging and social media).

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 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 Mar 31, 2020, cash & cash equivalents and marketable securities were \$60.29 billion compared with \$54.86 billion as of Dec 31, 2019. Moreover, free cash flow surged 37.4% year over year to \$7.34 billion in first-quarter 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.

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.

Reasons To Sell:

- ▼ 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 antitrust 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.

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.

Last Earnings Report

Facebook's Q2 Earnings Beat Estimates, Revenues Up Y/Y

Facebook's second-quarter 2020 earnings of \$1.80 per share beat the Zacks Consensus Estimate by 25% and soared 97.8% year over year.

Revenues of \$18.69 billion comfortably surpassed the Zacks Consensus Estimate by 8.1% and also rose 10.7% year over year. At constant currency (cc), the top line improved 12%.

Geographically, the United States & Canada was the strongest region as revenues grew 14.5% year over year followed by the Asia-Pacific's 10.9% and Europe's 9.6%. However, Rest of World (RoW) revenues declined 5.9% year over year.

Average Revenue per User (ARPU) growth was highest in the United States & Canada, increasing 9.7% year over year followed by Europe's 3.1%. However, ARPU in the Asia-Pacific and RoW fell 1.6% and 5.3%, respectively. Worldwide ARPU stayed at \$7.05.

Facebook's second-quarter advertising revenues were better than anticipated, and grew handsomely when compared to its closest peers—Alphabet's Google and Twitter. Facebook's ad revenues increased 10.2% year over year (12% at cc) to \$18.32 billion.

Notably, Google, Facebook's primary competitor for ad dollars, announced second-quarter ad revenues of \$29.87 billion, down 8% year over year. Further, Twitter's second-quarter advertising revenues declined 23% to \$561.9 million.

Facebook didn't provide any specific revenue guidance for the third quarter of 2020 due to macro-economic uncertainties related to coronavirus.

User Base Expands in Q2

Monthly active users (MAUs) were 2.701 billion, up 11.9% year over year. Daily Active Users (DAUs) were 1.785 billion, which increased 12.5% 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 2.47 billion, up 15.4% year over year.

Family Monthly Active People (MAP) increased 13.8% year over year to 3.14 billion.

The above community metrics reflected increased engagement with Facebook products during the reported quarter as more and more people were compelled to stay at home due to the coronavirus outbreak.

Asia-Pacific DAUs were up 13.7% year over year to 699 million. DAUs in the RoW, Europe and the United States & Canada grew 16.8%, 6.6% and 5.9% each to 583 million, 305 million and 198 million, respectively.

MAUs in Asia-Pacific, RoW, Europe and the United States & Canada grew 13.9%, 14.1%, 6.5% and 4.9% each to 1.14 billion, 892 million, 410 million and 256 million, respectively.

Advertising Revenue Details

Asia-Pacific and the United States & Canada were the strongest regions, increasing 11% and 13.9%, respectively. Advertising revenues in Europe grew 9.1% year over year. However, RoW advertising revenues decreased 6.4%.

Ad impressions served rose 40%, driven by Facebook Mobile News Feed. However, average price per ad decreased 21% from the year-ago quarter.

Other revenues surged 39.7% year over year to \$366 million. This growth is primarily attributable to higher sales of Oculus and Portal products.

Operating Details

In the second quarter, total costs and expenses climbed 3.8% year over year to \$12.72 billion. However, as percentage of revenues, total costs and expenses were 68.1%, down 450 basis points (bps) year over year.

As percentage of revenues, research & development, and marketing & sales expenses increased 420 bps and 90 bps, on a year-over-year basis, respectively.

However, as percentage of revenues, general & administrative expenses decreased to 8.5% from 19.1% reported in the year-ago quarter.

Notably, Facebook's employee base was 52,534 at the end of the second quarter, up 32% year over year.

Operating income of \$5.96 billion jumped 28.9% year over year. Operating margin expanded 450 bps year over year to 31.9%.

Balance Sheet & Cash Flow

As of Jun 30, 2020, cash & cash equivalents and marketable securities were \$58.24 billion compared with \$60.29 billion as of Mar 31, 2020.

Capital expenditures declined 10.9% year over year to \$3.36 billion. Free cash flow plunged 89.4% year over year to \$514 million in the reported quarter.

Quarter Ending	06/2020
Report Date	Jul 30, 2020
Sales Surprise	8.08%
EPS Surprise	25.00%
Quarterly EPS	1.80
Annual EPS (TTM)	8.19

Facebook bought back shares worth almost \$1.4 billion in the reported quarter.

Guidance

Facebook expects DAUs and MAUs to be flat or slightly down in most of its regions in the third quarter of 2020, sequentially.

The company expects ad-revenue growth on a year-over-year basis to be roughly 10%. Facebook assumes some of the recent surge in community engagement to normalize as regions reopens.

Further, a number of companies including Starbucks, Coca Cola and Verizon among others have announced plans to freeze ad spending on the social media platform. This is expected to hurt ad-sales growth.

Moreover, changes made by Apple and Google in their mobile operating systems and browser platforms have limited Facebook's ability to track user-activity trend.

Additionally, it expects total expenses for the current year between \$52 billion and \$55 billion, narrowed down from the prior range of \$52-\$56 billion.

Moreover, in the ongoing year, Facebook expects capital expenditures to be \$16 billion.

Recent News

On Sep 17, Facebook announced that it will no longer show health groups in recommendations. However, people can still invite friends to health groups or search for them.

Facebook also introduced Facebook Business Suite that allows businesses to post to Facebook and Instagram at the same time, and manage and receive messages, notifications and alerts in one place.

On Sep 16, Facebook introduced Quest 2, its next-generation VR device starting at \$299. The device will start shipping from Oct 13.

Facebook 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.

The company also unveiled Project Aria that will help Facebook develop the first generation of wearable augmented-reality devices.

On Sep 10, Facebook launched Facebook Campus, a college-only platform designed to help students connect with fellow classmates over shared interests.

On Sep 3, Facebook CEO Mark Zuckerberg announced that the social-media platform will not accept new political ads in the week before the election. The company will also remove posts that claim that people will get COVID-19 if they take part in voting.

Moreover, Facebook introduced a forwarding limit on Messenger which allows messages to be forwarded to five people or groups at a time.

The company also announced that users can now transfer Facebook photos and videos directly to two additional services - Dropbox and Koofr - using its latest data-portability tool.

On Aug 25, Facebook announced that it has renamed its AR/VR team as Facebook Reality Labs. The team works on several products including Oculus, Portal and Spark AR. The company also announced that its annual conference, Facebook Connect (formerly Oculus Connect), will be held virtually on Sep 16.

On Aug 20, Facebook announced that it has submitted official comments to the Federal Trade Commission ahead of its Sep 22 public workshop "to examine the potential benefits and challenges to consumers and competition raised by data portability." The company believes data portability can give people control and choice, while also fostering innovation.

On Aug 19, Facebook announced partnerships with BlueJeans, GoToMeeting, Webex and Zoom to offer even more video-conferencing apps to Portal users. These apps will be available on Portal Mini, Portal and Portal+ in September, with plans to add support for Portal TV in the future.

On Aug 14, Facebook launched a feature called paid online events that enables businesses, creators, educators and media publishers to set up paid events or classes online and keep 100% revenues — except on Apple's iOS, where event hosts must give up the 30% App-Store tax.

On Aug 5, Facebook announced Instagram Reels that helps users to create and discover short, entertaining videos on Instagram.

On Jul 31, Facebook announced that it is bringing official music videos to the platform in the United States. Users can now discover, watch and share music videos not only from top artists but also from up-and-coming bands and classics across various music genres on Facebook.

On Jul 22, Facebook announced new privacy and security features related to Messenger. App Lock lets users add another layer of security to its private messages and helps prevent other people from accessing them.

On Jul 20, Facebook announced that it will ask for permission to use certain types of data, such as data with special protections under Brazil's new data protection law, LGPD. The company is also adding a new Brazil privacy notice to its data policies on Facebook and Instagram.

On Jul 1, Facebook announced new WhatsApp features including Animated Stickers, QR codes and Dark mode for WhatsApp web and desktop. The company also announced improvements to group video calls. Moreover, Facebook introduced Status for KaiOS users.

On Jun 30, Facebook announced that original news reporting and stories with transparent authorship will get priority in News Feed.

On Jun 26, Facebook announced that it will soon start labeling all harmful posts including political content, which it used to leave despite violating its policies, because of newsworthiness.

On Jun 25, Facebook began to roll-out a notification screen that will inform people if the news articles they are about to share are more than 90 days old.

On Jun 18, Facebook reportedly acquired mapping technology provider Mapillary.

Valuation

Facebook shares increased 28.9% in the year-to-date period and 47.2% over the trailing 12-month period. Stocks in the Zacks sub-industry and

the Zacks Computer & Technology sector are up 16.6% and 21.2% in the year-to-date period, respectively. Over the past year, the Zacks sub-industry and the sector are up 28.4% and 38.2%, respectively.

The S&P 500 Index is up 4% in the year-to-date period and 16.1% in the past year.

The stock is currently trading at 26.76X forward 12-month earnings, which compares to 28.51X for the Zacks sub-industry, 26.01X for the Zacks sector and 21.89X for the S&P 500 index.

Over the past five years, the stock has traded as high as 56.45X and as low as 15.18X, with a 5-year median of 27.1X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$278 price target reflects 28.10X 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	26.76	28.51	26.01	21.89
	5-Year High	56.45	43.63	28	23.47
	5-Year Low	15.18	22.21	16.95	15.27
	5-Year Median	27.1	32.92	19.95	17.7
P/S F12M	Current	7.91	6.28	4.07	4.02
	5-Year High	13.65	14.87	4.48	4.3
	5-Year Low	4.68	5.08	2.77	3.18
	5-Year Median	8.97	7.78	3.44	3.67
EV/Sales TTM	Current	9.26	6.8	4.77	3.84
	5-Year High	18.25	13.67	5.22	4.15
	5-Year Low	5.11	4.36	2.85	2.61
	5-Year Median	11.56	8.24	3.82	3.57

As of 10/05/2020

Source: Zacks Investment Research

Industry Analysis Zacks Industry Rank: Top 48% (121 out of 252)



Top Peers

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

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

Industry Comparison Industry: Internet - Services				Industry Peers		
	FB	X Industry	S&P 500	BIDU	MSFT	TWTR
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	3	-	-	3	4	4
VGM Score	B	-	-	C	B	F
Market Cap	753.94 B	725.83 M	23.68 B	43.12 B	1,592.08 B	37.42 B
# of Analysts	13	3	14	3	15	9
Dividend Yield	0.00%	0.00%	1.64%	0.00%	0.97%	0.00%
Value Score	C	-	-	C	D	D
Cash/Price	0.08	0.15	0.07	0.51	0.09	0.21
EV/EBITDA	22.77	1.14	13.45	9.50	22.14	29.88
PEG F1	1.72	2.04	2.88	-8.74	2.40	NA
P/B	6.83	3.34	3.39	1.79	13.46	4.89
P/CF	31.16	15.74	13.14	9.32	27.89	17.16
P/E F1	32.67	37.99	21.79	17.48	32.92	NA
P/S TTM	10.03	2.55	2.55	2.89	11.13	11.26
Earnings Yield	3.06%	0.39%	4.42%	5.72%	3.04%	-1.94%
Debt/Equity	0.00	0.13	0.70	0.35	0.50	0.45
Cash Flow (\$/share)	8.49	0.06	6.92	13.39	7.54	2.76
Growth Score	B	-	-	C	A	D
Historical EPS Growth (3-5 Years)	42.58%	15.57%	10.45%	8.61%	19.44%	NA
Projected EPS Growth (F1/F0)	25.96%	0.94%	-2.97%	-4.64%	10.95%	-138.87%
Current Cash Flow Growth	-8.33%	-2.71%	5.47%	-9.22%	17.66%	123.58%
Historical Cash Flow Growth (3-5 Years)	38.21%	19.91%	8.50%	10.85%	10.19%	55.36%
Current Ratio	6.02	1.78	1.35	2.85	2.52	10.10
Debt/Capital	0.00%	15.77%	42.90%	26.16%	33.49%	30.92%
Net Margin	31.29%	-7.80%	10.28%	3.56%	30.96%	-32.54%
Return on Equity	22.90%	-1.82%	14.79%	9.55%	39.45%	-12.17%
Sales/Assets	0.56	0.59	0.51	0.35	0.50	0.26
Projected Sales Growth (F1/F0)	13.68%	0.00%	-0.79%	-2.71%	8.56%	-5.26%
Momentum Score	C	-	-	F	B	C
Daily Price Change	1.81%	0.00%	1.71%	0.06%	2.03%	2.58%
1-Week Price Change	2.01%	2.04%	2.13%	0.67%	-0.78%	5.20%
4-Week Price Change	-6.39%	1.49%	0.26%	1.49%	-1.81%	18.66%
12-Week Price Change	10.73%	0.00%	8.70%	-2.46%	1.60%	39.89%
52-Week Price Change	47.29%	17.42%	4.20%	22.89%	53.43%	15.96%
20-Day Average Volume (Shares)	22,204,380	94,634	2,164,008	2,674,953	33,611,780	17,380,116
EPS F1 Estimate 1-Week Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
EPS F1 Estimate 4-Week Change	0.54%	0.00%	0.00%	-6.88%	0.01%	0.00%
EPS F1 Estimate 12-Week Change	12.59%	4.22%	3.80%	22.77%	2.47%	-1,391.30%
EPS Q1 Estimate Monthly Change	1.10%	0.00%	0.00%	-7.94%	0.00%	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	C
Growth Score	B
Momentum Score	C
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

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Glossary of Terms and Definitions

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Periods:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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