

Twilio Inc. (TWLO) Long Term: 6-12 Months **Zacks Recommendation:** Underperform (Since: 02/24/21) \$353.11 (As of 04/07/21) Prior Recommendation: Neutral Price Target (6-12 Months): \$300.00 5-Strong Sell Zacks Rank: (1-5) Short Term: 1-3 Months VGM:F Zacks Style Scores: Value: F Growth: D Momentum: A

Summary

Twilio's profitability is likely to remain under pressure in the near-term due to increased spending and investment toward enhancing product portfolio and expanding across newer markets. Furthermore, we expect its elevated investment toward enhancing sales capabilities to gain enterprise customers and grab larger market share to weigh on its bottom-line results in the near-term. Moreover, intensifying competition in the cloud telecommunications market is inducing pricing pressure for Twilio, which is an overhang on its profitability. Also increased investments in its systems and infrastructure, R&D, go-to-market team and Flex are likely to dent bottom-line. Nonetheless, Twilio's top-line results are benefiting from accelerated digital transformation by companies amid the COVID-19 pandemic-led remote working and online learnings wave.

Price, Consensus & Surprise



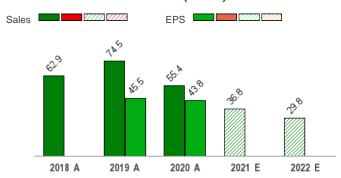
Data Overview

52-Week High-Low	\$457.30 - \$88.15
20-Day Average Volume (Shares)	2,076,004
Market Cap	\$61.0 B
Year-To-Date Price Change	5.6%
Beta	1.44
Dividend / Dividend Yield	\$0.00 / 0.0%
Industry	Internet - Software
Zacks Industry Rank	Bottom 18% (207 out of 253)

Last EPS Surprise	150.0%
Last Sales Surprise	20.6%
EPS F1 Estimate 4-Week Change	2.0%
Expected Report Date	05/05/2021
Earnings ESP	-11.9%

P/E TTM	1,554.5
P/E F1	NA
PEG F1	NA
P/S TTM	34.6

Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of \$)

*Quarterly figures may not add up to annual.

	Q1	Q2	Q3	Q4	Annual*
2022	731 E	773 E	826 E	918 E	3,129 E
2021	533 E	568 E	615 E	692 E	2,410 E
2020	365 A	401 A	448 A	548 A	1,762 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2022	\$0.04 E	\$0.07 E	\$0.09 E	\$0.13 E	\$0.19 E
2021	-\$0.09 E	-\$0.05 E	-\$0.01 E	\$0.02 E	-\$0.13 E
2020	\$0.06 A	\$0.09 A	\$0.04 A	\$0.04 A	\$0.23 A

The data in the charts and tables, including the Zacks Consensus EPS and sales estimates, is as of 04/07/2021. The report's text and the analyst-provided price target are as of 04/08/2021.

Overview

Headquartered in San Francisco, Twilio Inc. was founded in 2007 and got listed on the NYSE in Jun 2016. Twilio provides Cloud Communications Platform-as-a-Service. The company enables developers to build, scale and operate real-time communications within software applications. The company's platform consists of three layers, Engagement Cloud, Programmable Communications Cloud and Super Network.

Twilio's Programmable Communications Cloud software allows developers to embed voice, messaging, video and authentication capabilities. The company runs a cloud-based Application Programming Interfaces or API, which allows software developers to programmatically make and receive phone calls, text messages and video chats. The advantage of this is that now small app developers can add rich communications features to their apps at a very low cost.

By using Twilio's software, companies can develop such embed communication applications and website that will help them better connect with end customers. The Super Network is a software layer which enables its customers' software to communicate with connected devices globally.

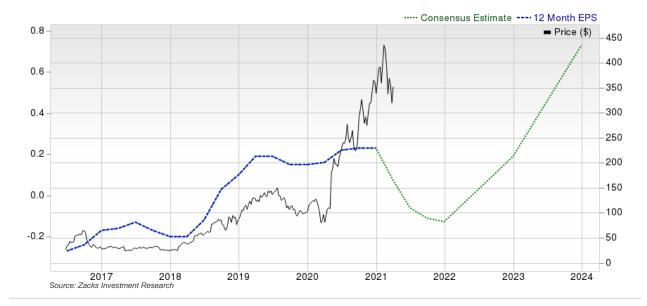


The company operates globally, with 22 data centers across nine 2016 2017 2018 2019 2020 2021 2022 regions. Twilio uses Amazon Web Service (AWS) to host its platform. Notably, Amazon had invested during Twilio's Series E round funding in 2015.

The company boasts a strong clientele which includes the likes of Uber, Facebook, Home Depot, Nordstrom, Netflix, Salesforce and Twitter among others. The company ended 2020 with more than 221,000 active customers.

Twilio delivered revenues of \$1.76 billion in 2020, up 55% from full-year 2019. The company generates majority of its revenues from customers located in the U.S. In 2019, these customers accounted for 73% of Twilio's total revenue, while the remaining 27% was contributed by customers located outside the country.

Its 10 largest customers generated approximately 13% of 2020 total revenue, of them Facebook's WhatsApp accounted for 5%. In 2019, revenue from Active Customer Accounts represented over 99% of total revenue.



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Reasons To Sell:

- ▼ Twilio's profitability is likely to remain under pressure at least in the near-term as the company is aggressively spending on its expansion plans. Twilio has entered into new product and geography markets to continue its high growth momentum. Moreover, in November 2020, the firm completed the acquisition of customer-data startup Segment Inc. for \$3.2 billion.
- Twilio has been striving to gain more and more enterprise customers, as they bring in more stable revenues for the long term. The company mainly generates sales through its online model, but in order to grab more market share, it has increased its investment on building traditional sales team.
- Twilio's profitability is likely to remain under pressure at least in the near-term due to the company's increased spending and investment toward enhancing product portfolio and expanding across newer markets.
- ▼ We remain concerned about the company's declining gross margins which contracted 100 basis points in fourth-quarter 2020 to 56%. The company's gross margins have been negatively impacted by shift in international traffic mix. Furthermore, the company's aggressive sales strategy is driving revenues, but at the cost of its profitability. It should be noted that Twilio's sales and marketing expenses soared nearly 50% year-over-year to \$415 million in 2020. We expect the situation to remain intact in the fourth quarter given the company's aggressive investment strategy toward enhancing sales capabilities, thereby thwarting its fourth-quarter bottom-line results.
- ▼ The enterprise communications market is highly competitive. The space, under which Twilio operates, has several well established players, and due to low barriers to entry, more and more new companies have made their presence. Most of these companies have more resources to bring technically superior products to the market. The company classifies its competitors under four categories legacy on-premise vendors, such as Avaya and Cisco; regional network service providers that offer limited developer functionality on top of their own physical infrastructure; smaller software companies that compete with portions of Twilio's product line; and SaaS companies which offer prepackaged applications for a narrow set of use cases.
- ▼ Twilio operates as a facilities-based provider of a range of integrated communications services. The demand for its products and services depends substantially upon the continued development and expansion of the internet as a communications medium and marketplace for the distribution and consumption of data and video by large enterprises and government organizations. Therefore, fluctuations in the global macro economy could have an adverse impact on the company's business, results of operations and financial condition.
- ▼ Twilio's gross margins are likely to be impacted by the implementation of Verizon's Application to Person or A2P fees. The company's non-GAAP gross margin contracted 100 basis points (bps) to 56% in fourth-quarter 2020, mainly due to a 150 bps negative impact from A2P fees. Although higher margin revenues from Twilio SendGrid are a tailwind, the company's rising investment in lower-margin international regions might drain its profitability.

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Risks

- Twilio is benefiting from accelerated digital transformation projects across many industries in the wake of coronavirus-led global lockdown. Organizations are reconfiguring their set-up for a work from home operational environment and trying to make nearly 100% ecommerce a reality. The company witnessed waning demand from ride-sharing, hospitality and travel industries, which have been hit hard by the coronavirus-led global lockdown, during the first quarter. However, increased demand from health care, education, retail and crisis management organizations more than offsets the negative impact from aforementioned factors.
- Twilio's efforts toward expanding global footprint are commendable. The company has been continuously making investments to meet the
 requirements of a broader range of global developers and enterprises. Furthermore, it is making strategic alliances, as well as has
 employed more employees outside the U.S. office to enhance international operations. In an effort to fortify its platform, Twilio has made a
 number of selective acquisitions and strategic investments in businesses and technologies. With the latest acquisition of SendGrid, Twilio
 aims to strengthen its omnichannel communications capabilities by enhancing its Programmable Communications Cloud software.
- Twilio has been witnessing tremendous demand for its programmable voice and messaging products, which is favoring its top-line performance. Furthermore, Twilio's consistent efforts in developing innovative use case products will continue to boost its revenues in the long run. A sturdy uptick in Twilio's Engagement Cloud offerings as well as email with the inclusion of SendGrid is a key catalyst. Strong uptake of Flex is likely to be a significant contributor to the company's revenue stream gradually. Twilio's new product line comprising Twilio Pay and Autopilot, which is also witnessing a solid acceptance, will help the company expand its market share going forward.
- Twilio is striving to gain more and more Enterprise customers, as they bring in more stable revenues for the long term. The company
 mainly generates sales through online model, but in order to grab more market share, it has increased its investment on building traditional
 sales team. Furthermore, Twilio has rolled out a plan for enterprise customers with more compliance, administrative and security features –
 Enterprise Plan which, we believe, will drive its enterprise customer growth. Being a provider of cloud communications platforms to
 corporations, Twilio is the missing link between businesses and the cloud. Additionally, as more and more companies are making a switch
 to the cloud, Twilio looks poised to ride the growth trend over the long run.
- The market in which Twilio operates has a huge growth potential. The company's main business, Programmable messaging, is likely to witness tremendous growth as the global Application-to-person (A2P) SMS market is anticipated to reach \$101 billion by 2030, representing a CAGR of 4%, according to a report by Transparency Market Research. We believe that with sustained focus on developing products, along with global expansion plan, the company is well poised to grab this opportunity.
- Twilio is a cash-rich company with a strong balance sheet. Well-off companies not only guarantee protection but are also likely to reward shareholders from its heavy cash registers. As of Dec 31, 2020, the company had cash and marketable securities of \$3.04 billion while long-term debt (including current maturities) was \$607 million. Also, its total debt-to-capital ratio of 0.14 is much lower than the industry average of 0.37. Since it has net cash available on its balance sheet, the existing cash can be used for pursuing strategic acquisitions, investment in growth initiatives and distribution to shareholders.

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Last Earnings Report

Twilio Q4 Earnings and Revenues Beat Estimates

Twilio delivered better-than-anticipated fourth-quarter 2020 results. The company posted non-GAAP earnings of 4 cents per share for the quarter, while the Zacks Consensus Estimate was pegged at a loss of 8 cents. The non-GAAP bottom-line figure is flat, year on year.

Twilio's quarterly revenues surged 65% year over year to \$548.1 million and also surpassed the Zacks Consensus Estimate of \$454.6 million on increase in clientele and the Segment buyout. The growing adoption of Twilio Flex is also a tailwind.

Report Date	Feb 17, 2021
Sales Surprise	20.56%
EPS Surprise	150.00%
Quarterly EPS	0.04
Annual EPS (TTM)	0.23

Quarter Ending

12/2020

Twilio is benefiting from the accelerated digital-transformation projects across many industries owing to the remote-working wave amid the COVID-19 pandemic. Organizations are reconfiguring their set-ups for a work-from-home operational environment and making nearly 100% e-commerce a reality.

Quarterly Details

Twilio's top 10 active customer accounts contributed to 13% of its total revenues, down from the 14% seen in the previous quarter as well as the year-ago quarter. WhatsApp represented approximately 5% of revenues during the fourth quarter compared with the year-ago quarter's 6%.

The company's dollar-based net expansion rate was 139% in the reported quarter, up from the prior-year period's 125%.

Twilio's active customer accounts increased to more than 221,000 as of Dec 31, 2020 from more than 179,000 as of Dec 31, 2019. In the fourth quarter, Twilio added more than 13,000 active customers.

Operating Results

Non-GAAP gross profit climbed 62.1% year over year to \$306.6 million. However, gross margin contracted 100 basis points (bps) to 56% mainly due to a 150-basis point negative impact from Application to Person or A2P fees.

Twilio registered fourth-quarter non-GAAP operating income of \$12.8 million, marking a strong improvement from the operating loss of \$3 million posted in the year-ago quarter. Non-GAAP operating margin improved to positive 2% from negative 1% in the year-ago quarter.

Balance Sheet

The company exited the October-December quarter with cash and cash equivalents plus short-term marketable securities of \$3.04 billion, down sequentially from \$3.3 billion.

During 2020, the company generated \$32.7 million of cash from operational activities.

Outlook

Twilio issued a dismal bottom-line outlook for first-quarter fiscal 2021. The company forecasts non-GAAP loss per share between 9 cents and 12 cents

We believe the company's drab bottom-line outlook reflects elevated spending on its expansion plans. Twilio has entered into new product and geography markets to continue its high growth momentum.

For the current quarter, the company anticipates revenues between \$526 million and \$436 million. It estimates non-GAAP loss from operations in the range of \$15 million to \$20 million.

Recent News

On Feb 19, Twilio announced commencing an underwritten public offering of \$1,000,000,000 of shares of its Class A common stock.

On Feb 11, Well Health announced a partnership with Twilio to help healthcare providers rapidly implement secure patient communications.

On Jan 14, Twilio announced that Deval Patrick has been appointed as a board member.

On Jan 5, Twilio announced that Equity Stock Transfer has deployed its Authy push authentication services.

On Nov 2, Twilio announced that it has successfully completed the acquisition of Segment.

On Oct 12, Twilio announced entering into a definitive agreement to acquire Segment for approximately \$3.2 billion in Twilio Class A common stock, on a fully diluted and cash free, debt free basis.

On Oct 8, Twilio announced the appointment of Jeremiah Brazeau as the company's new chief technology officer.

Valuation

Shares of Twilio have gained 4.3% in the YTD period and 270.4% over the trailing 12-month period. Stocks in the Zacks sub-industry have declined 7.5% YTD, while the Zacks Computer & Technology sector increased 7.8%. Over the past year, the Zacks sub-industry and the sector gained 100.1% and 67.5%, respectively.

The S&P 500 Index has increased 9% in the past six months and 49% in the past year.

The stock is currently trading at 23.13X forward 12-month sales, which compares to 9.02X for the Zacks sub-industry, 4.77X for the Zacks sector and 4.71X for the S&P 500 Index.

Over the past five years, the stock has traded as high 33.54X and as low as 4.61X with a 3-year median of 10.74X. Our Underperform recommendation indicates that the stock will perform worse than the market. Our \$300 price target reflects 19.66X forward 12-month sales.

The table below shows summary valuation data for TWLO

Valuation Multiples - TWLO					
		Stock	Sub-Industry	Sector	S&P 500
	Current	23.13	9.02	4.77	4.71
P/S F12M	5-Year High	33.54	10.57	4.77	4.71
	5-Year Low	4.61	4.95	2.78	3.21
	5-Year Median	10.74	6.10	3.50	3.71
	Current	7.12	10.27	8.97	6.89
P/B TTM	5-Year High	30.98	14.74	9.38	6.90
	5-Year Low	2.32	2.76	4.41	3.83
	5-Year Median	7.80	6.19	5.78	4.98
	Current	32.44	11.03	5.53	4.84
EV/Sales TTM	5-Year High	39.57	14.20	5.79	4.84
	5-Year Low	4.83	3.09	3.07	2.64
	5-Year Median	12.83	6.28	3.96	3.62

As of 04/07/2021

Source: Zacks Investment Research

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Industry Analysis Zacks Industry Rank: Bottom 18% (207 out of 253) ----- Industry Price - Industry ■ Price 450 10 400 9 -350 300 8 250 7-200 6 150 100 5 50 0 Source: Zacks Investment Research 018 2019 2020 2021

Top Peers

Company (Ticker)	Rec Rank
Ceridian HCM Holding Inc. (CDAY)	Neutral 4
salesforce.com, inc. (CRM)	Neutral 3
Evolent Health, Inc (EVH)	Neutral 3
j2 Global, Inc. (JCOM)	Neutral 2
Pinterest, Inc. (PINS)	Neutral 3
SolarWinds Corp. (SWI)	Neutral 4
Veeva Systems Inc. (VEEV)	Neutral 2
Zoom Video Communications, Inc. (ZM)	Neutral 3

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

Industry Comparison Industry: Internet - Software			Industry Peers			
	TWLO	X Industry	S&P 500	CRM	PINS	VEEV
Zacks Recommendation (Long Term)	Underperform	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	5	-	-	3	3	2
VGM Score	E	-	-	D	D	F
Market Cap	60.95 B	1.76 B	29.90 B	203.62 B	52.35 B	40.20 B
# of Analysts	14	5	12	17	4	12
Dividend Yield	0.00%	0.00%	1.3%	0.00%	0.00%	0.00%
Value Score	F	-	-	D	F	F
Cash/Price	0.05	0.07	0.06	0.06	0.04	0.04
EV/EBITDA	-184.88	-2.18	16.78	30.02	-569.47	84.46
PEG F1	NA	3.80	2.38	3.49	NA	5.68
P/B	6.94	7.84	4.00	4.88	23.34	17.74
P/CF	NA	54.11	16.82	32.10	NA	103.70
P/E F1	NA	68.38	21.96	64.32	112.18	82.07
P/S TTM	34.60	7.93	3.43	9.58	30.93	27.44
Earnings Yield	-0.04%	0.15%	4.46%	1.56%	0.89%	1.22%
Debt/Equity	0.04	0.01	0.66	0.06	0.00	0.00
Cash Flow (\$/share)	-0.94	-0.00	6.78	6.88	-0.00	2.51
Growth Score	D	-	-	В	Α	D
Historical EPS Growth (3-5 Years)	NA%	20.75%	9.39%	86.69%	NA	45.48%
Projected EPS Growth (F1/F0)	-155.28%	6.38%	15.29%	-30.14%	76.79%	10.01%
Current Cash Flow Growth	49.50%	-6.53%	0.44%	62.21%	-99.94%	29.40%
Historical Cash Flow Growth (3-5 Years)	NA%	19.09%	7.37%	46.81%	NA	40.48%
Current Ratio	7.52	1.86	1.39	1.23	11.51	3.23
Debt/Capital	3.65%	5.04%	41.26%	6.05%	0.00%	0.00%
Net Margin	-27.87%	-11.35%	10.59%	19.16%	-7.58%	25.94%
Return on Equity	-5.57%	-5.26%	14.86%	7.38%	-1.89%	16.09%
Sales/Assets	0.26	0.54	0.51	0.36	0.72	0.56
Projected Sales Growth (F1/F0)	36.77%	14.72%	7.36%	20.94%	46.15%	20.42%
Momentum Score	Α	-	-	D	D	С
Daily Price Change	-1.24%	-1.13%	-0.22%	-0.14%	0.61%	-1.90%
1-Week Price Change	10.08%	2.43%	0.35%	4.61%	12.54%	5.26%
4-Week Price Change	0.10%	-0.46%	3.66%	4.17%	21.50%	3.91%
12-Week Price Change	-4.31%	-1.35%	8.52%	1.20%	15.17%	-7.67%
52-Week Price Change	284.95%	98.51%	54.42%	46.10%	397.92%	62.24%
20-Day Average Volume (Shares)	2,076,004	805,929	2,089,350	5,738,883	10,304,117	883,086
EPS F1 Estimate 1-Week Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.61%
EPS F1 Estimate 4-Week Change	1.97%	0.00%	0.00%	1.23%	0.00%	0.61%
EPS F1 Estimate 12-Week Change	-11.14%	-8.14%	2.27%	-9.56%	109.68%	4.22%
EPS Q1 Estimate Monthly Change	0.30%	0.00%	0.00%	0.00%	0.00%	0.00%

Source: Zacks Investment Research

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Zacks Stock Rating System

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

Zacks Recommendation

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

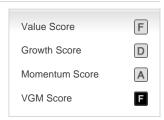
Zacks Rank

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

Zacks Style Scores

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

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



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

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

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

Glossary of Terms and Definitions

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Periods:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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