

3M Company (MMM)

\$173.08 (As of 12/14/20)

Price Target (6-12 Months): **\$182.00**

Long Term: 6-12 Months

Zacks Recommendation:

Neutral

(Since: 04/29/20)

Prior Recommendation: Underperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

3-Hold

Zacks Style Scores:

VGM:B

Value: B

Growth: B

Momentum: B

Summary

3M stands to gain from its solid product portfolio, restructuring actions, inorganic actions and shareholder-friendly policies over the long run. Cost-reduction actions too will be beneficial. High demand in multiple end markets, including personal safety, general cleaning, home improvement, and others, is expected to aid in the quarters ahead. For fourth-quarter 2020, the pandemic-induced demand for respirators is anticipated to boost sales by 300 bps year over year. Total sales in the quarter are anticipated to be \$8.2-\$8.4 billion. However, due to the pandemic-related uncertainties, it refrained from providing projections for 2020. Also, woes related to stiff competition, huge debts and international exposure might be concerning. Over the past three months, the company's shares have underperformed the industry.

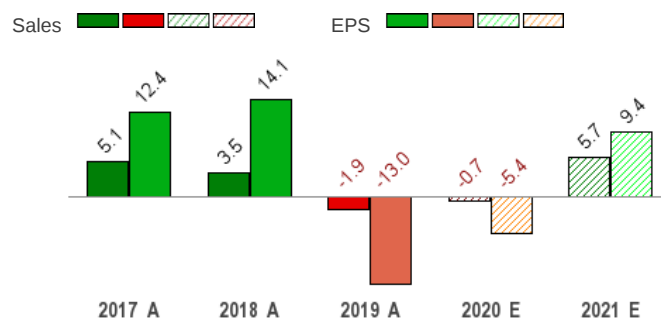
Price, Consensus & Surprise



Data Overview

52-Week High-Low	\$182.55 - \$114.04
20-Day Average Volume (Shares)	2,581,894
Market Cap	\$99.8 B
Year-To-Date Price Change	-1.9%
Beta	0.93
Dividend / Dividend Yield	\$5.88 / 3.4%
Industry	Diversified Operations
Zacks Industry Rank	Bottom 31% (175 out of 254)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	7.1%
Last Sales Surprise	-1.7%
EPS F1 Estimate 4-Week Change	0.5%
Expected Report Date	01/26/2021
Earnings ESP	0.0%
P/E TTM	20.8
P/E F1	20.1
PEG F1	2.0
P/S TTM	3.2

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	8,244 E	8,040 E	8,561 E	8,503 E	33,717 E
2020	8,075 A	7,176 A	8,350 A	8,356 E	31,906 E
2019	7,863 A	8,171 A	7,991 A	8,111 A	32,136 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$2.28 E	\$2.17 E	\$2.60 E	\$2.37 E	\$9.42 E
2020	\$2.16 A	\$1.78 A	\$2.43 A	\$2.25 E	\$8.61 E
2019	\$2.23 A	\$2.20 A	\$2.58 A	\$1.95 A	\$9.10 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 12/14/2020. The reports text is as of 12/15/2020.

Overview

Conglomerate 3M's focus on business transformation — with moves like the localization of decision making and integration of supply chains — enhances its competitive advantage. Also, its recognized product brands and investments in innovation are compelling. Inorganic actions (buyouts and divestments) are added advantages. Acclivity, since acquired in October 2019, has been strengthening 3M's medical solutions business. Being one of the largest manufacturers of respiratory masks, the coronavirus outbreak added to the company's growth potential.

Headquartered in St. Paul, MN, and founded in 1902, 3M Company together with its subsidiaries operates as a diversified technology firm. It has manufacturing operations across the globe and serves diversified customer base primarily in the United States, Europe, Middle East and Africa; Latin America/Canada; and the Asia Pacific regions. Exiting 2019, the company had 96,000 employees. The company has four business segments.

- The Safety & Industrial segment mainly serves customers in the electrical, safety and industrial markets across the globe. The segment includes industrial adhesives and tapes, personal safety, abrasives, closure and masking systems, roofing granules, automotive aftermarket, electrical markets, and other safety and industrial businesses.
- The Transportation & Electronics segment primarily serves original equipment manufacturers (OEMs) in the electronics and transportation industries across the globe. The segment includes electronics, commercial solutions, advanced materials, transportation safety, automotive and aerospace, and other related businesses.
- The Health Care segment engages in serving customers in the global healthcare industry. Businesses within the segment are oral care, medical solutions, food safety, separation and purification sciences, health information systems, and other miscellaneous healthcare businesses.
- The Consumer segment provides office supply, stationery, home improvement products, home care products and consumer health care products. In addition, the segment's Construction and Home Improvement Division offers some retail auto care products.



Source: Zacks Investment Research

Reasons To Buy:

- ▲ In the long term, 3M intends to become more competent on the back of product-portfolio solidification. Its household products like Nexcare, Post-it, Scotch, Scotch-Brite and Scotchgard are market leaders in their individual categories. Also, 3M's value model that comprises four priorities namely Portfolio (detailed in the next point), Innovation, Transformation, and People and Culture helps strengthen its margins. In addition, the company is working to transform its businesses through a streamlined operational structure and its new operating model (global). In the near term, the company remains focused on generating healthy cash flow, expanding digital capabilities and managing costs effectively. Also, ensuring the safety of its employees, shareholders and customers in the present environment remain a priority. It noted that it is experiencing high demand in personal safety, general cleaning, home improvement, biopharma filtration, data center and semiconductor markets. In fourth-quarter 2020, the company expects respirators to boost sales by 300 bps year over year. Sales in the quarter are expected to be \$8.2-\$8.4 billion.
- ▲ In sync with its portfolio priority, 3M divested its communication markets business in 2018, the gas and flame detection business to Teledyne Technologies in August 2019, and the advanced ballistic-protection business to Avon Rubber in January 2020. Also, in May 2020, 3M completed the divestment of its drug delivery business to an affiliate of Altaris Capital Partners. This divestiture is expected to hurt sales by \$100 million (or 130 basis points) in the fourth quarter of 2020. With regard to buyouts, 3M added M*Modal's technology business to its portfolio in February 2019, and Acelity Inc. and its KCI subsidiaries in October 2019. Notably, 3M's acquired assets and divestments had a net positive impact of 2.4% on sales in the second quarter and 3% on sales in the third quarter of 2020.
- ▲ 3M remains committed to rewarding its shareholders handsomely through dividend payments and share buybacks. During the first nine months of 2020, the company paid out dividends totaling \$2,540 million to its shareholders and bought back shares worth \$366 million (all repurchases were done in first-quarter 2020). Notably, dividend payouts of \$2,488 million and share buybacks worth \$1,243 million were done in the first nine months of 2019. The quarterly dividend was hiked by 2% or 3 cents per share in February 2020. In the prevalent difficult conditions, 3M continues to use its capital for dividend payments and organic investments, while suspended its share-buyback activities. Resumption of share repurchases will depend on the severity of the pandemic. In the past 30 days, the company's earnings estimates have been raised 3.4% for 2020 and 4.3% for 2021.

3M expects to gain from a solid product portfolio, restructuring actions, acquired assets and shareholder-friendly policies. Also, healthy demand for products in multiple end markets will be beneficial.

Reasons To Sell:

- ▼ In the past three months, 3M's shares have gained 2.1% compared with the industry's growth of 19.7%. In third-quarter 2020, the company's earnings declined 5.8% year over year due mainly to rise in cost of sales and operating expenses, and higher taxes (8 cents per share). These adversities more than offset the positive impacts of growth in net sales. The company remains wary of the uncertainties related to the pandemic and refrained from providing projections for 2020.
- ▼ Geographical diversification is reflective of 3M's flourishing business. However, the diversity exposed the company to headwinds arising from geopolitical issues, macroeconomic challenges and unfavorable movements in foreign currencies. In the third quarter of 2020, foreign currency adversely impacted operating margin by 30 basis points. Further, the company faces tremendous local competitive pressure, whether it is in Brazil, China, India or Indonesia. In order to reduce the competitive pressure, the company has to invest significantly in research and development (R&D) to locally develop and manufacture products. In third-quarter 2020, R&D expenses increased 4.1% year over year. If continued, high expenses might put pressure on the company's finances and hence might impact profitability.
- ▼ A highly leveraged balance sheet can inflate 3M's financial obligations and subsequently hurt profitability. In the last five years (2015-2019), the company's long-term debt rose 14.9% (CAGR). Notably, the metric stood at \$18.4 billion at the end of the third quarter of 2020. Interest expenses (net of interest income) increased 48.2% year over year to \$123 million in the third quarter. In addition to high debts, it is the company's ability to repay its financial obligations that are more concerning. Its cash and cash equivalents were just \$4.1 billion at the end of the third quarter, while its net cash generation from operating activities totaled \$2.5 billion.

Adversities related to the coronavirus outbreak, headwinds related to international exposure and huge debts might be concerning for 3M in the quarters ahead. Also, stiff competition might ail.

Last Earnings Report

3M Q3 Earnings Beat Estimates, Fall Y/Y on High Costs

3M has reported better-than-expected bottom-line results for the third quarter of 2020, with earnings surpassing the Zacks Consensus Estimate by 7.05%. However, sales lagged estimates by 1.7%.

Its adjusted earnings in the reported quarter were \$2.43 per share, surpassing the Zacks Consensus Estimate of \$2.27. However, the bottom line decreased 5.8% from the year-ago quarter figure of \$2.58.

The results suffered from a year-over-year rise in cost of sales and operating expenses, and higher taxes (8 cents per share). These adversities more than offset the positive impacts of growth in net sales.

Sales Details

In the quarter under review, 3M's net sales were \$8,350 million, reflecting growth of 4.5% from the year-ago quarter. However, the company's net sales lagged the Zacks Consensus Estimate of \$8,495 million.

Results benefitted from a 0.9% year-over-year increase in organic sales, a 4.8% contribution from acquisitions and a 0.6% gain from movements in foreign currencies. However, divestitures had a negative impact of 1.8%.

Business was healthy in home improvement, semiconductor, personal safety, general cleaning solutions, biopharma filtration and data center. These headwinds were partially offset by weakness in automotive OEM (original equipment manufacturer), general industrial, healthcare, office supplies, oral care, traffic safety, hospitality, healthcare IT and consumer electronics.

On a geographical basis, sales in the Americas increased 7.7% year over year, while that in the Asia Pacific declined 0.6%. Business in the Europe, Middle East and Africa region improved, with sales increasing 4.4% year over year.

The company reports top-line results under four business segments — including Safety & Industrial, Transportation & Electronics, Health Care, and Consumer. The segmental information is briefly discussed below.

Revenues from the **Safety and Industrial** segment totaled \$3,024 million, increasing 6.9% year over year. The improved performance resulted from a 6.9% increase in organic sales and a 0.4% contribution from movements in foreign currencies, partially offset by 0.4% adverse impacts of divestitures.

Revenues from the **Transportation & Electronics** segment totaled \$2,314 million, reflecting a year-over-year decline of 7.4%. Results were adversely impacted by a 7.1% fall in organic sales and a 1.2% negative influence of divestitures, partially offset by a 0.9% contribution from movements in foreign currencies.

Revenues from the **Health Care** segment were \$2,160 million, up 25.5% year over year. The results benefitted from a positive impact of 23.4% from acquisitions, an 8.1% increase in organic sales and a 1.1% gain from movements in foreign currencies. However, divestitures had a negative impact of 7.1%.

Revenues from the **Consumer** segment increased 5.6% year over year to \$1,417 million. Organic sales improved 5.5% and movements in foreign currencies had a positive impact of 0.1%.

Margin Profile

In the quarter under review, 3M's cost of sales increased 2.7% year over year to \$4,303 million. It represented 51.5% of net sales compared with 52.4% in the year-ago quarter. Selling, general and administrative expenses grew 15.3% year over year to \$1,677 million. It represented 20.1% of net sales versus 18.2% in the year-ago quarter. Research, development and related expenses expanded 4.1% year over year to \$461 million. It represented 5.5% of the quarter's net sales.

Adjusted operating income in the quarter under review inched up 0.2% year over year to \$1,909 million. Operating margin decreased 90 bps year over year to 22.9%. Tax rate in the quarter was 21.4% versus 19% in the year-ago quarter.

Balance Sheet and Cash Flow

Exiting the third quarter, 3M had cash and cash equivalents of \$4,121 million, down 2.3% from \$4,219 million at the end of the last reported quarter. Long-term debt balance decreased 4.4% sequentially to \$18,429 million.

In the reported quarter, it generated net cash of \$2,480 million, reflecting year-over-year growth of 22.7%. Capital used for purchasing property, plant and equipment increased 5.4% year over year to \$368 million. Adjusted free cash flow in the quarter was \$2,161 million, up 13.1% from \$1,911 million generated in the year-ago quarter. Adjusted free cash flow conversion was at 153%.

During the first nine months of 2020, the company used \$2,540 million for paying out dividends to shareholders and repurchased \$366 million treasury shares. Notably, it paid out dividends of \$2,488 million and repurchased shares worth \$1,243 million in the first nine months of 2019.

Outlook

Quarter Ending	09/2020
Report Date	Oct 27, 2020
Sales Surprise	-1.71%
EPS Surprise	7.05%
Quarterly EPS	2.43
Annual EPS (TTM)	8.32

3M remains focused on investing in innovation and growth opportunities as well as working on cost-saving actions. Also, healthy generation of cash flow, efforts to strengthen capital structure and sound capital allocation remain its priorities.

For 2020, the company refrained from providing financial projections due to the prevailing uncertainties associated with the pandemic.

Notably, it did mention that it expects a year-over-year change in sales of flat to up in low-single digits in October. Business days in the month are one less than the year-ago month.

In the fourth quarter of 2020, the company expects respirators to boost sales by 300 bps year over year. Also, the divestiture of the drug delivery business is expected to hurt sales by \$100 million (or 130 bps). Operating margin (adjusted) in the quarter is expected to be 21%.

Recent News

Monthly Sales Update

On **Dec 14, 2020**, 3M discussed its sales performance for November 2020. Total sales in the month expanded 8% year over year, driven by strength across segments and geographies served.

As noted, the company's sales in November totaled \$2.9 billion. Organically, monthly sales increased 7% year over year, while divestitures had an adverse impact of 1% on top-line results. The impact of the movements in foreign currencies was a positive 2% on a year-over-year basis.

On a geographical basis, 3M's sales in the Americas grew 9% year over year or expanded roughly 11% on an organic basis. Notably, local-currency organic sales increased 13% in the United States. Further, Europe, Middle East and Africa's sales improved 10% year over year or 7% organically.

Sales in the Asia Pacific were up 5% from the year-ago month or were flat organically. Notably, organic sales (local currency) in China expanded 13%, while were down 5% in Japan.

On a segmental basis, the company's sales improved 16% year over year in Safety and Industrial, 5% in Health Care, 16% in Consumer, and 3% in Transportation and Electronics. On an organic local-currency basis, sales were up 14% in Safety and Industrial, 15% in Consumer, 7% in Health Care, and 1% in Transportation and Electronics.

3M noted that it generated sales of \$5.7 billion in the first two months of the fourth quarter of 2020. The company anticipates the full quarter's sales to total \$8.2-\$8.4 billion amid the prevalent uncertainties related to the pandemic.

Dividend

On **Dec 12, 2020**, 3M paid a quarterly dividend of \$1.47 per share to its shareholders of record as of Nov 20.

Restructuring Plans

On **Dec 3, 2020**, 3M communicated that it will undertake multiple initiatives to adapt to the changing operating environment in the recovering phase from the pandemic. The moves will likely boost its growth capabilities and impact jobs worldwide.

As noted, the company's operating model, introduced in early 2020, is proving advantageous and further actions to advance the model are being considered. It will work on streamlining its operations by removing redundancies and driving efficiencies.

In addition, 3M is focusing on enhancing its marketing capabilities by investing in global programs, using digital platforms and available data. The above-mentioned actions will likely equip the company well to benefit from the growing opportunities in home improvement, healthcare, e-commerce, automotive electrification and personal safety arenas.

Restructuring actions planned by the company are expected to result in pre-tax charges of \$250-\$300 million. Of these, charges worth \$120-\$150 million are predicted to be incurred in fourth-quarter 2020 and the rest in the second half of 2021. These restructuring moves are likely to impact 2,900 jobs globally.

From these actions, savings of \$200-\$250 million are anticipated, with the share of \$75-\$100 million expected to be realized in 2021.

3M Teams with Safran for Aircraft Interior Solution

On **Nov 23, 2020**, 3M announced its partnership with Safran Cabin — a provider of jet cabin interiors. The collaboration will involve both the companies to leverage their strong research expertise to come up with a cleaner aircraft cabin interior solution for safe and comfortable travel experience.

Monthly Sales Update

On **Nov 13, 2020**, 3M provided details on its sales performance for October 2020. Revenues in the month reportedly increased 3% from the year-ago quarter as business across geographies and segments, except for Transportation and Electronics segment, improved. Notably, the company expected flat to low-single-digit growth in sales for October.

As noted, the company's sales in October totaled \$2.9 billion. Organically, its sales improved 2% year over year, while acquisitions/divestitures positively influenced the quarterly performance by 1%. The impact of the movements in foreign currencies was flat compared with the year-ago quarter.

On a geographical basis, sales in the Americas increased 2%, both on a reported and organic basis, from the year-ago quarter. Notably, local-currency organic sales expanded 3% in the United States. Further, Europe, Middle East and Africa's sales increased 2% year over year or 1% organically. Sales in the Asia Pacific were up 3% than the year-ago month or increased 1% organically. Notably, organic sales (local currency) in China grew 13%, while were down 4% in Japan.

On a segmental basis, sales increased 4% year over year in Safety and Industrial, 7% in Consumer, and 12% in Health Care. However, Transportation and Electronics' sales decreased 4% year over year. On an organic local-currency basis, sales were up 4% in Safety and Industrial, 8% in Consumer, and 8% in Health Care, while were down 4% in Transportation and Electronics.

For the fourth quarter of 2020, 3M anticipates a healthy demand for respirations due to the pandemic to boost sales by 300 basis points (bps)

year over year. Also, it believes that business days will not impact year-over-year results. However, headwinds to the tune of \$100 million (or 130 bps) related to the divestiture of the drug delivery business to an affiliate of Altaris Capital Partners in May 2020 is predicted to impact sales in the quarter.

Valuation

3M's shares have moved down 1.9% in the year-to-date period and up 1.3% over the trailing 12 months. Stocks in both the Zacks sub-industry and the Zacks Conglomerates sector increased 14.1% in the year-to-date period. Over the past year, both the Zacks sub-industry and sector have increased 15.4%.

The S&P 500 Index has increased 13.9% in the year-to-date period and 15% in the past year.

The stock is currently trading at 18.44x forward 12-month P/E, which compares to 28.06x for the Zacks sub-industry, 28.06x for the Zacks sector and 22.56x for the S&P 500 index.

Over the past five years, the stock has traded as high as 26.25x and as low as 12.6x, with a 5-year median of 19.13x. Our Neutral recommendation indicates that the stock will perform in line with the market. Our \$182 price target reflects 19.36x forward 12-month earnings per share.

The table below shows summary valuation data for MMM.

Valuation Multiples - MMM					
		Stock	Sub-Industry	Sector	S&P 500
P/E F12M	Current	18.44	28.06	28.06	22.56
	5-Year High	26.25	28.06	28.06	23.47
	5-Year Low	12.6	15.76	15.76	15.27
	5-Year Median	19.13	18.58	18.58	17.77
P/S F12M	Current	2.97	4.81	4.81	4.25
	5-Year High	4.57	4.81	4.81	4.29
	5-Year Low	2.04	2.29	2.29	3.17
	5-Year Median	3.39	3.06	3.06	3.68

As of 12/14/2020

Source: Zacks Investment Research

Industry Analysis Zacks Industry Rank: Bottom 31% (175 out of 254)



Source: Zacks Investment Research

Top Peers

Company (Ticker)	Rec	Rank
Avery Dennison Corporation (AVY)	Outperform	2
Danaher Corporation (DHR)	Outperform	2
ParkerHannifin Corporation (PH)	Outperform	2
Carlisle Companies Incorporated (CSL)	Neutral	3
Federal Signal Corporation (FSS)	Neutral	3
General Electric Company (GE)	Neutral	3
Honeywell International Inc. (HON)	Neutral	3
IDEX Corporation (IEX)	Neutral	3

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

Industry Comparison Industry: Diversified Operations				Industry Peers		
	MMM	X Industry	S&P 500	AVY	CSL	HON
Zacks Recommendation (Long Term)	Neutral	-	-	Outperform	Neutral	Neutral
Zacks Rank (Short Term)	3	-	-	2	3	3
VGM Score	B	-	-	A	A	D
Market Cap	99.84 B	4.46 B	25.65 B	12.41 B	8.22 B	148.65 B
# of Analysts	7	3	13	6	4	10
Dividend Yield	3.40%	0.93%	1.52%	1.67%	1.36%	1.76%
Value Score	B	-	-	C	B	C
Cash/Price	0.05	0.20	0.06	0.02	0.09	0.10
EV/EBITDA	15.57	11.10	14.36	28.05	11.05	16.81
PEG F1	1.99	2.12	2.76	3.24	1.86	3.91
P/B	8.36	1.27	3.51	9.30	3.32	8.12
P/CF	14.39	8.40	13.61	16.79	12.76	21.42
P/E F1	20.23	20.01	21.62	21.52	27.86	30.13
P/S TTM	3.15	1.44	2.77	1.84	1.90	4.47
Earnings Yield	4.97%	4.05%	4.44%	4.64%	3.59%	3.32%
Debt/Equity	1.54	0.72	0.70	1.51	0.84	0.97
Cash Flow (\$/share)	12.02	2.28	6.94	8.86	12.06	9.89
Growth Score	B	-	-	B	A	F
Historical EPS Growth (3-5 Years)	2.90%	10.73%	9.69%	16.35%	8.77%	6.09%
Projected EPS Growth (F1/F0)	-5.37%	-10.36%	1.00%	4.75%	-32.70%	-13.84%
Current Cash Flow Growth	-11.15%	6.22%	5.22%	3.06%	19.98%	-1.43%
Historical Cash Flow Growth (3-5 Years)	1.67%	7.02%	8.33%	8.17%	13.96%	5.69%
Current Ratio	1.90	1.58	1.38	1.31	3.31	1.64
Debt/Capital	60.68%	41.71%	42.00%	60.22%	45.65%	49.14%
Net Margin	15.65%	2.27%	10.40%	7.80%	7.91%	14.99%
Return on Equity	44.77%	7.98%	14.99%	44.88%	14.60%	27.69%
Sales/Assets	0.70	0.72	0.50	1.17	0.74	0.55
Projected Sales Growth (F1/F0)	-0.71%	-0.36%	0.30%	-2.94%	-11.62%	-12.55%
Momentum Score	B	-	-	A	C	B
Daily Price Change	-0.54%	-0.12%	-0.76%	-0.83%	-0.98%	-1.30%
1-Week Price Change	0.90%	0.34%	-1.29%	-2.62%	3.60%	0.92%
4-Week Price Change	-0.45%	3.10%	0.17%	-2.51%	6.81%	1.56%
12-Week Price Change	7.26%	14.80%	16.05%	22.75%	29.65%	31.28%
52-Week Price Change	1.36%	-5.45%	4.24%	13.73%	-3.74%	20.10%
20-Day Average Volume (Shares)	2,581,894	72,779	2,015,076	407,825	238,099	3,010,971
EPS F1 Estimate 1-Week Change	0.00%	0.00%	0.00%	0.48%	0.00%	0.00%
EPS F1 Estimate 4-Week Change	0.53%	0.04%	0.00%	0.85%	0.00%	0.00%
EPS F1 Estimate 12-Week Change	4.15%	4.00%	3.94%	13.89%	-0.08%	1.88%
EPS Q1 Estimate Monthly Change	-0.22%	0.00%	0.00%	3.39%	0.00%	0.00%

Source: Zacks Investment Research

Zacks Stock Rating System

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

Zacks Recommendation

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

Zacks Rank

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

Zacks Style Scores

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

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

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

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

Disclosures

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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.