

Neogen Corporation (NEOG)

\$84.79 (As of 03/12/21)

Price Target (6-12 Months): **\$89.00**

Long Term: 6-12 Months

Zacks Recommendation:

Neutral

(Since: 03/05/21)

Prior Recommendation: Underperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

3-Hold

Zacks Style Scores:

VGM:D

Value: D

Growth: C

Momentum: C

Summary

Fall in NEOGEN's revenues in the fiscal second quarter of 2021 from Brazil due to adverse foreign exchange is disappointing. Despite an impressive top line for the quarter, the business environment across many of the company's markets remains sluggish and challenging, which is concerning. Contraction of both margins is a downer. Stiff competition and currency headwinds are worrying. NEOGEN's results in the quarter were lower-than-expected. Yet, NEOGEN's segmental performance was mainly boosted by robust sales of cleaners and disinfectants to meet the pandemic-led requirements. NEOGEN's international performance was impressive despite the challenging global business climate. Positive customer response for its products buoy optimism. Shares of NEOGEN have outperformed its industry over the past six months.

Price, Consensus & Surprise

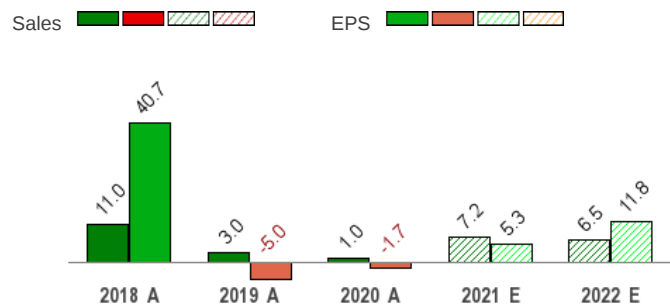


Source: Zacks Investment Research

Data Overview

52-Week High-Low	\$89.32 - \$48.91
20-Day Average Volume (Shares)	213,454
Market Cap	\$4.5 B
Year-To-Date Price Change	6.9%
Beta	0.45
Dividend / Dividend Yield	\$0.00 / 0.0%
Industry	Medical - Products
Zacks Industry Rank	Bottom 40% (152 out of 253)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	-6.3%
Last Sales Surprise	-0.4%
EPS F1 Estimate 4-Week Change	0.0%
Expected Report Date	03/23/2021
Earnings ESP	0.0%
P/E TTM	74.4
P/E F1	71.9
PEG F1	7.2
P/S TTM	10.4

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2022	117 E	122 E	114 E	124 E	477 E
2021	109 A	115 A	107 E	116 E	448 E
2020	101 A	108 A	100 A	109 A	418 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2022	\$0.31 E	\$0.34 E	\$0.27 E	\$0.35 E	\$1.33 E
2021	\$0.30 A	\$0.30 A	\$0.27 E	\$0.32 E	\$1.19 E
2020	\$0.28 A	\$0.31 A	\$0.23 A	\$0.31 A	\$1.13 A

*Quarterly figures may not add up to annual.

The data in the charts and tables, including the Zacks Consensus EPS and sales estimates, is as of 03/12/2021. The report's text and the analyst-provided price target are as of 03/15/2021.

Overview

NEOGEN Corporation develops and markets food and animal safety products. The company's Food Safety Division markets culture media and diagnostic test kits to detect foodborne bacteria, natural toxins, food allergens, drug residues, plant diseases and sanitation concerns.

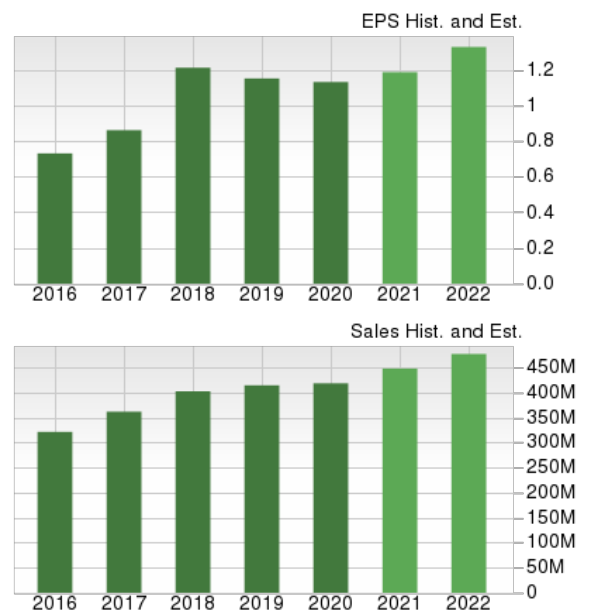
NEOGEN operates under two business segments — **Food Safety** and **Animal Safety**.

Food Safety (50.9% of total revenues in 2020, down 0.4% from fiscal 2020): The products in the segment include tests for Mycotoxins, Food allergens, Dairy antibiotics, Foodborne pathogens, Spoilage microorganisms, Sanitation monitoring, Dehydrated culture media and Seafood contaminants.

Animal Safety (49.1%, up 2.4%): The division is engaged in the development, manufacture, marketing and distribution of veterinary instruments, pharmaceuticals, vaccines, topicals, diagnostic products, rodenticides, cleaners, disinfectants, insecticides and genomics testing services for the worldwide animal safety market. The majority of these consumable products are marketed through a network of national and international distributors, as well as a number of large farm supply retail chains in the United States and Canada.

The animal safety products include Veterinary instruments, Veterinary pharmaceuticals, Veterinary biologics, Veterinary OTC products, Rodenticides, Cleaners and disinfectants, Insecticides, Animal genomics services and Life sciences.

NEOGEN acquired the assets of the Edmonton-based Delta Genomics Centre, an animal genomics laboratory in Canada, in January 2019. Delta's laboratory operations were renamed NEOGEN Canada post the acquisition, thus, becoming NEOGEN's sixth animal genomics laboratory. This is intended to help accelerate growth of NEOGEN's animal genomics business throughout Canada.



Source: Zacks Investment Research

Reasons To Buy:

▲ **Share Price Performance:** Shares of NEOGEN have outperformed its industry over the past six months. The stock has gained 11.4% compared with the industry's 8.1% rise. NEOGEN witnessed year-over-year growth in segmental performance mainly boosted by robust sales of cleaners and disinfectants to meet the pandemic-led requirements. NEOGEN's international performance was impressive despite the challenging global business climate. Positive customer response for its products buoys optimism.

▲ **Long-Term Growth Strategy Progresses Well:** NEOGEN in its mission to be the leading company in the development and marketing of solutions for food and animal safety follows a vision or a growth strategy consisting of the following elements: increasing sales of existing products; introducing new products and product lines; expanding international sales; and acquiring businesses and forming strategic alliances.

Going by the first leg of the growth strategy, NEOGEN is progressing well in terms of picking the right growth markets and gaining bigger share of those markets. In terms of the second leg of the growth strategy, NEOGEN continues well with its strong R&D activities. With respect to the third leg of international growth, the company is expanding well in other geographies.

Regarding the fourth leg of inorganic growth, in fiscal 2020, the company generated \$3 million revenues from acquisitions. Internationally, the company is currently integrating the acquisitions it completed in the past 34 quarters. Growth from these acquisitions were above the company's expectation generating \$1.9 million for the year.

▲ **Product Launches:** NEOGEN, of late, has been focusing on product launches to strengthen its business on a global scale. In December 2020, the company developed new Reveal tests for horse, beef, sheep and poultry provide accurate results in a span of few minutes to determine meat speciation in raw meat and environmental samples. The same month, the company announced the development of two new TMB substrates, K-Blue Advanced Plus and K-Blue Select, thus expanding the popular K-Blue product line to meet the evolving customer requirements. Further in the month, NEOGEN launched the Igenity Canine Wellness, which is a preventative care DNA screening tool for veterinarians.

In November 2020 NEOGEN launched COMPANION Foaming Antibacterial Hand Soap, which is highly effective against harmful bacteria and is skin friendly.

The company, in October 2020, launched the Igenity Feeder, which is a DNA tool designed to assist cattle producers in the stocker and background phase to rank and manage feeder cattle according to their genetic potential for carcass traits. The same month, NEOGEN launched Reveal 3-D Food Buffer, which is a new food extraction method that expands the capabilities of select Reveal 3-D food allergen tests to include the direct testing of food products.

▲ **Animal Safety Business Grows Well:** In fiscal second quarter, NEOGEN's Animal Safety segment recorded a 12.8% revenue uptick backed by continued new sales of cleaners and disinfectants used to fight the spread of COVID-19 (which rose by 4%), a 24% increase in sales of rodenticides due to continued demand from the U.S. Pacific Northwest and large increases in sales of genomic testing services, insecticides (backed by the July 2020 acquisition of Elanco's StandGuard product), animal care products, and needles and syringes as animal protein markets gained strength compared to the year-ago period.

Increased sales to the company's largest U.S. distributors resulting from improving end-market demand in the animal protein market pumped up sales of animal care products sold out of the Lexington, KY-based manufacturing and distribution center. Products sold from this unit include small animal supplements, wound care and vitamin injectables, which increased 22%. Vet instruments, including needles and syringes, rose 17% for the quarter.

Revenues in the genomics testing and bioinformatics business grew 11%, with continued market share gains in the companion animal parentage markets. This was primarily driven by robust spending on pets along with increased penetration in the retail veterinary market. Commercial beef cattle markets continue to be strong in the United States. Australia's beef testing markets were also strong, backed by rebuilding of herds after the devastating fires in 2020. Worldwide genomics revenues rose 12% with strong growth in the United States, Australia and China.

▲ **Food Safety Sales Growth Continues:** NEOGEN continues to see rising revenues from the Food Safety business. For fiscal 2021 second quarter, the company's Food Safety revenues reflected a 1.2% year-over-year growth due to 13% increase in sales of its Soleris microbial testing system, Soleris Next Generation, compared to the year-ago quarter. Robust customer acceptance of NEOGEN's Listeria Right Now test system led to 6% sales growth of the system from the year-ago quarter. The segment also benefited from new sales from recently acquired businesses in Italy, Argentina, Uruguay and Chile.

In August 2020, NEOGEN had announced that the U.S. Environmental Protection Agency has validated the effectiveness of the company's BioSentry 904 Disinfectant against the coronavirus-causing SARS-CoV-2 virus, when used per the revised label instructions. The same month, the company received a patent from the U.S. Patent and Trademark Office, covering materials that increase the water-based binding and extraction of toxins from grains and other foods.

▲ **International Business Holds Solid Ground:** NEOGEN's international business in the reported quarter was quite impressive. The company registered 59% sales increase in China, which included significant increases in sales of disinfectants and genomic products as it recovers from its COVID-19 and African swine fever outbreaks. Increased sales of cleaners and disinfectants, rodenticides, detectable needles, and genomics led to a 13% increase in revenues from Mexico and Central America.

NEOGEN is well positioned to gain from its extensive global foothold and diverse product mix. The company's long-term growth strategy looks impressive.

Further, NEOGEN Australasia's quarterly revenues surged 81% primarily due to strong sales gains for genomic and animal safety products along with new sales from the March 2020 acquisition of a former distributor of the company's food safety products. Revenues from the U.K. operations rose 9% due to strong sales of cleaners and disinfectants. Segment revenues from India increased 5%.

Despite the decline in revenue from the company's Brazilian operations post currency adjustments, revenues rose 4% in local currency with increases across the food safety and genomics portfolio.

▲ **Strategic Partnerships Deals:** Of late, NEOGEN inked a series of partnership deals, which is expected to aid in the company's segmental growth as well as international expansion. The company, in November 2020, partnered with Transnetix, Inc. to collaborate on distribution and advancement of the miniMUGA genotyping array (Mouse Universal Genotyping Array).

The company, in September 2020, entered into a sponsorship agreement with the National FFA to support the agricultural organization and help fight the spread of COVID-19.

In August 2020, NEOGEN announced the completion of the previously announced acquisition of the U.S. (including territories) rights to Elanco's StandGuard Pour-on for horn fly and lice control in beef cattle, and related assets.

Other notable partnerships of NEOGEN include the one with Ripe Technology (a food industry blockchain pioneer) and Gencove signed in February and January 2020.

▲ **Strong Solvency and Capital Structure:** NEOGEN exited the second quarter of fiscal 2021 with cash and investments of \$391 million compared with \$367 million at the end of the first quarter of fiscal 2021. Notably, the company does not have any kind of debt on its balance sheet. This apparently indicates a strong solvency position for the company.

Cumulative net cash flow from operating activities at the end of fiscal second quarter was \$47.5 million compared with \$40.5 million a year ago.

Reasons To Sell:

- ▼ **Expensive Valuation:** NEOGEN's P/E (F12M) ratio is expensive in comparison to the broader industry. The company is currently trading at a forward P/E (F12M basis) ratio of 67.6 for the past year, whereas the current P/E ratio (F12 basis) for the industry it belongs to is 27.6.
- ▼ **Coronavirus Concern:** Over the past few months, the coronavirus pandemic has wreaked havoc on the company's stock. NEOGEN continues to be adversely impacted due to the pandemic-led global market disruptions, especially in the food industry in some of its important end markets in the United States and Europe due to the lockdowns and social-distancing restrictions still in place. NEOGEN witnessed a soft food safety diagnostic kit market in fiscal second quarter due to the pandemic.
- ▼ **Currency Headwinds:** In the first quarter of fiscal 2021, NEOGEN's international business was significantly impacted by unfavorable currency movements. When the magnitude of the pandemic became evident and as it began moving around the world, there was a move toward the safety of the U.S. dollar, negatively impacting local currencies in the company's international locations, particularly those where the outbreaks were less controlled. The Brazilian real and the Mexican peso continued to be weak compared to the U.S. dollar.
- ▼ **Competitive Landscape Tough:** NEOGEN faces intense competition from companies ranging from small businesses to divisions of large multinational companies. Some of these organizations have substantially greater financial resources than the company. Historically, NEOGEN has faced intense competition resulting from the development of new technologies by the company's competitor which could affect the marketability and profitability of NEOGEN's products.
- ▼ **Global Economic Problems Hamper Growth:** The current macroeconomic environment across the globe has adversely affected NEOGEN's financial operations. Governments and insurance companies continue to look for ways to contain the rising cost of healthcare. This might put pressure on players in the healthcare industry with NEOGEN being no exception.

Moreover, fluctuating currency rates also hamper growth of companies like NEOGEN, given that it derives a substantial amount of its revenues from international markets. The company's sales are thus directly affected by unfavorable macroeconomic conditions. We are concerned that such macroeconomic softness might hamper the company's growth. In the reported quarter, NEOGEN's revenues from Brazil declined by 22% as a large one-time sale of insecticides in the year-ago quarter did not recur along with adverse currency impact due to the 25% devaluation of the real against the dollar.

Global macroeconomic issues continue to put pressure on NEOGEN's vast international trade. Also, tough competitive landscape and expensive valuation also weigh on the stock.

Last Earnings Report

NEOGEN's Q2 Earnings and Revenues Fall Shy of Estimates

NEOGEN Corporation's second-quarter fiscal 2021 earnings per share of 30 cents fell short of the year-ago figure of 31 cents per share by 3.2%. It also lagged the Zacks Consensus Estimate by 6.3%.

Revenues for fiscal second quarter improved 6.7% on a year-over-year basis to \$115 million despite the ongoing difficult global business environment. Revenues also lagged the Zacks Consensus Estimate by 0.4%.

Quarter Ending	11/2020
Report Date	Dec 22, 2020
Sales Surprise	-0.39%
EPS Surprise	-6.25%
Quarterly EPS	0.30
Annual EPS (TTM)	1.14

Segments in Detail

For the quarter, the company registered **Food Safety** revenues of \$57.5 million, reflecting 1.2% year-over-year growth due to 13% increase in sales of its Soleris microbial testing system, Soleris Next Generation ("NG"), compared to the year-ago quarter. Robust customer acceptance of NEOGEN's Listeria Right Now test system led to 6% sales growth of the system from the year-ago quarter. The segment also benefited from new sales from recently acquired businesses in Italy, Argentina, Uruguay and Chile. However, these increases were offset by flat sales growth of its natural toxins and food allergen product lines along with decline in sales of foodborne pathogen (8%), general sanitation (8%) and culture media (3%) products, which partly resulted from COVID-19-related disruptions in many of the company's end markets.

Animal Safety revenues for fiscal second quarter were \$57.5 million, reflecting a 12.8% year-over-year increase backed by continued new sales of cleaners and disinfectants used to fight the spread of COVID-19, a 24% increase in sales of rodenticides due to continued demand from the U.S. Pacific Northwest and large increases in sales of genomic testing services, insecticides (backed by the July 2020 acquisition of Elanco's StandGuard product), animal care products, and needles and syringes as animal protein markets gained strength compared to the year-ago period.

NEOGEN's revenues from China were 59%, which included significant increases in sales of disinfectants and genomic products as it recovers from its COVID-19 and African swine fever outbreaks. Increased sales of cleaners and disinfectants, rodenticides, detectable needles, and genomics led to a 13% increase in revenues from Mexico and Central America. NEOGEN Australasia's quarterly revenues surged 81% primarily due to strong sales gains for genomic and animal safety products along with new sales from the March 2020 acquisition of a former distributor of the company's food safety products. Revenues from the U.K. operations rose 9% due to strong sales of cleaners and disinfectants. Segment revenues from India increased 5%. However, its revenues from Brazil declined by 22% as a large one-time sale of insecticides in the year-ago quarter did not recur along with adverse currency impact due to the 25% devaluation of the real against the dollar.

Revenues from NEOGEN's worldwide animal genomics business increased 12% for the second quarter of fiscal 2021 from the comparable year-ago period. This was primarily due to increases in companion animal genomic testing due to a surge in COVID-19-related pet adoptions and continued penetration into the veterinary markets along with testing through beef and dairy breed associations. Internationally, NEOGEN's genomic sales registered uptick in Australia (mainly bovine and canine), China (dairy cattle and porcine during its recovery from African swine fever outbreak) and Latin America (dairy cattle).

Margin Details

NEOGEN's fiscal second-quarter gross profit improved 4.3% year over year to \$53.2 million. However, gross margin contracted 106 basis points (bps) to 46.3%.

Sales and marketing expenses fell 1.4% to \$17.7 million, whereas administrative expenses rose 10.9% from the prior-year quarter to \$12.2 million. Research & development expenses were \$4.1 million, up 7.3% from the year-ago quarter. Operating costs totaled \$33.9 million, reflecting an increase of 3.7% year over year.

For the reported quarter, operating income was \$19.2 million, which improved 5.3% from the year-ago period. Operating margin, however, contracted 21 bps to 16.7%.

Cash Position

The company ended fiscal second-quarter 2021 with cash and investments of \$390.8 million, reflecting an improvement from \$367.5 million at the end of the first quarter of fiscal 2021. The company had no debt on the balance sheet at quarter-end.

Cumulative net cash flow from operating activities at the end of fiscal second quarter was \$47.5 million compared with \$40.5 million a year ago.

Recent News

NEOGEN Launches EarlyWarning COVID-19 Test: Feb 15, 2021

NEOGEN launched wastewater detection test to monitor the presence of SARS-CoV-2, the virus known to cause COVID-19, in sludge from wastewater facilities.

NEOGEN's ThyroKare Relaunched: Feb 1, 2021

NEOGEN has relaunched its FDA-approved ThyroKare (levothyroxine sodium tablets), USP, for replacement therapy for diminished thyroid function in dogs.

NEOGEN Launches Test to Aid in Detecting Cancer-Causing Toxin: Jan 12, 2021

NEOGEN announced the launch of Reveal Q+ for the Aflatoxin M1 test — a faster and easier test to detect the presence of cancer-causing toxin aflatoxin M1.

NEOGEN Acquires Megazyme, Expands Food Diagnostics Portfolio: Jan 4, 2021

NEOGEN has acquired Ireland-based Megazyme, Ltd., a renowned supplier of analytical solutions used by quality control laboratories in the global food and beverage industries, thus expanding NEOGEN's food diagnostics portfolio.

NEOGEN Launches Meat Speciation Tests: Dec 14, 2020

NEOGEN has developed the new Reveal tests for horse, beef, sheep and poultry to determine meat speciation in raw meat and environmental samples in just few minutes.

NEOGEN Expands K-Blue Product Line With Latest Products: Dec 8, 2020

NEOGEN announced the development of two new TMB substrates — K-Blue Advanced Plus and K-Blue Select — which expands the popular K-Blue product line to meet the evolving customer requirements.

NEOGEN Launches DNA Test for Canines: Dec 8, 2020

NEOGEN launched the Igenity Canine Wellness, a preventative care DNA screening tool for veterinarians.

Valuation

NEOGEN shares are up 11.4% in the six months and up 54.8% in the trailing 12-month period. Stocks in the Zacks sub-industry are up 2% while the Zacks Medical sector are up 1.3% in the six months. Over the past year, the Zacks sub-industry is up 48.7% and sector is up 31.2%.

The S&P 500 index is up 17.2% in the six months and rose 67.5% in the past year.

The stock is currently trading at 65.4X Forward 12-months earnings, which compares to 26.5X for the Zacks sub-industry, 21.6X for the Zacks sector and 22.5X for the S&P 500 index.

Over the past five years, the stock has traded as high as 75.6X and as low as 37.9X, with a 5-year median 52.5X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$89 price target reflects 68.9X forward 12-months earnings.

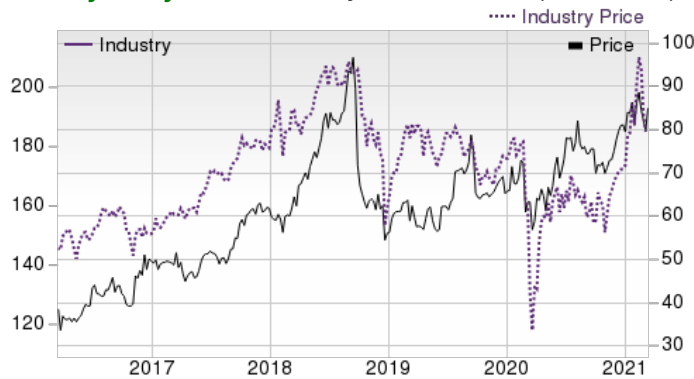
The table below shows summary valuation data for NEOG

Valuation Multiples - NEOG					
		Stock	Sub-Industry	Sector	S&P 500
P/E F12M	Current	65.38	26.50	21.56	22.49
	5-Year High	75.56	31.26	22.86	23.80
	5-Year Low	37.90	17.09	15.90	15.30
	5-Year Median	52.50	21.60	19.24	17.90
P/S F12M	Current	9.59	3.97	2.73	4.57
	5-Year High	11.19	4.03	3.17	4.57
	5-Year Low	4.82	2.90	2.26	3.21
	5-Year Median	7.30	3.37	2.81	3.69
P/B TTM	Current	5.81	3.52	4.31	6.66
	5-Year High	8.63	3.71	5.11	6.66
	5-Year Low	4.00	2.28	3.02	3.83
	5-Year Median	5.41	2.97	4.37	4.97

As of 03/12/2021

Source: Zacks Investment Research

Industry Analysis Zacks Industry Rank: Bottom 40% (152 out of 253)



Source: Zacks Investment Research

Top Peers

Company (Ticker)	Rec	Rank
BioRad Laboratories, Inc. (BIO)	Neutral	2
Elanco Animal Health Incorporated (ELAN)	Neutral	2
Laboratory Corporation of America Holdings (LH)	Neutral	3
3M Company (MMM)	Neutral	3
Merck & Co., Inc. (MRK)	Neutral	3
Phibro Animal Health Corporation (PAHC)	Neutral	3
Thermo Fisher Scientific Inc. (TMO)	Neutral	3
Zoetis Inc. (ZTS)	Neutral	2

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

Industry Comparison Industry: Medical - Products				Industry Peers		
	NEOG	X Industry	S&P 500	BIO	LH	MMM
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	3	-	-	2	3	3
VGM Score	D	-	-	C	A	A
Market Cap	4.51 B	594.50 M	28.54 B	16.71 B	23.30 B	107.09 B
# of Analysts	2	3	13	1	9	7
Dividend Yield	0.00%	0.00%	1.38%	0.00%	0.00%	3.20%
Value Score	D	-	-	C	A	B
Cash/Price	0.09	0.10	0.06	0.06	0.06	0.05
EV/EBITDA	45.47	-0.96	16.11	3.19	7.82	13.92
PEG F1	7.24	2.40	2.38	NA	1.10	2.04
P/B	5.81	4.28	3.92	1.69	2.48	8.25
P/CF	57.40	20.96	16.30	52.68	6.77	15.24
P/E F1	72.41	29.43	21.26	49.78	11.18	19.35
P/S TTM	10.42	6.49	3.30	6.57	1.67	3.33
Earnings Yield	1.39%	0.65%	4.59%	2.01%	8.94%	5.16%
Debt/Equity	0.00	0.07	0.67	0.00	0.59	1.39
Cash Flow (\$/share)	1.48	0.00	6.78	10.63	35.24	12.13
Growth Score	C	-	-	C	A	B
Historical EPS Growth (3-5 Years)	11.80%	4.94%	9.34%	30.30%	14.25%	2.00%
Projected EPS Growth (F1/F0)	4.87%	28.23%	14.75%	6.94%	-10.80%	9.32%
Current Cash Flow Growth	0.09%	3.47%	0.74%	48.88%	102.69%	1.21%
Historical Cash Flow Growth (3-5 Years)	12.01%	8.10%	7.37%	22.91%	22.28%	1.95%
Current Ratio	12.97	3.30	1.39	3.39	1.66	1.88
Debt/Capital	0.00%	14.02%	41.42%	0.12%	37.12%	58.18%
Net Margin	13.92%	-10.48%	10.59%	149.52%	11.13%	16.73%
Return on Equity	8.13%	-3.59%	14.70%	3.92%	29.36%	44.24%
Sales/Assets	0.54	0.50	0.51	0.23	0.76	0.70
Projected Sales Growth (F1/F0)	7.05%	15.74%	6.93%	5.17%	2.08%	6.72%
Momentum Score	C	-	-	B	A	C
Daily Price Change	0.44%	0.00%	0.64%	-1.57%	0.60%	0.19%
1-Week Price Change	-2.65%	-3.85%	2.46%	-2.84%	-0.88%	3.28%
4-Week Price Change	-2.85%	-7.72%	4.45%	-13.02%	0.63%	4.35%
12-Week Price Change	4.54%	18.44%	7.65%	-4.15%	17.77%	4.68%
52-Week Price Change	51.09%	68.95%	62.34%	74.99%	74.38%	38.43%
20-Day Average Volume (Shares)	213,454	307,381	2,210,456	226,834	863,424	2,263,885
EPS F1 Estimate 1-Week Change	0.00%	0.00%	0.00%	0.00%	0.10%	-0.01%
EPS F1 Estimate 4-Week Change	0.00%	0.00%	0.00%	10.29%	10.36%	-0.01%
EPS F1 Estimate 12-Week Change	-4.05%	-0.65%	2.01%	10.29%	15.68%	1.38%
EPS Q1 Estimate Monthly Change	-3.03%	0.00%	0.00%	-4.94%	18.83%	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	D
Growth Score	C
Momentum Score	C
VGM Score	D

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

Disclosures

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

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

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

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

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

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

Additional Disclosure

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

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

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

Glossary of Terms and Definitions

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Periods:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

P/TB Ratio: The price-to-tangible-book value ratio is calculated as 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.