

Mack-Cali Realty Corp. (CLI)

\$16.28 (As of 03/15/21)

Price Target (6-12 Months): \$17.50

Long Term: 6-12 Months	(Since: 02/08/2	Zacks Recommendation: (Since: 02/08/21) Prior Recommendation: Underperform			
Short Term: 1-3 Months	Zacks Rank:	(1-5)	4-Sell		
	Zacks Style So	VGM:F			
	Value: C	Momentum: D			

Summary

Mack-Cali has significant presence in the high barrier-to-entry Hudson River waterfront region, positioning it to benefit from the growing demand for business districts outside Manhattan. Also, the company is disposing of its non-core suburban office assets and is using the proceeds to repay its debt. This will increase its exposure to residential properties and enhance flexibility of its balance sheet. However, while the multifamily portfolio continues to witness an improvement in leasing traffic and occupancy, this has come at the expense of concessions and decline in net effective rent. Further, office vacancy as well as hotel and parking disruptions due to the pandemic are hurting the company's performance. Also, the earnings dilution from dispositions cannot be avoided. Its shares have underperformed the industry in the past year.

Data Overview

Last EPS Surprise

PEG F1

P/S TTM

52-Week High-Low	\$18.83 - \$10.35
20-Day Average Volume (Shares)	648,006
Market Cap	\$1.5 B
Year-To-Date Price Change	29.9%
Beta	1.07
Dividend / Dividend Yield	\$0.00 / 0.0%
Industry	REIT and Equity Trust - Other
Zacks Industry Rank	Bottom 14% (217 out of 253)

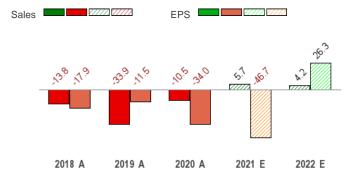
Last Sales Surprise	-27.3%
EPS F1 Estimate 4-Week Change	-20.7%
Expected Report Date	05/05/2021
Earnings ESP	-19.6%
P/E TTM	15.1
P/F F1	29.1

The data in the charts and tables, including the Zacks Consensus EPS and sales estimates, is as of 03/15/2021. The report's text and the analyst-provided price target are as of 03/16/2021.

Price, Consensus & Surprise



Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2022					346 E
2021	87 E	71 E	71 E	73 E	332 E
2020	82 A	73 A	78 A	77 A	314 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*		
2022					\$0.72 E		
2021	\$0.17 E	\$0.10 E	\$0.16 E	\$0.14 E	\$0.57 E		
2020	\$0.33 A	\$0.28 A	\$0.30 A	\$0.16 A	\$1.07 A		
*Quarterly figures may not add up to annual.							

-33.3%

NA

4.8

Overview

The Jersey City, NJ-based real estate investment trust (REIT) — Mack-Cali Realty Corporation — is engaged in owning and providing management, leasing, development and other tenant-related services for office and multi-family real estate assets. Specifically, the company has dual platform operations of waterfront offices and multi-family rental properties.

Operating in the Northeast United States for more than 60 years, the company owned or had interests in 52 properties as of Dec 31, 2020. These properties include 25 office properties spanning 8.1 million square feet of space. The properties are leased to around 225 commercial tenants.

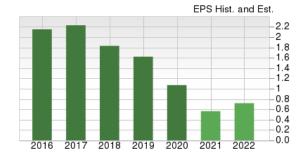
It also has 19 multi-family assets, including 5,825 apartment units, four parking/retail properties, and three hotels and a land parcel leased to a third party. These properties are located in three states in the Northeast, and the District of Columbia.

Mack-Cali operates in two segments: (i) commercial and other real estate (ii) multi-family real estate and services. Notably, the company operates multi-family residential real estate operations through its subsidiary Roseland Residential Trust.

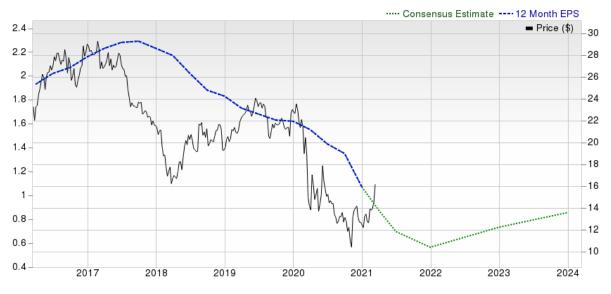
As part of a strategic shift in its operations, in December 2019, the company announced its plan to sell the entire suburban New Jersey

office portfolio, spanning 6.6 million square feet. It intends to use the sales proceeds to repay corporate-level, unsecured debt. After the completion of the suburban office portfolio sale, Mack Cali's holdings will comprise of waterfront class A office portfolio and multi-family rental portfolio, as well as related development projects and land holdings. Post the sale, the company expects to derive around 55% of its net operating income (NOI) from multifamily portfolio and 45% from its office portfolio.

Note: All EPS numbers presented in this report represent funds from operations ("FFO") per share. FFO, a widely used metric to gauge the performance of REITs, is obtained after adding depreciation and amortization and other non-cash expenses to net income.







Source: Zacks Investment Research

Zacks Equity Research www.zackspro.com Page 2 of 13

Reasons To Buy:

- ▲ Mack-Cali, with around 225 commercial tenants from diverse industries, enjoys a dominant presence in high barrier-to-entry markets in the United States, especially in the Northeast region. A diversified tenant base helps the company enjoy a steady revenue stream and avoid shortcomings related to any particular sector. In fact, rent collections were stable in fourth-quarter 2020, with office portfolio collections of 97.1% and multi-family receipts of 99%.
- ▲ Mack-Cali has made concerted efforts in recent years to transform from a sub-urban office REIT to a residential and geographically-focused office REIT. The company's transformational plan entailed emphasis on New Jersey Hudson River waterfront as well as a regional ownership of luxury multi-family residential properties. The company's Harborside portfolio-repositioning strategy is focused on capturing the attention of people who prefer to live, work and play in the same area a trend that drove development in several other cities

Strong presence in high barrier-to-entry markets, focus on waterfront and transit-oriented office properties and diversification into the apartment sector continue to drive the company's growth.

- in the United States. This group also gives much importance to transit options, and hence focusing on such areas remains a strategic choice for the company. Hence, the company's Harborside Class A office campus on the waterfront in Jersey City, is likely to witness strong demand for space, given its strategic location and diverse offerings.
- ▲ Much of the leasing proportion shifted from new to renewal-oriented deals due to the pandemic. In the fourth quarter, Mack-Cali executed 10 lease deals, spanning 122,574 square feet, in the company's core office portfolio. Three deals for 8,413 square feet were new leases, while seven leases for 114,161 square feet were lease renewals and other tenant retention transactions. Going forward, office-space demand will likely be driven by de-densification to allow higher square footage per office worker and the need for better-amenitized office properties to focus on health & wellness amid social-distancing requirements. Hence, with significant presence in the high barrier-to-entry Hudson River waterfront region and the growing demand for space in business districts outside Manhattan, Mack-Cali is well-positioned to benefit from the emerging trend.
- ▲ Mack-Cali's focus on multi-family assets is a strategic fit. This asset class is comparatively stable and is likely to contribute more toward the company's cash flows in the upcoming period. In fact, its \$1-billion waterfront residential development pipeline is well-positioned to deliver 1,942 residential units over the next two years, with no remaining equity funding. This enhances growth prospects for the company. Tenant retention are likely to support the performance of this asset category in the meantime.
- ▲ Mack-Cali enjoys debt-free ownership for a decent part of its portfolio. As of Dec 31, 2020, the company had 18 unencumbered properties, with a carrying value of \$1.1 billion. This denoted 40.9% of the company's total consolidated property count.

Zacks Equity Research www.zackspro.com Page 3 of 13

Reasons To Sell:

- ▼ The coronavirus pandemic and measures to curb its spread are leading to uncertainties and risk to the company. Particularly, demand for office space is likely to remain limited in the upcoming period, affecting leasing volumes. Further, office vacancy as well as disruptions in the demand for hotel and parking spaces due to the pandemic is hurting the company's performance. Also, any cost increases associated with construction and delivery delays at its development and redevelopment projects amid this environment add to its woes.
- As part of a strategic shift in its operations, in December 2019, the company announced its plan to sell the entire suburban New Jersey office portfolio, spanning 6.6 million square feet. It intends to use sales proceeds to repay corporate-level, unsecured debt. Since late December 2019 through fourth-quarter 2020 end, Mack-Cali disposed of 20 of such suburban office properties, aggregating 3.2 million square feet, for net sales proceeds of \$377.4 million. As of

Hotel and parking disruptions due to the pandemic and high financial leverage are pressing concerns for Mack-Cali. Also, earnings dilution from planned dispositions continues to mar performance.

- 2020 end, the company had 16 office properties remaining in the suburban office portfolio, totaling 3 million square feet. In January 2021, it sold 100 Overlook Center, a 149,600-square-foot office building situated in Parsippany, NJ, for \$38 million. The sale of its remaining Suburban Office Portfolio properties is expected to close by second-quarter 2021. Moreover, Mack-Cali is selling residential properties in non-core markets. Although such non-core asset dispositions are a strategic fit for the long run, the dilutive impact on earnings in the near term cannot be bypassed.
- ▼ In addition, as part of its long-term strategy, Mack-Cali continues to pursue multi-family residential investment in development projects. While this strategy will enable the company to capitalize on value creation and is encouraging from the long-term perspective, it involves significant capital investments. Moreover, while the multifamily portfolio continues to witness an improvement in leasing traffic and occupancy, this has come at the expense of concessions and decline in net effective rent. Hence, with limited EBITDA benefit and cash generation, the move hinders the company's growth momentum in the near term.
- ▼ Mack-Cali has a high financial leverage. Particularly, net debt to adjusted EBITDA for fourth-quarter 2020 was 15.8X, up from 9.7X for the prior-year quarter. Further, total debt/total market capitalization ratio is high. Additionally, in the past, the company's senior unsecured debt ratings had been downgraded to sub-investment grade ratings, currently at B1 and B+ by Moody's and S&P, respectively. Such downgrades increase the interest rate on outstanding borrowings under its current \$600-million unsecured revolving credit facility.
- ▼ Solid dividend payouts remain the biggest attraction for REIT investors and Mack-Cali had remained committed to that. However, on Sep 30, 2020, the company announced the suspension of its dividend payments for the third and fourth quarters of 2020. The move has been taken to support its financial flexibility amid the uncertainties due to the pandemic. Since Mack-Cali satisfied the dividend obligation on taxable income expected for 2020, the dividend suspension does not affect the company's REIT status.
- ▼ Also, the company has a concentration of assets in the Northeastern markets of New Jersey, New York and Massachusetts. This raises its risks because any adverse economic and geo-political situations in the region can produce a significant negative impact on its operations and financial condition.
- ▼ Shares of the company have edged down 0.6% against the industry's rally of 39.6% over the past year. Further, the trend in estimate revisions for 2021 FFO per share does not indicate a favorable outlook for the company as it has been revised 6.5% downward over the past week. Therefore, given the above-mentioned concerns and downward estimate revisions, the stock has limited upside potential.

Last Earnings Report

Mack-Cali Q4 FFO & Revenues Miss Estimates, NOI Declines

Mack-Cali's fourth-quarter 2020 core FFO per share of 16 cents missed the Zacks Consensus Estimate of 24 cents. Also, the figure compares unfavorably with the year-ago quarter's 44 cents.

Results reflect a decrease in same-store cash NOI for the office portfolio. Moreover, lease rate decreased in the multi-family portfolio.

Quarterly revenues of \$76.6 million missed the Zacks Consensus Estimate of \$105.3 million. The revenue figure was also 13.2% lower than the prior-year quarter's number.

quartor Enamy	12/2020
Report Date	Feb 25, 2021
Sales Surprise	-27.29%
EPS Surprise	-33.33%
Quarterly EPS	0.16
Annual EPS (TTM)	1.07

Quarter Ending

12/2020

For 2020, Mack-Cali reported core FFO per share of \$1.07, down 34% year over year. Also, the figure missed the Zacks Consensus Estimate of \$1.15. Total revenues of \$313.6 million decreased 12.2% year over year.

Quarter in Detail

As of Dec 31, 2020, Mack-Cali's consolidated core office properties were 78.7% leased, reflecting an increase from 78.2% as of Sep 30, 2020. Notably, the Class A suburban portfolio was leased 86.6%, while Suburban and Waterfront portfolios were leased 74.2% and 77.3%, respectively, as of the same date.

Same-store cash revenues for the office portfolio declined 1.1% and the same-store cash NOI was down 4.4% year over year.

During the reported quarter, Mack-Cali executed 10 lease deals, spanning 122,574 square feet, in the company's core office portfolio. Three deals for 8,413 square feet were new leases, while seven leases for 114,161 square feet were lease renewals and other tenant retention transactions.

Further, Roseland, the company's subsidiary engaged in multi-family residential operations, reported that its overall operating portfolio was 90.2% leased at the end of the quarter, contracting 70 basis points (bps) from the prior quarter's end. The multi-family portfolio, which comprised 3,813 units, witnessed a same-store NOI decline of 32.8% from the prior-year quarter.

Portfolio Activity

During the fourth quarter, the company sold four office buildings and land in its Suburban portfolio.

Subsequent to 2020-end, it completed the sale of 100 Overlook Center for \$38 million. The office property in Princeton, NJ, spans 149,600 square feet.

Balance Sheet Position

The company exited fourth-quarter 2020 with \$38.1 million in cash, up from \$25.6 million as of Dec 31, 2019.

Mack-Cali's net debt to adjusted EBITDA was 15.8 X for the reported quarter compared with the prior-year quarter's 9.7X.

Dividend Update

On Sep 30, the company announced the suspension of its dividend payments for the third and fourth quarters of 2020. The move has been taken to support its financial flexibility amid the uncertainties due to the pandemic.

Notably, the dividend suspension will enhance Mack-Cali's financial flexibility during the pandemic. It will also help preserve the incremental capital required to support leasing initiatives at the company's Harborside campus on the Jersey City waterfront.

Since Mack-Cali satisfied the dividend obligation on taxable income expected for 2020, the move does not affect the company's REIT status.

Outlook

The Company provided core FFO guidance of 12-15 cents per share for first-quarter 2021.

Recent News

Mack-Cali's Subsidiary Opens Waterfront Residential Building - Feb 4, 2021

Mack-Cali's subsidiary, Roseland Residential Trust, unveiled The Capstone at Port Imperial, a new luxury residential building in Port Imperial. The rental building is located on the New Jersey Gold Coast and will likely benefit from the prime waterfront location.

The Capstone is owned in joint venture with an institutional equity provider, and offers a mix of 360 units ranging from studios to four-bedroom homes. It also offers a wide option of amenities and 25,000 square feet of retail.

Mack-Cali Sells Two Residential Assets, Refinances Another - Jan 6, 2021

Mack-Cali announced multiple transactions across its residential portfolio. These include the sale of interest in two properties and the refinance of another.

Specifically, the company sold its joint-venture stake in Crystal House Apartments for \$377 million. The property in Arlington, VA, is situated in the vicinity of Amazon's proposed HQ2. The 825-unit operating property was sold for \$337 million, while the land held for future development was sold for \$40 million.

Further, the company disposed of Riverwatch Commons for \$47 million. The asset consisted of 200 residential units across New Brunswick, NJ, 5 Dennis Street, 10 Dennis Street, and 100 Hiram Square. These properties are strategically located near Rutgers University and Robert Wood Johnson University Hospital.

Ultimately, with the two properties being the oldest ones in the company's portfolio, the disposal reduces the average age of the company's assets to seven years and enhances the portfolio's average revenue per home to more than \$3,100.

The dispositions aside, Mack-Cali has also taken out a construction refinance loan for The Emery at Overlook Ridge in Malden, MA. Specifically, it refinanced the existing \$60-million construction loan with a \$72-million mortgage from New York Community Bank.

Per management, "securing permanent financing of The Emery, a building that has nearly stabilized since its 1Q 2020 opening, provides the company with excess financing proceeds."

The property comprises 326 luxury rental apartment units across three elevator-serviced, five-storied buildings. Apartment unit format consists of a mix of studio, one- and two-bedroom units, with varied sizes, spanning from 529 square feet of space for studios to 1,342 square feet of space for larger two-bedroom units.

Notably, despite the pandemic-borne challenges, the property is witnessing strong demand since leasing activities commenced last February. In fact, it is currently 93% leased. Also, these efforts are in line with its focus on becoming a regional owner of waterfront luxury multi-family residential properties.

Valuation

Mack-Cali's shares have been down 0.6% in the trailing 12 months. Stocks in the Zacks sub-industry and the Zacks Finance have been up

30.4% and 54.9%, respectively, over the past year.

The S&P 500 Index has been up 58.2% over the trailing 12-month period.

The stock is currently trading at 27.16X forward 12-month FFO, which compares with 20.45X for the Zacks sub-industry, 17.38X for the Zacks sector and 22.59X for the S&P 500 Index.

Over the past five years, the stock has traded as high as 27.16X and as low as 7.95X, with a 5-year median of 12.10X. Our Neutral recommendation indicates that the stock will perform in line with the market. Our \$17.5 price target reflects 29.20X FFO.

The table below shows summary valuation data for CLI.

Valuation Multiples - CLI						
		Stock	Sub-Industry	Sector	S&P 500	
	Current	27.16	20.45	17.38	22.59	
P/E F12M	5-Year High	27.16	20.45	17.38	23.80	
	5-Year Low	7.95	14.58	11.60	15.30	
	5-Year Median	12.10	16.34	14.58	17.90	
	Current	4.42	7.93	7.60	4.59	
P/S F12M	5-Year High	4.49	7.93	7.60	4.59	
	5-Year Low	2.33	5.45	5.02	3.21	
	5-Year Median	3.61	6.31	6.13	3.69	
	Current	0.93	2.38	3.21	6.70	
P/B TTM	5-Year High	1.54	2.72	3.21	6.70	
	5-Year Low	0.62	1.63	1.74	3.83	
	5-Year Median	1.12	2.32	2.60	4.97	

As of 03/15/2021

Source: Zacks Investment Research

Zacks Equity Research www.zackspro.com Page 7 of 13

Industry Analysis Zacks Industry Rank: Bottom 14% (217 out of 253)

····· Industry Price ■ Price -30 Industry 360 28 340 26 320 24 300 -22 20 280 260 240 220 200 2018 2019 2021 2017 2020

Source: Zacks Investment Research

Top Peers

Company (Ticker)	Rec	Rank
Brandywine Realty Trust (BDN)	Neutral	4
Boston Properties, Inc. (BXP)	Neutral	4
Douglas Emmett, Inc. (DEI)	Neutral	3
Highwoods Properties, Inc. (HIW)	Neutral	3
Hudson Pacific Properties, Inc. (HPP)	Neutral	3
Kilroy Realty Corporation (KRC)	Neutral	3
Piedmont Office Realty Trust, Inc. (PDM)	Neutral	3
SL Green Realty Corporation (SLG)	Neutral	4

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

Industry Comparison Industry	stry Comparison Industry: Reit And Equity Trust - Other			Industry Peers			
	CLI	X Industry	S&P 500	ВХР	KRC	SLG	
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutral	
Zacks Rank (Short Term)	4	-	-	4	3	4	
VGM Score	E	-	-	С	D	С	
Market Cap	1.47 B	2.93 B	28.65 B	16.92 B	8.04 B	5.39 B	
# of Analysts	4	4	13	9	6	7	
Dividend Yield	0.00%	3.21%	1.38%	3.61%	2.90%	4.68%	
Value Score	С	-	-	С	D	В	
Cash/Price	0.04	0.04	0.06	0.10	0.10	0.07	
EV/EBITDA	44.36	17.26	16.24	13.31	20.22	14.35	
PEG F1	NA	3.35	2.38	3.35	2.50	5.06	
P/B	0.92	1.52	3.92	2.08	1.51	1.08	
P/CF	NA	16.04	16.36	10.69	16.06	7.12	
P/E F1	28.82	17.53	21.26	16.20	16.74	11.94	
P/S TTM	4.75	7.20	3.30	6.12	8.94	5.12	
Earnings Yield	3.46%	5.39%	4.59%	6.17%	5.98%	8.37%	
Debt/Equity	1.76	0.87	0.67	1.63	0.74	1.00	
Cash Flow (\$/share)	-0.04	1.73	6.78	10.01	4.29	10.74	
Growth Score	F	-	-	D	F	D	
Historical EPS Growth (3-5 Years)	-10.93%	0.68%	9.32%	4.05%	3.34%	-1.84%	
Projected EPS Growth (F1/F0)	-47.20%	7.30%	14.55%	6.55%	11.19%	-8.40%	
Current Cash Flow Growth	-100.97%	-0.74%	0.72%	29.71%	5.52%	34.81%	
Historical Cash Flow Growth (3-5 Years)	NA%	10.42%	7.32%	4.98%	2.64%	-2.47%	
Current Ratio	0.72	1.51	1.39	6.81	2.74	2.72	
Debt/Capital	67.55%	46.73%	41.42%	61.43%	42.64%	48.04%	
Net Margin	-16.63%	9.37%	10.59%	31.52%	20.83%	35.25%	
Return on Equity	-8.61%	2.98%	14.65%	10.56%	3.55%	7.01%	
Sales/Assets	0.06	0.11	0.51	0.12	0.09	0.08	
Projected Sales Growth (F1/F0)	7.32%	5.87%	6.95%	1.41%	8.94%	-7.81%	
Momentum Score	D	-	-	Α	В	C	
Daily Price Change	0.62%	0.99%	0.92%	-1.43%	-0.22%	-1.66%	
1-Week Price Change	10.97%	4.95%	2.96%	6.19%	7.02%	7.20%	
4-Week Price Change	16.79%	7.14%	4.69%	13.75%	14.28%	17.66%	
12-Week Price Change	29.62%	12.94%	10.09%	13.81%	22.18%	33.25%	
52-Week Price Change	-0.61%	51.90%	74.12%	10.43%	22.53%	41.20%	
20-Day Average Volume (Shares)	648,006	669,138	2,323,115	1,218,224	1,290,973	1,404,536	
EPS F1 Estimate 1-Week Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
EPS F1 Estimate 4-Week Change	-20.70%	0.00%	0.00%	-0.18%	0.00%	-0.65%	
EPS F1 Estimate 12-Week Change	-20.14%	-1.06%	2.09%	-2.57%	-0.28%	-3.73%	
EPS Q1 Estimate Monthly Change	-49.38%	-0.12%	0.00%	-0.51%	0.00%	-0.61%	

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.

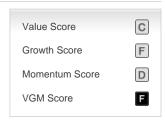
Zacks Rank

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.

Disclosures

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

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

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

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

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

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

Zacks Equity Research www.zackspro.com Page 9 of 13

Additional Disclosure

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

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

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

Glossary of Terms and Definitions

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Periods:

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

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

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

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

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

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

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

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

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

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

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

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

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

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.

Zacks Equity Research www.zackspro.com Page 12 of 13

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.