

Charles River Lab (CRL)

\$366.95 (As of 06/23/21)

Price Target (6-12 Months): **\$386.00**

Long Term: 6-12 Months

Zacks Recommendation:

Neutral

(Since: 04/15/19)

Prior Recommendation: Outperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

2-Buy

Zacks Style Scores:

VGM:C

Value: D

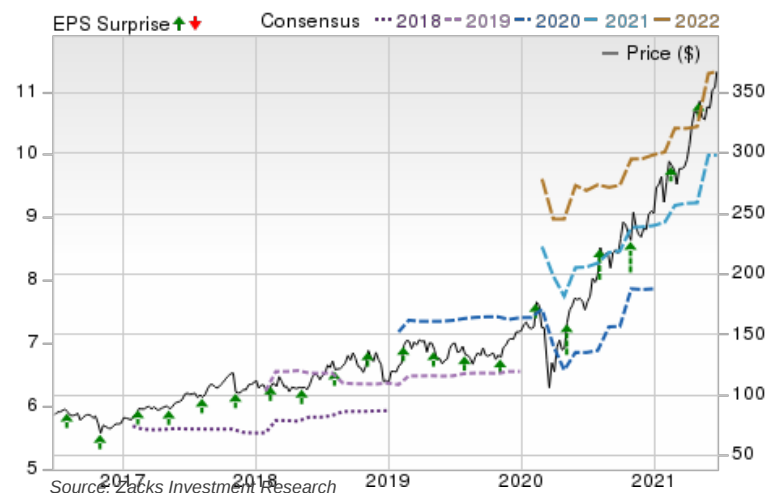
Growth: B

Momentum: C

Summary

Over the past three months, Charles River has been outperforming its industry. The last-reported first quarter was highlighted by 13% organic revenue growth, driven by double-digit growth across all three segments. Internationally, Biomedical research in China has returned to pre-COVID levels, and in some areas, even greater levels. Based on a strong first-quarter performance and expectations of robust client demand through the remainder of the year, the company has raised its 2021 guidance. Meanwhile, the company expects strong synergy benefits from the acquisition of Cognate which will help it to offer CDMO services in the high-growth, high-science cell and gene therapy sector. On the flip side, the company's cell supply business is facing issues related to donor access. Stiff competition and foreign currency fluctuation are other woes.

Price, Consensus & Surprise



Data Overview

52-Week High-Low **\$370.58 - \$167.55**

20-Day Average Volume (Shares) **540,054**

Market Cap **\$18.4 B**

Year-To-Date Price Change **46.9%**

Beta **1.14**

Dividend / Dividend Yield **\$0.00 / 0.0%**

Industry **Medical Services**

Zacks Industry Rank **Bottom 25% (189 out of 252)**

Last EPS Surprise **15.5%**

Last Sales Surprise **3.5%**

EPS F1 Estimate 4-Week Change **0.6%**

Expected Report Date **08/04/2021**

Earnings ESP **1.7%**

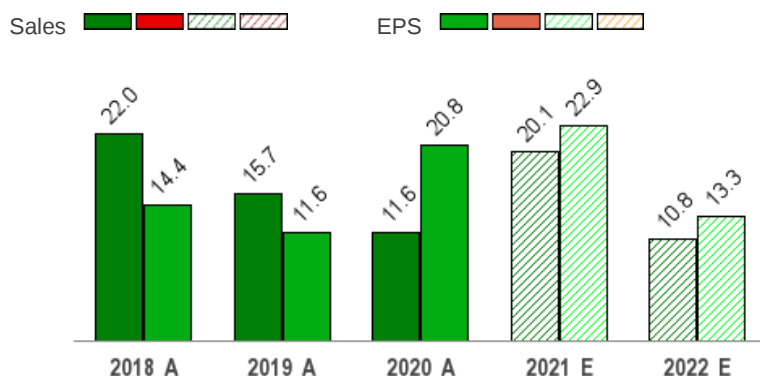
P/E TTM **41.6**

P/E F1 **36.7**

PEG F1 **2.6**

P/S TTM **6.1**

Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2022	920 E	932 E	962 E	1,016 E	3,893 E
2021	825 A	867 E	888 E	923 E	3,512 E
2020	707 A	683 A	743 A	791 A	2,924 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2022	\$2.66 E	\$2.66 E	\$2.88 E	\$2.98 E	\$11.32 E
2021	\$2.53 A	\$2.39 E	\$2.45 E	\$2.57 E	\$9.99 E
2020	\$1.84 A	\$1.58 A	\$2.33 A	\$2.39 A	\$8.13 A

*Quarterly figures may not add up to annual.

The data in the charts and tables, including the Zacks Consensus EPS and sales estimates, is as of 06/23/2021. The report's text and the

analyst-provided price target are as of 06/24/2021.

Overview

Headquartered in Wilmington, MA, Charles River Laboratories International, Inc. (CRL) is a full service, early-stage contract research organization (CRO). The company provides essential products and services to help pharmaceutical and biotechnology companies, government agencies and leading academic institutions globally accelerate their research and drug development efforts.

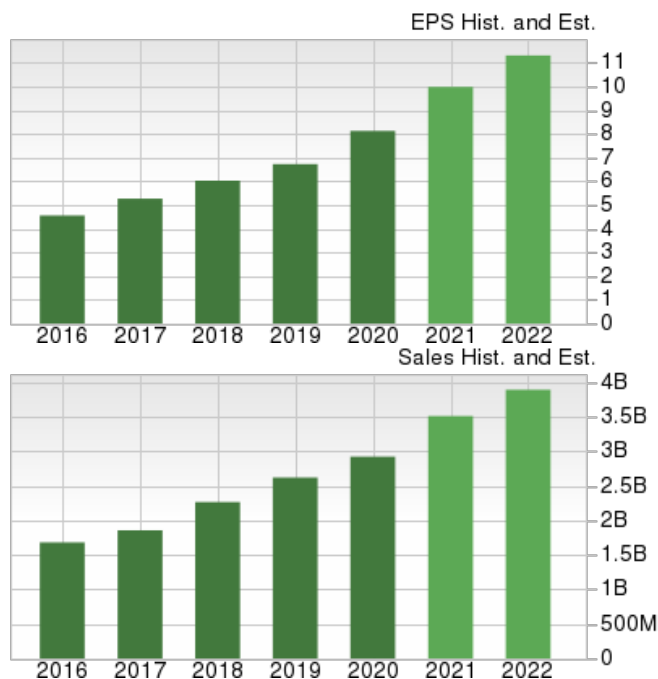
The company has a diverse portfolio of discovery and safety assessment services, both Good Laboratory Practice (GLP) and non-GLP. This helps support its clients from target identification through non-clinical development. Charles River also provides a line of products and services to support clients' manufacturing activities. Utilizing the company's broad portfolio of products and services, clients can create a more flexible drug development model, aiming cost reduction, productivity enhancement and increase in speed to market.

Charles River currently has three reporting segments: Research Models and Services (RMS), Discovery and Safety Assessment (DSA) and Manufacturing Support.

Through the RMS segment (19.6% of total revenue in 2020; up 6.3% from 2019), the company supplies research models to the drug development industry. It also provides a variety of related services that are designed to support clients in the use of research models in drug discovery and development.

The DSA segment (62.8%; up 13.5%) provides services that enable clients to outsource their advanced drug discovery research, related drug development activities and their regulatory-required safety testing of potential new drugs, industrial and agricultural chemicals, consumer products, veterinary medicines and medical devices.

Through the Manufacturing segment (17.6%, up 10.8%) the company helps ensure the safe production and release of products manufactured by its clients. The Manufacturing segment comprises three businesses: Microbial Solutions, Biologics Testing Solutions and Avian Vaccine Services.



Reasons To Buy:

▲ **Share Price Movement:** Over the past three months, Charles River has been outperforming its industry. The stock has gained 22.8% compared with the industry's 7.1% rise. The stock exited the first quarter of 2021 on a strong note with better-than-expected revenues and earnings. The highlight of the quarterly performance was 13% organic revenue growth driven by double-digit increase across all three segments. The year-over-year comparison to last year's COVID-related revenue impact, which primarily affected the RMS segment, contributed approximately 140 basis points to the reported revenue growth rate this quarter. Further, there was 170 basis points improvement in operating margin driven by a strong margin scenario within RMS and DSA segments, reflecting operating leverage.

Based on robust first-quarter performance and expectations of robust client demand through the remainder of the year, the company has raised its 2021 revenue and adjusted earnings guidance.

The company is currently looking forward to the acquisition of Cognate, which was completed in March. As per Charles River, this will help the company to offer CDMO services in the high-growth, high-science cell and gene therapy sector.

Strong organic revenue growth and robust margin scenario demonstrates the strength of the biopharmaceutical market environment and the power of the company's advanced portfolio.

▲ **RMS Business Rebounds:** Last year, the RMS segment was hugely impacted by COVID-19 related business disruption. However, in the reported quarter, RMS revenues increased 14.8% organically year over year. Robust demand for research models in China was the primary growth driver. Further, higher revenues from research model services, including GEMS and CRADL initiative, also contributed to the quarter's top line within RMS. In the first quarter, COVID-led favorable year-over-year comparison contributed approximately 620 basis points to RMS revenue growth. Demand trends for the research models were largely consistent with those prior to the pandemic, with growth in China widely outpacing mature markets. Research models business in China had an exceptional quarter even after normalizing for last year's COVID-19 impact, driven by resurgence in demand across all segments.

Further, Biomedical research in China has returned to pre-COVID levels, and in some areas, even at greater levels. In the United States and Europe, client order activity has also rebounded. Research Model Services also continued to perform well.

RMS' organic revenue growth guidance for 2021 reflects recovery from the impact of the COVID-19 pandemic last year, exceptional growth in China and an expected improvement in cell supply revenue growth in 2021.

▲ **DSA Arm Continues to Thrive:** This segment reported 11.6% organic revenue growth in the first quarter of 2021 driven by broad-based demand for both Discovery and Safety Assessment. The Safety Assessment business continued to perform exceptionally well, reflecting robust demand from both biotech and global biopharma clients and price increases. Bookings and proposal volume reached record highs in the first quarter, with strength across all regions and major service areas. Bookings increased substantially more than the company's target.

Charles River projects the DSA segment to deliver low double-digit revenue growth for the full year, reflecting the strong first-quarter performance and intensified early stage research activity.

▲ **Strategic Acquisitions Drive Growth:** Charles River broadens the scope of the products and services across the drug discovery and early-stage development continuum through focused acquisitions. Citoxlab (acquired in 2019) and HemaCare (acquired in 2020) are an integral part of the company's growth strategy of successfully expanding the company's portfolio and broadening its geographic footprint. According to Charles River, the acquisition of Citoxlab enhanced its position as a leading global early stage CRO. The acquisition of HemaCare enhances its ability to provide a comprehensive cell therapy solution from discovery through commercialization. The acquisition of Cognate in March 2021 too is expected to be highly complementary to the company's Biologics business. The acquisition establishes Charles River as a premier scientific partner to cell and gene therapy development, testing and manufacturing.

▲ **Stable Solvency Structure:** Charles River exited the first quarter of 2021 with cash and cash equivalents of \$465 million compared with \$228 million at the end of the fourth quarter of 2020. Meanwhile, total debt was \$2.20 billion, a slight increase from the last quarter's reported figure of \$1.98 billion. Although the first quarter's total debt was much higher than the corresponding cash and cash equivalent level, the company has short-term payable debt of \$3 million on its balance sheet, much lower than the present level of cash in hand. This is good news in terms of the company's solvency position, particularly during the time of the pandemic, when it is majorly facing manufacturing and supply halt globally.

At the end of the first quarter, total debt-to-capital of 50.2% stood at a moderately high level. It represented a slight rise from 48.3% at the end of the fourth quarter. The industry's debt-to-capital of 56.1% stands higher. On the other hand, the company's first-quarter-end interest coverage stands at 5.5%, lower than the last reported quarter's 6.2%.

Reasons To Sell:

- ▼ **Cell Supply Business Faces Challenge:** In the first quarter, the company's cell supply business faced issues related to donor access. Charles River particularly noted that revenue growth for HemaCare and Celloero remained below the targeted level in the quarter due to some limitations on donor access. According to the company, COVID-19 has resulted in lack of access to donor. Although the Cognate acquisition is expected to address this problem, the fact that Cognate is relatively new, the entire process of recovery might take time.
- ▼ **Foreign Exchange Translation Impacts Sales:** Foreign exchange is a major headwind for Abbott due to considerable percentage of its revenues coming from outside the United States. The strengthening of Euro and some other developed market currencies has been constantly hampering the company's performance in the international markets.
- ▼ **Competitive Landscape:** Charles River competes in the marketplace on the basis of its therapeutic and scientific expertise in early-stage drug research, quality, reputation, flexibility, responsiveness, pricing, innovation and global capabilities. The company primarily faces a broad range of competitors of different sizes and capabilities in each of its three businesses segments. For RMS, it has five main competitors of which one is a government funded, not-for-profit entity, one is privately held in Europe and three are privately held in the United States. For DSA, Discovery Services has three main competitors, two are public companies in China and one is a public company in Europe. Within Safety Assessment, one main competitor is a division of a large public company in the United States. In Manufacturing, each of the company's underlying businesses has several competitors. This fiercely competitive global market impacts the company's market capitalization scenario.
- ▼ **Macroeconomic Condition:** A significant chunk of Charles River's both RMS and DSA businesses is based in China. Any trade policy related conflict between the United States and China might accordingly hamper the company's business developments in this region.

The global business environment continues to be challenging. A dull Cell Supply business might dampen top-line growth.

Last Earnings Report

Charles River Q1 Earnings and Revenues Beat Estimates: May 4, 2021

Charles River Laboratories announced adjusted earnings of \$2.53 for first-quarter 2021, a 37.5% surge from the year-ago earnings of \$1.84 per share. The metric surpassed the Zacks Consensus Estimate of earnings per share by 15.5%.

On a GAAP basis, earnings improved 37.9% year over year to \$2.58.

Revenues

Revenues in the first quarter totaled \$826.6 million, beating the Zacks Consensus Estimate by 3.5%. Moreover, the top line jumped 16.6% from the year-ago number (up 13% organically, excluding the impact of acquisition and foreign currency translation). Notably, quarterly revenues achieved the high end of the company's previous expectations of growth of 20-24% at CER.

The quarter's reported and organic revenues benefited by 140 basis points(bps) from favorable year-over-year comparison to last year's COVID-related revenue impact.

Segment in Detail

Charles River's first-quarter total Research Models and Services (RMS) revenues of \$176.9 million reflected an increase of 21.2% year over year (up 14.8% organically). Organic revenue growth was driven by robust demand for research models in China, as well as higher revenues from research models services, particularly Genetically Engineered Models and Services (GEMS). COVID-led favorable year-over-year comparison contributed approximately 620 bps to the RMS revenue growth in the first quarter.

Discovery and Safety Assessment (DSA) revenues of \$501.2 million were up 14.2% (up 11.6%). Organic revenue growth was primarily driven by robust demand from global biopharmaceutical and biotechnology clients in both the Discovery Services and Safety Assessment businesses.

Manufacturing Support revenues totaled \$146.5 million, up 19.7% year over year (up 15.6%). Organic revenue improved banking on strong demand in the Biologics Testing Solutions and Microbial Solutions businesses.

Margins

Gross profit in the reported quarter was \$308.3 million, up 22.3% from the prior-year quarter. Gross margin of 37.4% expanded 174 bps .

Meanwhile, selling, general & administrative expenses rose 19.9% to \$155.7 million.

Adjusted operating income totaled \$152.5 million, reflecting a 24.9% surge from the prior-year quarter. Further, adjusted operating margin in the first quarter expanded 122 bps to 18.5%.

Guidance Raised

For the year, Charles River raised its revenue and adjusted earnings guidance. Revenues are now expected to grow in the band of 19-21% compared with the earlier guidance of 16-18%. Organic revenue growth is now expected in the range of 12-14% from 9-11% earlier. The Zacks Consensus Estimate for total revenues is pegged at \$3.51 billion indicating 20.1% rise from 2020.

Adjusted earnings per share for 2021 are expected in the range of \$9.75-10.00, an improvement from the earlier range of \$9.00- \$9.25. The current Zacks Consensus Estimate is pegged at \$9.90 per share.

Quarter Ending	03/2021
Report Date	May 04, 2021
Sales Surprise	3.49%
EPS Surprise	15.53%
Quarterly EPS	2.53
Annual EPS (TTM)	8.83

Recent News

Long-Term Solar Contract for North American Operations: Jun 7, 2021

Charles River recently entered into a long-term solar energy contract with Duke Energy Sustainable Solutions to address the company's North American electric power requirements with clean, renewable energy by 2023. The companies entered into a 15-year, 102 megawatt (MW) virtual power purchase agreement (VPPA).

To Acquire Vigene Biosciences: May 17, 2021

Charles River signed a definitive agreement to acquire Vigene Biosciences, a premier gene therapy contract development and manufacturing organization providing viral vector-based gene delivery solutions. The deal value is expected to be worth \$292.5 million in cash, subject to customary closing adjustments.

Forms Alliance with Valence to Progress in AI-Enabled Drug Design Capabilities: Apr 6, 2021

Charles River has formed a strategic partnership with Valence Discovery to provide clients access to Valence's artificial intelligence platform for molecular property prediction, generative chemistry and multiparameter optimization.

Valuation

Charles River's shares are up 46.8% and up 111.4% in the year-to-date period and the trailing 12-month period, respectively. Stocks in the Zacks sub-industry are up 5.5% while the Zacks Medical sector is up 0.6% in the year-to-date period. Over the past year, the Zacks sub-industry is up 16.1% and sector is up 4.1%.

The S&P 500 index is up 13.8% in the year-to-date period and up 39.7% in the past year.

The stock is currently trading at 34.5X Forward 12-months earnings, which compares to 31.8X for the Zacks sub-industry, 23.4X for the Zacks sector and 21.7X for the S&P 500 index.

Over the past five years, the stock has traded as high as 35.8X and as low as 12.8X, with a 5-year median of 19.4X.

Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$386 price target reflects 36.3X forward 12-months earnings.

The table below shows summary valuation data for CRL.

Valuation Multiples - CRL					
		Stock	Sub-Industry	Sector	S&P 500
P/E F12M	Current	34.54	31.79	23.39	21.66
	5-Year High	35.80	31.79	23.39	23.83
	5-Year Low	12.75	10.49	15.82	15.31
	5-Year Median	19.39	14.57	19.33	18.05
P/S F12M	Current	5.01	3.52	2.67	4.71
	5-Year High	5.01	3.52	3.17	4.74
	5-Year Low	1.61	1.38	2.27	3.21
	5-Year Median	2.46	1.93	2.78	3.72
P/B TTM	Current	8.43	3.32	4.46	7.07
	5-Year High	8.43	5.48	5.05	7.08
	5-Year Low	2.96	1.58	3.03	3.84
	5-Year Median	4.87	2.11	4.35	5.02

As of 06/23/2021

Source: Zacks Investment Research

Industry Analysis Zacks Industry Rank: Bottom 25% (189 out of 252)



Top Peers

Company (Ticker)	Rec	Rank
AMN Healthcare Services Inc (AMN)	Outperform	2
BIOMERIEUX (BMXMF)	Neutral	4
ICON PLC (ICLR)	Neutral	3
IQVIA Holdings Inc. (IQV)	Neutral	3
LHC Group, Inc. (LHCG)	Neutral	3
PRA Health Sciences, Inc. (PRAH)	Neutral	3
Surgery Partners, Inc. (SGRY)	Neutral	4
Syneos Health, Inc. (SYNH)	Neutral	3

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

Industry Comparison Industry: Medical Services				Industry Peers		
	CRL	X Industry	S&P 500	ICLR	PRAH	SYNH
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	2	-	-	3	3	3
VGM Score	C	-	-	A	A	A
Market Cap	18.44 B	500.57 M	29.87 B	11.30 B	10.79 B	8.86 B
# of Analysts	7	3	12	7	3	5
Dividend Yield	0.00%	0.00%	1.35%	0.00%	0.00%	0.00%
Value Score	D	-	-	B	B	B
Cash/Price	0.03	0.06	0.06	0.08	0.06	0.03
EV/EBITDA	26.26	-0.63	17.12	21.90	25.58	22.22
PEG F1	2.63	2.19	2.05	2.10	NA	NA
P/B	8.43	5.75	4.07	5.84	6.93	2.74
P/CF	28.26	24.44	17.35	25.52	27.33	16.89
P/E F1	36.86	31.24	20.98	24.58	27.20	19.74
P/S TTM	6.06	4.47	3.36	3.84	3.24	1.99
Earnings Yield	2.72%	0.84%	4.69%	4.07%	3.67%	5.07%
Debt/Equity	1.01	0.01	0.66	0.18	0.74	0.89
Cash Flow (\$/share)	12.99	-0.01	6.83	8.26	6.09	5.03
Growth Score	B	-	-	A	A	C
Historical EPS Growth (3-5 Years)	14.84%	15.87%	9.59%	10.00%	16.90%	7.46%
Projected EPS Growth (F1/F0)	22.84%	32.21%	21.62%	31.26%	28.91%	26.28%
Current Cash Flow Growth	21.40%	16.50%	0.99%	-4.97%	-11.10%	-3.10%
Historical Cash Flow Growth (3-5 Years)	18.71%	8.81%	7.28%	8.29%	13.50%	24.58%
Current Ratio	1.77	1.86	1.39	2.01	1.21	1.09
Debt/Capital	50.48%	16.41%	41.51%	15.27%	42.55%	47.17%
Net Margin	12.33%	0.19%	11.95%	11.49%	6.40%	4.44%
Return on Equity	22.54%	-2.14%	16.48%	20.70%	20.49%	10.23%
Sales/Assets	0.56	0.57	0.51	0.92	0.83	0.58
Projected Sales Growth (F1/F0)	19.45%	16.97%	9.54%	22.56%	17.12%	18.25%
Momentum Score	C	-	-	B	A	A
Daily Price Change	0.81%	0.10%	-0.11%	-0.75%	-0.52%	-1.04%
1-Week Price Change	0.46%	-1.11%	0.43%	-1.85%	-0.87%	1.10%
4-Week Price Change	13.08%	2.74%	1.09%	-5.99%	-2.83%	-2.85%
12-Week Price Change	26.61%	0.21%	6.77%	7.31%	8.63%	12.05%
52-Week Price Change	115.04%	71.75%	39.06%	29.61%	75.81%	56.63%
20-Day Average Volume (Shares)	540,054	384,386	1,889,295	551,096	780,168	1,651,270
EPS F1 Estimate 1-Week Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
EPS F1 Estimate 4-Week Change	0.64%	0.00%	0.01%	0.00%	1.10%	0.00%
EPS F1 Estimate 12-Week Change	8.69%	0.08%	3.54%	2.93%	3.38%	1.78%

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	3.52%	:	0.00%	0.00%	:	0.00%	1.91%	0.31%
Source: Zacks Investment Research								

Zacks Stock Rating System

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

Zacks Recommendation

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

Zacks Rank

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

Zacks Style Scores

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

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

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

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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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.