

Baxter International (BAX)

\$81.86 (As of 06/29/21)

Price Target (6-12 Months): **\$86.00**

Long Term: 6-12 Months

Zacks Recommendation:

Neutral

(Since: 02/10/21)

Prior Recommendation: Underperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

2-Buy

Zacks Style Scores:

VGM:C

Value: C

Growth: C

Momentum: D

Summary

Baxter's surgical portfolio is anticipated to generate huge profits on the back of products including FLOSEAL Hemostatic Matrix and TISSEEL Fibrin Sealant. It ended first-quarter 2021 on a strong note, wherein both earnings and revenues beat the Zacks Consensus Estimate. The company witnessed strong performance across five of its business units. Growth in EMEA and APAC instills optimism. Number of regulatory approvals, buyout, completion of agreements, and multiple collaborations to help in the manufacturing process of COVID-19 vaccines are primary highlights. But, weak performance across Medication Delivery and Advanced Surgery segments is a dampener. Contraction in both gross and operating margins remains a concern. Cut-throat competition in the MedTech markets is also a woe. The company underperformed the industry in a year's time.

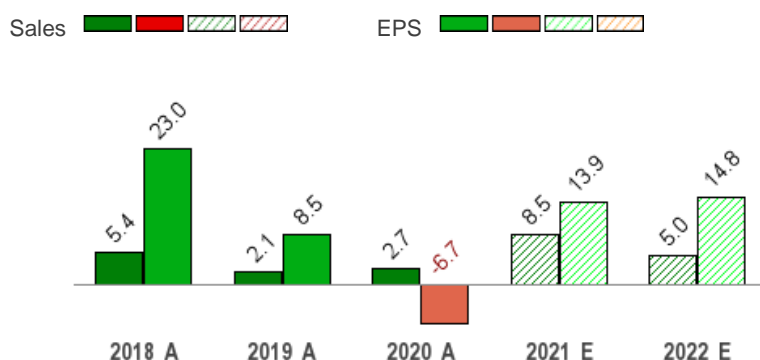
Price, Consensus & Surprise



Data Overview

52-Week High-Low	\$91.45 - \$74.79
20-Day Average Volume (Shares)	2,848,472
Market Cap	\$41.2 B
Year-To-Date Price Change	2.0%
Beta	0.68
Dividend / Dividend Yield	\$1.12 / 1.4%
Industry	Medical - Products
Zacks Industry Rank	Bottom 28% (180 out of 251)

Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2022	3,093 E	3,266 E	3,389 E	3,582 E	13,305 E
2021	2,946 A	3,113 E	3,219 E	3,406 E	12,670 E
2020	2,802 A	2,718 A	2,972 A	3,181 A	11,673 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2022	\$0.90 E	\$0.94 E	\$1.03 E	\$1.16 E	\$4.04 E
2021	\$0.76 A	\$0.74 E	\$0.94 E	\$1.08 E	\$3.52 E
2020	\$0.82 A	\$0.64 A	\$0.83 A	\$0.80 A	\$3.09 A

*Quarterly figures may not add up to annual.

Last EPS Surprise	18.8%
Last Sales Surprise	1.7%
EPS F1 Estimate 4-Week Change	0.0%
Expected Report Date	07/29/2021
Earnings ESP	0.0%
P/E TTM	27.0
P/E F1	23.3
PEG F1	1.8
P/S TTM	3.5

The data in the charts and tables, including the Zacks Consensus EPS and sales estimates, is as of 06/29/2021. The report's text and the

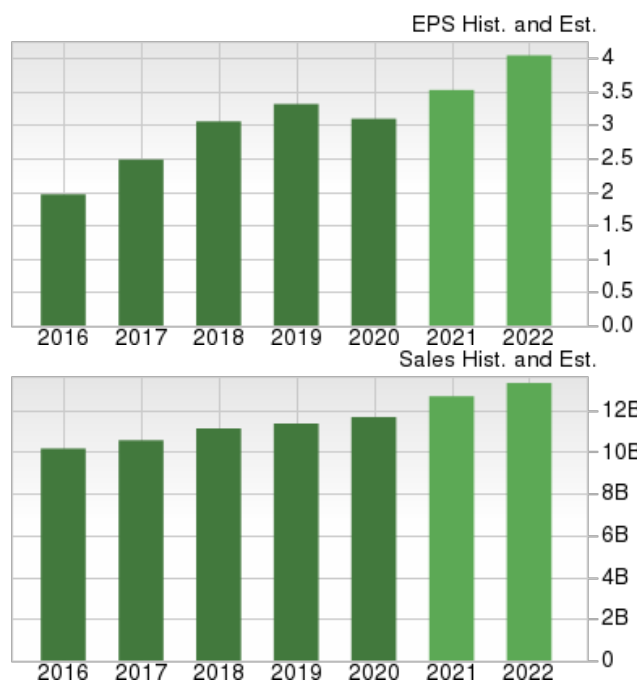
analyst-provided price target are as of 06/30/2021.

Overview

Headquartered in Deerfield, IL, Baxter International Inc. (BAX) is a global medical technology company. However, the company spun off its biopharmaceuticals segment into an independent entity – Baxalta Inc. Following the spinoff, the company consists of renal and hospital products, providing items such as kidney-dialysis equipment, infusion pumps, and intravenous (IV) solutions.

Baxter has been reporting through six revenue segments. Renal Care (32% of net sales in 2020), Medication Delivery (23%), Pharmaceuticals (18.2%), Clinical Nutrition (7.9%), Advanced Surgery (7.6%), Acute Therapies (6.3%) and Other (4.4%).

Baxter's Renal segment primarily consists of Peritoneal Dialysis (PD) and Hemodialysis (HD) therapies. The portfolio addresses the needs of patients with kidney failure or kidney disease, and their healthcare providers, with a comprehensive range of therapeutic options across home, in-center, and hospital settings for better individualized care. Pharmacy Solutions (IPS) mainly includes premixed and oncology drug platforms, nutrition products and pharmacy compounding services. Cyclophosphamide is a part of this division. Surgical Care includes inhaled anesthesia products as well as biological products and medical devices used in surgical procedures for hemostasis, tissue sealing and adhesion prevention. Other segment primarily generates revenues from the company's pharmaceutical partnering business.



2020 at a Glance: Baxter reported net revenues of \$11.67 billion in 2020, up 2.7% year over year on a reported basis. Adjusted earnings of \$3.09 per share, fell 6.6% year over year.



Reasons To Buy:

▲ **Acute Therapies Profile:** Baxter's performance in acute therapies has been continued to be driven by improving utilization for continuous renal replacement (CRRT) globally, and increased demand for multi-organ support products. In acute therapies, Baxter launched the first 3-in-1 oXIRIS set for continuous renal replacement therapy and sepsis management protocols. This adds to Baxter's multi-organ therapy offering, utilizing the Prismaflex system. PrisMax is available in the intensive care units in more than 20 countries across Europe and Asia-Pacific.

Positive tidings on regulatory front, expanding product portfolio, strategic collaborations and strong presence in the international markets are key positives.

The company has been witnessing tremendous demand for many products, which includes its PrisMax and PRISMAFLEX, continuous renal replacement therapy, devices and associated consumables. The company's MINI-BAG Plus drug delivery system, the Spectrum IQ infusion system in SAS, plus IV Solutions parenteral nutrition therapies and injectable drugs are in great demand as well.

Per first-quarter 2021 results, revenues in Acute Therapies business were \$207 million, reflecting growth of 32.7% on a reported basis and 28% on a constant currency (cc) basis. Per management, the segment continues to witness higher demand for CRRT products utilized in the treatment of COVID-19. In the quarter under review, the performance in this segment drove growth across all of Baxter's product categories. However, per management, the aforementioned heightened demand will slow down with the increase in vaccination rates and COVID-related admissions decline.

▲ **Baxter – a Leading Player in Renal-Care Space:** Baxter provides renal care services across Asia, Europe and Latin America. For more than 60 years, Baxter has been a leading provider for Hemodialysis (HD) and peritoneal dialysis (PD). New therapies like expanded hemodialysis (HDx) and remote patient management has fortified the company's position in the renal care space. The renal care products include AMIA Automated PD System with SHARESOURCE Remote Patient Management System, SHARESOURCE Remote Patient Management System, BICART Cartridge, Cartridge Blood Set, DIACLEAR Ultrafilter, DIASCAN Monitoring System, EXELTRA Dialyzer High-Flux, Single-Use Dialyzers, PD Simple Paks, POLYFLUX 6H Dialyzer and others. All these products enjoy high demand and have been significantly contributing to the company's top line in the past several quarters.

Baxter continues to experience robust growth in global demand for CRRT therapies despite the ongoing COVID-19 pandemic. In the first quarter, revenues in Renal Care business were \$922 million, which increased 5.9% from the prior-year quarter and 2% at cc. Global growth in its PD business contributed to the solid performance in the first quarter.

▲ **Baxter's Surgical Portfolio Holds Promise:** Baxter's surgical portfolio includes products like FLOSEAL Hemostatic Matrix, TISSEEL Fibrin Sealant, COSEAL Surgical Sealant and VASCU-GUARD Patch among others. The portfolio is composed of hemostasis (addressing bleeding), tissue sealing and hard tissue regeneration as well as soft tissue repair and microsurgery with products available in nearly 60 countries. Introduction of Peri-Strips Dry stapler and Tisseel Prima are likely to boost Baxter's surgical portfolio.

However, in the first quarter, Baxter witnessed Advanced Surgery segment's revenues of \$217 million, declining 3.1% from the year-ago quarter and 6% at cc. Decline in surgical procedure volumes coupled with a strained year-over-year comparison (since the first quarter of 2020 included a benefit of approximately 600 basis points owing to competitor product shortages) led to the decline. Nonetheless, per management, quarterly sequential improvement is expected, while the company anticipates to end the year with procedure volumes being around flat to pre-COVID levels.

▲ **Positive Tidings on Regulatory Front:** Baxter has been witnessing positive tidings on the regulatory front. In recent times, the company received CE mark for the Evo IQ Infusion System in the United Kingdom and Ireland, representing the first in a series of planned regulatory submissions for the Evo IQ system. Additionally, in the second quarter of 2020, Baxter announced CE marking in Europe and regulatory approval from Australia's Therapeutic Goods Administration (TGA) for the Evo IQ Syringe Infusion System. This can be utilized to deliver small volumes of medications and other fluids to patients in a controlled manner. The device is part of the broader Evo IQ Infusion Platform and is supported by Baxter's web-based Dose IQ Safety Software and wireless IQ Enterprise Connectivity Suite.

In November 2020, Baxter attained FDA approval for the Homechoice Claria automated peritoneal dialysis (APD) system with Sharesource connectivity platform. In March 2021, Baxter received U.S. FDA clearance of its next-generation Artificial Kidney 98 (AK 98) dialysis machine, which can be used simultaneously with the company's novel dialysis membrane — Theranova. The latest technology has been designed to be a portable and simple to use system to manage hemodialysis (HD) treatments.

Further, during the first quarter, the company resubmitted to the FDA for 510(k) clearance of Baxter's cutting-edge Novum IQ Infusion platform. The platform comprises both large volume and syringe infusion pumps, and has Baxter's Dose IQ Safety Software and IQ Enterprise Connectivity Suite, intuitive digital health technologies that have been created for patient protection, device management and provision of advanced insights.

▲ **Solid Global Foothold:** Baxter has a strong presence in foreign markets, which makes international diversification a core component of its strategy. In the fourth quarter, two of the company's three global regions performed well and contributed to the quarter's favorable results. In EMEA, revenues totaled \$738 million, up 7.3% from the year-ago quarter and flat at cc. In APAC, revenues of \$648 million improved 18% from the prior-year quarter and 8% at cc. Strength across the region, with most of the region advancing toward its recovery, contributed to the

improvement. Baxter's wide geographic presence reflects balance and stability, thereby enabling it in countering risks stemming from overexposure to a more limited range of geographies.

- ▲ **Strong Product Portfolio:** Baxter has an impressive product portfolio with improved existing products and new product development. Management has announced plans of introducing therapies and products, which are expected to contribute approximately \$1.7 billion to sales by 2023.

During the first quarter, Baxter inked a deal with Moderna, Inc. for Baxter BioPharma Solutions to offer fill/finish sterile manufacturing services and supply packaging for about 60-90 million doses of the Moderna COVID-19 vaccine in 2021. This partnership follows previous agreements announced with BioNTech and Novavax to offer manufacturing services for their respective COVID-19 vaccines.

In December, Baxter collaborated with AdventHealth Tampa to develop customized hemostasis strategies that can aid in the latter's clinical, operational and financial goals. This has been made possible with the help of Baxter's Vital Edge program.

During the first quarter of 2021, Baxter acquired rights to specified territories outside of the United States with respect to the widely prescribed chemotherapy medication Caelyx, known as Doxil in several geographies, including the United States. This in turn, supplements Baxter's U.S. rights to Doxil, (which was acquired in 2019). Moreover, Baxter acquired full U.S. and specified OUS rights to the anti-nausea medication Transderm Scop, indicating a key adjacency to Baxter's industry-leading inhaled anesthetics portfolio. It is worth mentioning that previously Baxter had a license to sell the product to select customers in the United States.

Per the fourth-quarter 2020 earnings call, Baxter's new product pipeline comprises addition of generic injectables and the next generation of its market, leading premix technology among other notable mentions. Additionally, Baxter will continue to pursue attractive business development and licensing opportunities in line with its core portfolio ranking adjacencies.

- ▲ **Stable Liquidity Position:** Baxter is well capitalized having exited first-quarter 2021 with cash and cash equivalents of \$3.18 billion, down from \$3.73 billion on a sequential basis. Meanwhile, long-term debt came was \$5.68 billion in the first quarter, slightly lower than \$5.79 billion, sequentially. Although the quarter's long-term debt was higher than the corresponding cash and cash equivalent level, the company's current-year debt of \$407 million (slightly higher from \$406 million on sequential basis) is much lower than the cash level. This is good news in terms of the company's solvency level as, at least during the year of economic downturn.
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Reasons To Sell:

▼ **Shares Down:** Over the past year, shares of Baxter have lost 6.2% against the industry's growth of 18.4%. The company witnessed weak performance across Medication Delivery and Advanced Surgery segments in the first quarter, which is a dampener. Also, contraction in both gross and operating margins has weighed on the results. Moreover, the pandemic adversely affected overall ESRD patient volumes as this patient population is witnessing a higher mortality rate and incidence of new patients' diagnosis appears to be slowing. Per management, the company estimates that COVID-19 negatively impacted year-over-year sales growth by around 400 basis points in the first quarter. Further, cut-throat competition in the MedTech markets remains a woe.

Generic competition for Cyclophosphamide, and lackluster sales in a few sub-segments are key concerns.

▼ **Generic Competition for Cyclophosphamide:** Cyclophosphamide is a part of Baxter's Hospital Products segment. However, Baxter's cyclophosphamide performance over the last five years has lacked luster for the most part. Lower cyclophosphamide sales pose threats to the Integrated Pharmacy Solutions franchise business. Despite a promising portfolio, the company has failed to grab market share and substantially grow its top line, thanks to generic competition for cyclophosphamide.

▼ **Sluggish Macro-environment:** Baxter depends on the European Union for about a third of its sales. This is a cause for concern, given the sluggish macro-environment, a glum outlook for hospital spending and tightening of reimbursement. The outlook also remains slightly uneasy in the U.S., where demand for many health care products is soft with an expectation of further price cuts on account of health care reforms.

▼ **Cutthroat Competition in Renal Care Market:** Increase in prevalence of renal diseases and a huge diabetic and obese population is responsible for the growth of renal dialysis market in North America, Europe and Asia Pacific. Notably, Middle East and Africa has the least share in the renal dialysis market. Per a report by Global Market Insights, the Global Renal Dialysis market is expected to exceed US\$ 104 billion by end of 2024.

Cutthroat competition in the Renal Care Market is likely to dent Baxter's margins. The company faces aggressive rivalry from MedTech behemoths like Fresenius Medical Care, DaVita Healthcare Partners Inc. and more.

Last Earnings Report

Baxter Q1 Earnings and Revenues Surpass Estimates

Baxter International Inc. reported first-quarter 2021 adjusted earnings per share of 76 cents, which outpaced the Zacks Consensus Estimate of 64 cents by 18.8%. However, the bottom line declined 7.3% from the year-ago quarter.

Revenue Details

Revenues of \$2.94 billion beat the Zacks Consensus Estimate of \$2.89 billion by 1.7%. The top line also improved 5.1% year over year on a reported basis, and 1% on both constant currency (cc) and operational basis.

Geographical Details

Baxter reports operating results through three geographic segments — Americas (North and South America), EMEA (Europe, Middle East and Africa) and APAC (Asia Pacific).

In Americas, Baxter reported revenues of \$1.56 billion, down 0.3% on a year-over-year basis and 1% at cc.

In EMEA, revenues totaled \$738 million, up 7.3% from the year-ago quarter and flat at cc.

In APAC, revenues of \$648 million improved 18% from the prior-year quarter and 8% at cc.

Segmental Details

It is worth mentioning that starting from the first quarter of 2021, the company's segmental details of revenues separately show net sales from its BioPharma Solutions business that was previously included within Other.

Renal Care

This segment reported revenues of \$922 million in the quarter under review, up 5.9% year over year. Revenues at the segment increased 2% at cc.

Medication Delivery

Revenues at the segment amounted to \$652 million, down 3.8% from the year-ago quarter and 6% at cc.

Pharmaceuticals

Revenues at the segment totaled \$552 million, up 6.9% from the year-ago quarter and 1% at cc.

Clinical Nutrition

Revenues at the segment were \$234 million, up 7.8% from the year-ago quarter and 3% at cc.

Advanced Surgery

Revenues at the segment totaled \$217 million, down 3.1% from the year-ago quarter and 6% at cc.

Acute Therapies

This segment reported revenues of \$207 million, up 32.7% from the prior-year quarter and 28% at cc.

BioPharma Solutions

This segment reported revenues of \$135 million, up 18.4% from the prior-year quarter and 11% at cc.

Other

Revenues in the segment were \$27 million, flat on a year-over-year basis but down 4% at cc.

Margin Analysis

Baxter reported adjusted gross profit of \$1.24 billion in the first quarter, down 0.2% year over year. As a percentage of revenues, gross margin contracted 230 basis points (bps) on a year-over-year basis at 42% in the first quarter.

Quarter Ending

03/2021

Report Date	Apr 29, 2021
Sales Surprise	1.73%
EPS Surprise	18.75%
Quarterly EPS	0.76
Annual EPS (TTM)	3.03

Adjusted operating income fell 5.1% year over year to \$501 million in the quarter under review. As a percentage of revenues, operating margin contracted 180 bps to 17% in the quarter under review.

2021 Guidance

For second-quarter 2021 the company anticipates sales to improve in the band of 14-15% on a reported basis, 8-9% at cc and 7-8% on an operational basis.

For the same period, adjusted EPS is estimated between 72 cents and 75 cents. The Zacks Consensus Estimate for the same is pegged at 78 cents.

For full-year 2021, Baxter anticipates sales growth in the range of 8-9% on a reported basis, 5-6% at cc and 4-5% on an operational basis.

Adjusted earnings per share is estimated in the range of \$3.47 to \$3.55. The Zacks Consensus Estimate for the same stands at \$3.39.

Recent News

Baxter's TheraNova-Enabled HDx Therapy Data Positive: Jun 8, 2021

Baxter International announced favorable data from the "Effectiveness of medium cut-off versus high flux dialyzers: An inverse probability weighting cohort study".

Baxter Unveils New Digital Health Module for PD Patients: Jun 2, 2021

Baxter International introduced the Sharesource Analytics 1.0 premium module, which is the next generation of digital health for home-based PD patients.

Baxter's PrisMax 2 to Simplify Organ Support Therapies: May 25, 2021

Baxter International announced the global launch of the latest version of its next-generation platform, PrisMax 2.

Valuation

Baxter's shares are up 2% in the year-to-date period while down 6.2% in the trailing 12-month period.

Stocks in the Zacks sub-industry are up 4.1% in the year-to-date period, while that in the Zacks Medical Market are up 2%. Over the past year, the Zacks sub-industry and sector are up 18.4% and 6.3%, respectively.

The S&P 500 index is up 15% in the year-to-date period and 39.8% the past year.

The stock is currently trading at 21.7X Forward 12-months earnings, which compares to 27.4X for the Zacks sub-industry, 23.7X for the Zacks sector and 21.9X for the S&P 500 index.

Over the past five years, the stock has traded as high as 28.1X and as low as 18.8X, with a 5-year median of 23.5X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$86 price target reflects 23.2X forward 12-months earnings.

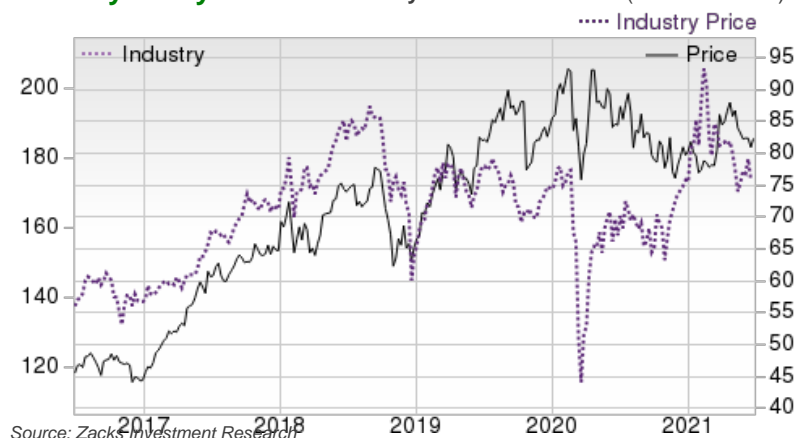
The table below shows summary valuation data for BAX.

Valuation Multiples - BAX					
		Stock	Sub-Industry	Sector	S&P 500
P/E F12M	Current	21.68	27.43	23.71	21.85
	5-Year High	28.13	30.08	23.71	23.83
	5-Year Low	18.76	16.75	15.82	15.31
	5-Year Median	23.49	22.14	19.38	18.2
P/S F12M	Current	3.17	3.8	2.72	4.76
	5-Year High	4.03	3.89	3.17	4.76
	5-Year Low	2.26	2.59	2.27	3.21
	5-Year Median	3.31	3.39	2.78	3.72
P/B TTM	Current	4.85	3.48	4.56	7.14
	5-Year High	6.2	3.95	5.05	7.14
	5-Year Low	2.74	2.23	3.03	3.84
	5-Year Median	4.5	3.04	4.35	5.02

As of 06/29/2021

Source: Zacks Investment Research

Industry Analysis Zacks Industry Rank: Bottom 28% (180 out of 251)



Top Peers

Company (Ticker)	Rec	Rank
Boston Scientific Corporation (BSX)	Neutral	3
EssilorLuxottica Un-sponsored ADR (ESLOY)	Neutral	3
Owens & Minor, Inc. (OMI)	Neutral	3
Perrigo Company plc (PRGO)	Neutral	3
Stryker Corporation (SYK)	Neutral	3
Terumo Corp. (TRUMY)	Neutral	3
Zimmer Biomet Holdings, Inc. (ZBH)	Neutral	3
Abbott Laboratories (ABT)	Underperform	5

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

Industry Comparison Industry: Medical - Products				Industry Peers		
	BAX	X Industry	S&P 500	BSX	OMI	SYK
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	2	-	-	3	3	3
VGM Score	C	-	-	C	A	C
Market Cap	41.16 B	656.10 M	30.34 B	61.43 B	3.11 B	98.12 B
# of Analysts	10	3	12	13	3	13
Dividend Yield	1.37%	0.00%	1.34%	0.00%	0.02%	0.97%
Value Score	C	-	-	C	A	C
Cash/Price	0.08	0.10	0.06	0.03	0.02	0.02
EV/EBITDA	19.27	2.26	17.30	35.34	13.67	39.36
PEG F1	1.82	2.35	2.11	2.93	0.59	2.96
P/B	4.85	3.81	4.05	3.91	3.96	7.27
P/CF	16.97	24.58	17.44	20.19	12.38	26.90
P/E F1	23.26	29.89	21.19	27.36	10.92	28.39
P/S TTM	3.48	6.07	3.42	6.07	0.36	6.67
Earnings Yield	4.30%	1.87%	4.64%	3.65%	9.16%	3.52%
Debt/Equity	0.67	0.02	0.66	0.58	1.25	0.97
Cash Flow (\$/share)	4.82	0.00	6.86	2.14	3.34	9.68
Growth Score	C	-	-	C	A	B
Historical EPS Growth (3-5 Years)	13.96%	7.40%	9.59%	2.19%	-13.53%	7.40%
Projected EPS Growth (F1/F0)	13.92%	26.01%	21.89%	64.58%	67.70%	23.49%
Current Cash Flow Growth	-3.94%	-2.29%	1.02%	-9.43%	31.76%	-7.10%
Historical Cash Flow Growth (3-5 Years)	9.99%	8.88%	7.34%	8.10%	5.56%	9.18%
Current Ratio	2.46	3.35	1.38	1.80	1.65	2.27
Debt/Capital	40.09%	10.11%	41.51%	36.62%	55.52%	49.17%
Net Margin	9.04%	-9.67%	12.06%	1.69%	1.28%	9.57%
Return on Equity	18.34%	-3.00%	16.59%	9.80%	43.12%	21.90%
Sales/Assets	0.60	0.52	0.51	0.33	2.64	0.45
Projected Sales Growth (F1/F0)	8.54%	10.86%	9.56%	18.36%	13.32%	19.40%
Momentum Score	D	-	-	C	C	C
Daily Price Change	0.26%	-0.23%	0.03%	-0.23%	-0.60%	0.03%
1-Week Price Change	1.70%	2.17%	1.07%	2.51%	-5.79%	3.17%
4-Week Price Change	-0.34%	1.87%	2.14%	0.70%	-3.00%	1.82%
12-Week Price Change	-3.60%	-0.82%	5.35%	10.99%	8.41%	4.85%
52-Week Price Change	-4.92%	23.33%	38.43%	23.13%	443.18%	44.54%
20-Day Average Volume (Shares)	2,848,472	319,236	1,994,187	6,054,538	1,172,019	1,046,652
EPS F1 Estimate 1-Week Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
EPS F1 Estimate 4-Week Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
EPS F1 Estimate 12-Week Change	3.75%	-0.14%	3.69%	3.11%	10.34%	1.42%

Past performance is no guarantee of future results. Please see important disclosures and definitions at the end of this report.

EPS Q1 Estimate Monthly Change	0.00%	:	0.00%	:	0.00%	:	0.00%	:	0.00%	:	0.00%
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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.

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.

Value Score	C
Growth Score	C
Momentum Score	D
VGM Score	C

Disclosures

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Glossary of Terms and Definitions

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

proportionate to its market value.

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

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

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

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

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

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

Periods:

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

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

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

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

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

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

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

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

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

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

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

EV/CF Ratio: The enterprise value-to-cash flow ratio is calculated as a company's enterprise value (market capitalization + value of total long-

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

However, this ratio can vary widely from industry to industry, the ideal amount of required debt being different. Some businesses are more capital

intensive than others and typically require higher debt to finance their operations. So, a company's debt-to-capital ratio should be compared with the same for its industry.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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