

Air Lease Corporation (AL)

\$28.84 (As of 11/02/20)

Price Target (6-12 Months): \$30.00

Long Term: 6-12 Months	Zacks Reco	Neutral			
	(Since: 11/02/20)				
	Prior Recommendation: Outperform				
Short Term: 1-3 Months	Zacks Rank	: (1-5)	3-Hold		
	Zacks Style Scores:		VGM:B		
	Value: A	Growth: D	Momentum: B		

Summary

Air Lease is being aided by rise in revenues from rentals of flight equipment. Revenues from this segment rose 8.1% in the first half of 2020. Additionally, we are impressed by the company's endeavors to reward its shareholders. Steady growth in Air Lease's fleet is also laudable. As of Jun 30, Air Lease owned 301 aircraft in the operating-lease portfolio, with a net book value of \$19.1 billion. This compares favorably with 292 aircraft at the end of 2019 with a net book value worth \$18.7 billion. However, decline in the collection rate is concerning., Moreover, rising operating expenses due to higher interest expenses, selling, general and administrative expenses, pose a threat to the company's bottom line. Notably, shares of the company have underperformed its industry in the past six months due to higher expenses.

Data Overview

P/S TTM

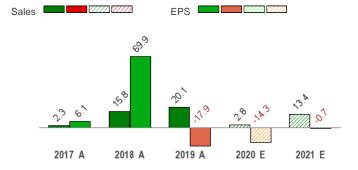
52-Week High-Low	\$49.96 - \$8.41
20-Day Average Volume (Shares)	772,467
Market Cap	\$3.3 B
Year-To-Date Price Change	-39.3%
Beta	2.04
Dividend / Dividend Yield	\$0.60 / 2.1%
Industry	Transportation - Equipment and Leasing
Zacks Industry Rank	Top 22% (57 out of 254)

Last EPS Surprise	23.5%
Last Sales Surprise	4.4%
EPS F1 Estimate 4-Week Change	0.0%
Expected Report Date	11/09/2020
Earnings ESP	0.0%
P/E TTM	5.6
P/E F1	6.6
PEG F1	0.9

Price, Consensus & Surprise



Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021					2,351 E
2020	511 A	521 A	501 E	540 E	2,074 E
2019	466 A	471 A	531 A	549 A	2,017 A
EPS Es	stimates				

	Q1	Q2	Q3	Q4	Annual*
2021					\$4.33 E
2020	\$1.17 A	\$1.26 A	\$1.03 E	\$0.82 E	\$4.36 E
2019	\$1.23 A	\$1.10 A	\$1.34 A	\$1.42 A	\$5.09 A
*Quarterl	y figures may no	t add up to anni	ual.		

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 11/02/2020. The reports text is as of 11/03/2020.

1.6

Overview

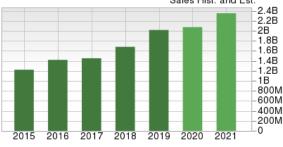
Founded in 2010, Los Angeles, CA-based Air Lease Corporation is a leading aircraft leasing company. It is primarily involved in purchasing commercial aircraft directly from the manufacturers, leasing the same to its airline customers across the globe. Some noteworthy manufacturers that the company works with are The Boeing Company and Airbus S.A.S.

Besides leasing, the company sells planes from its portfolio to third parties such as other leasing companies, financial services and corporate airline entities. It also provides investors and owners with fleet management services and charges a management fee in return. The company faces competition from aircraft manufacturers, banks, financial institutions, other leasing companies, aircraft brokers and airlines. Air Lease reduces the risks of lessee defaults and adverse economic conditions by diversifying its operating lease portfolio.

The company's operating performance depends on growth of its fleet, the terms of its leases, interest rates on its debt and the aggregate amount of its indebtedness alongside gains from aircraft sales, trading activities and management fees.

Air Lease currently covers more than 200 airlines across 70 countries. It has markets in all major geographies, namely Asia, the Pacific Rim, Latin America, the Middle East, Europe, Africa and North America. The company expects to benefit from significant replacement opportunities

going forward as many of its airline customers look to replace their old planes with new, modern and more fuel efficient ones.

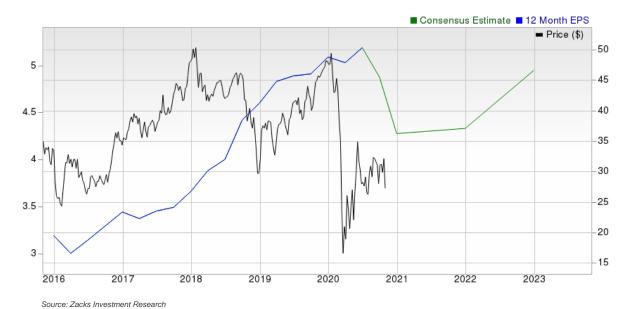


The company's debt financing strategy, used for funding its business activities, is aimed at raising unsecured debt with minimal usage of export credit or any other secured financing variant.

The company entered into a joint venture with Blackbird Capital I LLC in 2014 and owns 9.5% of the joint venture. The collaboration is aimed at supplementing the growth of the company.

Air Lease is constantly making efforts to expand its fleet. It has multiple owned and managed aircraft in its portfolio. The company's total revenues increased 20% to \$2.02 billion in 2019. Revenues from rentals of flight equipment accounted for bulk (95%) of the top line. Remaining revenues came from aircraft sales, trading and other sources.

The company's fiscal year coincides with the calendar year.



Zacks Equity Research www.zackspro.com Page 2 of 12

Reasons To Buy:

▲ We are impressed by Air Lease's endeavors to reward shareholders. In fact, the company has an impressive dividend payment history. In November 2019, its board approved a 15.4% hike in its quarterly cash dividend to 15 cents per share (annualized 60 cents). This raise marked the 7th dividend increase in the company's history. Moreover, it rewarded its shareholders with dividends for 29 consecutive quarters. As investors prefer an incomegenerating stock, a high dividend-yielding one is much coveted. Needless to say that

The rise in revenues from rentals of flight equipment is encouraging.

- investors are always on the lookout for companies, which boast an impressive history of regular and incremental dividend payments.
- ▲ We are also encouraged by the impressive revenues from rentals of flight equipment. Revenues from the segment rallied 17.5% in 2019 and led to a 20% improvement in the company's top line. The same rose 8.1% in the first-half 2020 and led to a 10.2% increase in the top line. Given the coronavirus-related setback, the segment's performance in the first half is quite encouraging. The same is expected to have aided the company's third quarter results (releasing on Nov 9) as well.
- ▲ Steady growth in Air Lease's fleet is also appreciative. During the March-quarter, the company received delivery of eight aircraft and purchased one aircraft from the secondary market, which represented \$709 million in aircraft investments. As of Jun 30, Air Lease owned 301 aircraft in the operating lease portfolio, with a net book value of \$19.1 billion. This compares with 292 aircraft at the end of 2019, with a net book value of \$18.7 billion. This fleet growth is aiding the company's top line. We are also pleased by Air Lease's decision to deliver one new Airbus A320-200neo aircraft on long-term lease to Atlantic Airways, the national carrier of the Faroe Islands.

Zacks Equity Research www.zackspro.com Page 3 of 12

Reasons To Sell:

▼ The fortunes of Air Lease are tied to the airline industry. Given how severely coronavirus is impacting the airline industry, in terms of declining air traffic, Air Lease is experiencing weakness in lease demand. Airline companies deferring aircraft deliveries to cope with the crisis are also weighing on the company. The company's collection rate (total cash collected from lease rentals and maintenance reserves) also declined substantially. While collection rate was 91% in the second quarter, it declined to 89% in July. Collection rate is expected to remain subdued going forward due to declining travel demand. Additionally, persistent delivery delays from Airbus and Boeing (as a result of the MAX groundings) are affecting the company's operations.

Collection rate is expected to remain subdued going forward due to declining travel demand.

- ▼ Rising operating expenses pose a threat to the company's bottom line. Notably, operating expenses increased more than 23% during 2019, thanks to higher interest expenses, and selling, general and administrative expenses. The same rose 12.5% in the first half of 2020 and in turn limited bottom-line growth.
- ▼ The company's total debt-to-total capital ratio stood at 0.71 at the end of the second quarter, much higher than the industry's average of 0.58. In fact, Air Lease's total debt-to-total capital ratio has been high (more than 0.7) for the past few quartwers. A high ratio implies that a company is highly leveraged with a higher risk of insolvency.

Zacks Equity Research www.zackspro.com Page 4 of 12

Last Earnings Report

Air Lease's Q2 Earnings Surpass Estimates

Air Lease's earnings of \$1.26 per share surpassed the Zacks Consensus Estimate of \$1.02. Also, the bottom line increased 14.5% on a year-over-year basis. Also, quarterly revenues of \$521.3 million beat the Zacks Consensus Estimate of \$499.4 million and increased 10.6% on a year-over-year basis.

This year-over-year uptick can be primarily attributed to 7.3% increase in revenues from the rental of flight equipment. Notably, rental of flight equipment revenues contributed 95.5% to the top line.

Quarter Ending	06/2020
Report Date	Aug 06, 2020
Sales Surprise	4.40%
EPS Surprise	23.53%
Quarterly EPS	1.26
Annual EPS (TTM)	5.19

Revenues from aircraft sales, trading activity and other sources surged more than 100% to \$23.5 million in the reported quarter. Total expenses rose 8.5% to \$337.4 million due to higher interest expenses, depreciation of flight equipment costs as well as other factors.

As of Jun 30, Air Lease owned 301 aircraft in the operating lease portfolio, with a net book value of \$19.1 billion. Total fleet size at the end of first quarter was 800 (including owned fleet of 301) compared with 858 (including owned fleet of 292) at 2019-end.

Thanks to the COVID-19 outbreak, the company reduced capital expenditures in aircraft investments and is expecting to minimize aircraft sales for the rest of 2020. In order to counter the COVID-19 impact in the financial market, Air Lease has an impressive liquid position of \$6.9 billion.

Liquidity

Air Lease exited the quarter with cash and cash equivalents of \$926.4 million compared with \$317.4 million at 2019 end. As of June end, the company had \$14.6 billion of debt financing, net of discount and issuance costs compared with \$13.6 billion as of Dec 31, 2019.

Recent News

Delivery of A321-200neo LR Aircraft to Titan Airways—Oct 26, 2020

Air Lease announced the delivery of one new Airbus A321-200neo LR aircraft on long-term lease to Titan Airways (United Kingdom). This aircraft is the first of two A321-200neo LRs confirmed to deliver to the British carrier from ALC's order book with Airbus. The second A321-200neo LR aircraft is scheduled to deliver to Titan Airways in Spring 2021.

Delivery of A321-200neo LR Aircraft to SAS Scandinavian Airlines — Oct 15, 2020

Air Lease announced the delivery of one new Airbus A321-200neo LR aircraft on long-term lease to SAS Scandinavian Airlines System. This aircraft is the first of the three A321-200neo LRs confirmed to deliver to the Scandinavian airline from Air Lease's order book with Airbus. The other two A321-200neo LR aircraft are scheduled to deliver to the airline in 2021.

Activity Update — Oct 7, 2020

As of Sep 30, Air Lease fleet consisted of 308 owned aircraft and 81 managed aircraft. Besides, 377 new planes from Boeing and Airbus are expected to get delivered by 2026. This steady fleet growth is expected to boost the company's top line. During the quarter, the company delivered seven new aircraft including one Airbus A320neo, four A321neos, one A350-900 and one A350-1000. Also, the company's aircraft investment in the quarter totalled nearly \$0.6 billion. Under its financing activity, the company issued \$700 million of senior unsecured medium-term notes due 2026 at a fixed rate of 2.875%. Moreover, Air Lease exited the quarter with \$7 billion liquidity comprising of unrestricted cash and available revolver capacity

Dividend Update - Aug 6, 2020

Air Lease's board cleared a quarterly cash dividend of 15 cents per share (annualized 60 cents). The amount will be paid on Oct 9, 2020 to shareholders on record as on Sep 11.

Valuation

Air Lease shares are down 39.3% and 37% in the year-to-date period and over the trailing 12-month period, respectively. Stocks in the Zacks sub-industry and stocks in the Zacks Transportation sector have declined 16.8% and 0.3% in the year-to-date period, respectively. Over the past year, the Zacks sub-industry and the sector has declined 16.9% and 1%, respectively.

The S&P 500 index is up 3.1% and 8.1% in the year-to-date period and in the past year respectively.

The stock is currently trading at 5.56X trailing 12-month price to earnings, which compares to 13.89X for the Zacks sub-industry, 33.19X for the Zacks sector and 24.87X for the S&P 500 Index.

Over the past five years, the stock has traded as high as 13.84X and as low as 2.12X, with a 5-year median of 9.64X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$30 price target reflects 5.79X trailing 12-month earnings.

The table below shows summary valuation data for AL

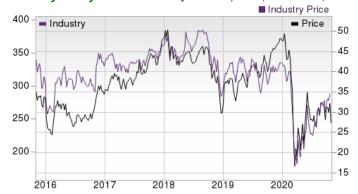
Valuation Multiples - AL						
		Stock	Sub-Industry	Sector	S&P 500	
	Current	5.56	13.89	33.19	24.87	
P/E TTM	5-Year High	13.84	20.03	33.19	24.87	
	5-Year Low	2.12	8.88	11.73	16.01	
	5-Year Median	9.64	13.14	15.56	19.44	
	Current	8.29	8.65	9.46	13.66	
EV/EBITDA TTM	5-Year High	13.69	14.38	11.09	15.63	
	5-Year Low	7.45	5.63	5.14	9.52	
	5-Year Median	9.56	9.61	7.26	13.11	
	Current	1.42	1.02	1.35	4.1	
P/S F12M	5-Year High	3.36	1.73	1.41	4.3	
	5-Year Low	0.48	0.69	0.85	3.17	
	5-Year Median	2.1	1.34	1.2	3.66	

As of 11/02/2020

Source: Zacks Investment Research

Zacks Equity Research www.zackspro.com Page 6 of 12

Industry Analysis Zacks Industry Rank: Top 22% (57 out of 254)



Source: Zacks Investment Research

Top Peers

Company (Ticker)	Rec	Rank
Herc Holdings Inc. (HRI)	Outperform	1
Aercap Holdings N.V. (AER)	Neutral	3
The Boeing Company (BA)	Neutral	3
GATX Corporation (GATX)	Neutral	3
General Electric Company (GE)	Neutral	3
Freightcar America, Inc. (RAIL)	Neutral	3
Trinity Industries, Inc. (TRN)	Neutral	2
Fly Leasing Limited (FLY)	Underperform	3

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

Industry Comparison Industry	Comparison Industry: Transportation - Equipment And Leasing			Industry Peers			
	AL	X Industry	S&P 500	AER	FLY	GAT	
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Underperform	Neutra	
Zacks Rank (Short Term)	3	-	-	3	3	3	
VGM Score	В	-	-	В	С	С	
Market Cap	3.28 B	1.14 B	22.78 B	3.46 B	195.90 M	2.46 E	
# of Analysts	4	1.5	13	5	1	2	
Dividend Yield	2.08%	0.00%	1.63%	0.00%	0.00%	2.73%	
Value Score	Α	-	-	Α	Α	В	
Cash/Price	0.30	0.22	0.07	0.81	1.69	0.19	
EV/EBITDA	8.74	6.92	13.27	7.30	3.80	10.09	
PEG F1	0.91	2.72	2.59	NA	NA	N/	
P/B	0.56	1.13	3.35	0.36	0.22	1.28	
P/CF	2.39	2.89	12.76	1.22	0.49	4.54	
P/E F1	6.78	17.83	20.60	3.82	3.80	18.64	
P/S TTM	1.55	1.35	2.55	0.71	0.40	1.94	
Earnings Yield	15.12%	5.37%	4.70%	26.20%	26.34%	5.37%	
Debt/Equity	2.49	2.45	0.70	3.16	2.41	2.69	
Cash Flow (\$/share)	12.06	10.88	6.92	21.45	13.03	15.49	
Growth Score	D	-	-	F	F	D	
Historical EPS Growth (3-5 Years)	15.48%	-4.53%	10.07%	6.59%	25.49%	-4.53%	
Projected EPS Growth (F1/F0)	-14.44%	-25.09%	-0.59%	-18.39%	-78.45%	-31.49%	
Current Cash Flow Growth	18.20%	15.86%	5.45%	7.37%	57.24%	1.08%	
Historical Cash Flow Growth (3-5 Years)	16.99%	4.56%	8.38%	8.11%	8.74%	2.02%	
Current Ratio	1.89	1.49	1.37	0.75	1.32	4.22	
Debt/Capital	71.38%	71.03%	41.67%	75.97%	70.68%	72.92%	
Net Margin	28.67%	7.07%	10.37%	22.57%	35.28%	14.96%	
Return on Equity	10.67%	8.20%	14.93%	11.68%	22.13%	9.01%	
Sales/Assets	0.09	0.29	0.50	0.11	0.14	0.15	
Projected Sales Growth (F1/F0)	2.81%	-4.81%	-0.11%	-3.33%	-38.14%	0.00%	
Momentum Score	В	-	-	В	D	F	
Daily Price Change	5.87%	3.65%	2.25%	5.76%	6.91%	3.03%	
1-Week Price Change	-15.14%	-6.52%	-5.63%	-17.56%	-16.83%	-1.97%	
4-Week Price Change	-8.42%	-2.28%	-1.47%	-2.78%	-16.25%	5.16%	
12-Week Price Change	-6.42%	-0.40%	-1.17%	-19.35%	-20.75%	5.66%	
52-Week Price Change	-36.98%	-12.90%	-0.65%	-55.49%	-69.59%	-14.94%	
20-Day Average Volume (Shares)	772,467	212,961	1,910,259	1,453,717	212,961	194,684	
EPS F1 Estimate 1-Week Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
EPS F1 Estimate 4-Week Change	0.00%	0.00%	0.76%	0.00%	0.00%	0.00%	
EPS F1 Estimate 12-Week Change	3.75%	3.75%	2.79%	2.12%	-18.55%	0.00%	
EPS Q1 Estimate Monthly Change	0.00%	0.00%	0.22%	0.00%	0.00%	N/	

Source: Zacks Investment Research

Zacks Equity Research www.zackspro.com Page 7 of 12

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.

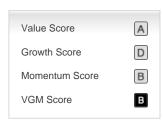
Zacks Rank

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 8 of 12

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.

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

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.

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

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 11 of 12

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.

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