Tyson Foods Inc. (TSN)

$69.13 (As of 12/03/20)

Price Target (6-12 Months): **$73.00**

Long Term: 6-12 Months	**Zacks Recommendation:** (Since: 09/04/20) Prior Recommendation: Outperform	**Neutral**
Short Term: 1-3 Months	**Zacks Rank:** (1-5)	**3-Hold**
	Zacks Style Scores:	VGM:B
	Value: B | Growth: A | Momentum: F	

Summary

Shares of Tyson Foods have outpaced the industry in the past six months. The company has been gaining on its brand strength, wide reach and ability to cater to evolving demand. Of late, the company has been seeing rising pandemic-led demand in its retail channel. This along with solid e-commerce sales aided fourth-quarter fiscal 2020 results, wherein earnings and sales grew year over year and beat the Zacks Consensus Estimate. For fiscal 2021, USDA expects overall domestic protein production to rise about 1%. However, the company continues to face COVID-19 hurdles like below normal operations in certain foodservice locations and member absenteeism, which are likely to weigh on volumes. Further, management expects COVID-19 costs of $330 million for fiscal 2021. Nonetheless, the company is keen on enhancing operational efficiency and the cost structure.

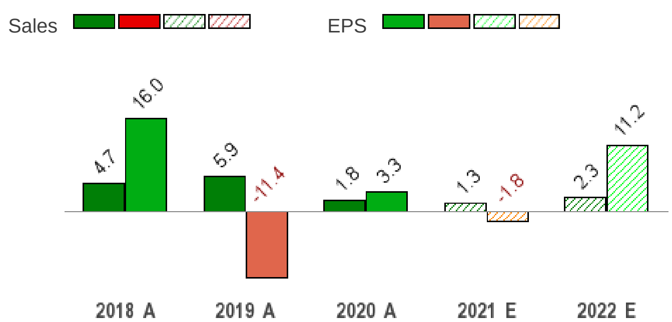
Price, Consensus & Surprise

Source: Zacks Investment Research

Data Overview

52-Week High-Low	**$94.24 - $42.57**
20-Day Average Volume (Shares)	**2,782,611**
Market Cap	**$25.2 B**
Year-To-Date Price Change	**-24.1%**
Beta	**0.75**
Dividend / Dividend Yield	**$1.78 / 2.6%**
Industry	**Food - Meat Products**
Zacks Industry Rank	**Top 50% (126 out of 254)**
Last EPS Surprise	**57.4%**
Last Sales Surprise	**3.2%**
EPS F1 Estimate 4-Week Change	**-2.8%**
Expected Report Date	**02/04/2021**
Earnings ESP	**0.0%**
P/E TTM	**12.3**
P/E F1	**12.5**
PEG F1	**3.1**
P/S TTM	**0.6**

Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of $)

	Q1	Q2	Q3	Q4	Annual*
2022	11,596 E	11,550 E	10,772 E	11,291 E	44,777 E
2021	11,173 E	11,025 E	10,570 E	10,990 E	43,758 E
2020	10,815 A	10,888 A	10,022 A	11,460 A	43,185 A

EPS Estimates

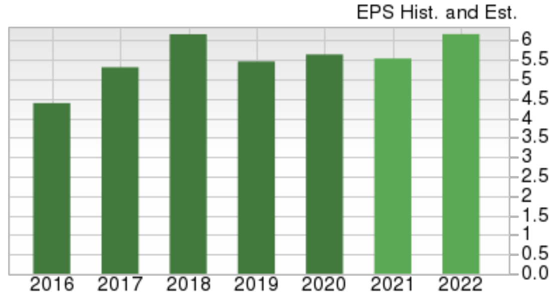
	Q1	Q2	Q3	Q4	Annual*
2022	$1.63 E	$1.37 E	$1.50 E	$1.86 E	$6.16 E
2021	$1.47 E	$1.11 E	$1.37 E	$1.72 E	$5.54 E
2020	$1.66 A	$0.77 A	$1.40 A	$1.81 A	$5.64 A

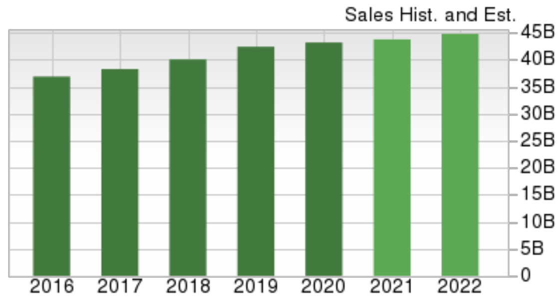
*Quarterly figures may not add up to annual.

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 12/03/2020. The reports text is as of 12/04/2020.

Overview

Headquartered in Arkansas, Tyson Foods Inc. was founded in 1935. It is the biggest U.S. chicken company and produces, distributes and markets chicken, beef, pork as well as prepared foods. Its products are marketed and sold primarily by sales staff to grocery retailers, grocery wholesalers, meat distributors, military commissaries, industrial food processing companies, chain restaurants, international export companies and domestic distributors.





- **Chicken** (30.6% of FY20 Sales)**:** The operations of this segment comprise raising and processing live chickens into fresh, frozen and value-added chicken products, as well as sales from allied products.

- **Beef** (36.5% of FY20 Sales)**:** This segment's operations include processing cattle and preparing dressed beef carcasses into meat cuts and case-ready products. The revenues from this segment also come from sales of allied products such as hides and variety meats. Allied products are marketed to manufacturers of pharmaceuticals and technical products.

- **Pork** (12% of FY20 Sales)**:** This segment's operations comprise processing market hogs and preparing pork carcasses into meat products.

- **Prepared Foods** (19.8% of FY20 Sales)**:** This segment's operations include manufacturing frozen and refrigerated food products, like pepperoni, bacon, pizza toppings, pizza crusts, tortilla products, appetizers, prepared meals, ethnic foods, soups, sauces, side dishes, meat dishes and processed meats.

- **International/Other** (4% of FY20 Sales)**:** The segment includes foreign operations in Australia, China, South Korea, Malaysia, Mexico, the Netherlands, Thailand and the United Kingdom. Also, it includes third-party merger, integration costs and corporate overhead related to Tyson New Ventures, LLC.

Source: Zacks Investment Research

Reasons To Buy:

▲ **Robust Retail Demand, Solid E-Commerce Sales:** Tyson Foods' shares have gained 6.5% in the past six months compared with the industry's growth of 1.8%. The company has been gaining on rising demand in its retail channel, thanks to increased at-home consumption amid the pandemic. In fourth-quarter fiscal 2020, the company's retail core business lines saw share growth for the ninth consecutive time. Core retail line volumes rose about 15% during the last 13 weeks, per management's conference call on Nov 16. In fact, given the rising demand, the company has also shifted part of its foodservice production to concentrate on retail. Management expects to see elevated at-home dining in fiscal 2021, which is likely to aid retail volumes. It also expects to see gradual recovery in foodservice volumes in the fiscal, unless the current coronavirus wave causes any major shutdown. Apart from this, Tyson Foods is benefiting from its brand strength, robust geographical reach and ability to manufacture locally in its international markets and cater well to the evolving global demand.

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Another channel performing well for Tyson Foods is e-commerce, which saw its sales more than double in the fourth quarter and rise 99% in fiscal 2020 as more consumers are buying online amid the pandemic. Management expects continued strength in the e-commerce channel.

▲ **Focus on Protein-Packed Brands:** Tyson Foods remains focused on higher protein production to cater to the rising demand for protein-packed food. For fiscal 2021, USDA expects overall domestic protein production (chicken, beef, pork and turkey) to rise about 1% year over year. In the beef segment, USDA projects domestic production to grow about 2% in fiscal 2021. For pork, domestic production is likely to range from flat to a slight rise year over year, per the USDA. Further, USDA forecasts domestic production in the Chicken segment to be flat to a slight increase from the fiscal 2020 level. In the Prepared Foods segment, the company expects to remain focused on responding to the changing consumer behavior as it goes into fiscal 2021. Finally, the company expects better results from its operations in the International/Other segment. Though management expects food and protein demand to shift among different sales networks and witness short-term hiccups amid the pandemic, worldwide demand is expected to increase over time. Notably, management anticipates sales to be $42-$44 billion in fiscal 2021.

To this end, Tyson Foods boasts a rich portfolio of protein packed brands that are growing rapidly across the globe. Additionally, the company has undertaken divesture of non-protein businesses (such as Sara Lee Frozen Bakery, Kettle and Van's) so as to focus more on the growing protein-packed food arena. Apart from this, the company has been steadily expanding fresh prepared foods offering, owing to consumers rising demand for natural fresh meat offerings without any added hormones or antibiotics. In this respect, Tyson Foods' buyout of Tecumseh (June 2018) is quite noteworthy. The deal has added the popular air-chilled Smart Chicken brand along with a variety of chicken sausages, fresh and deli-style chicken to Tyson Foods' portfolio. Additionally, Tyson Foods has been venturing into alternative sources for meat and protein products, evident from the investment in Memphis Meats.

▲ **Measures to Boost Efficiency:** Tyson Foods is undertaking a number of operational and supply chain efficiency programs to place itself better for the long run. Also, the company is constantly looking for ways to improve cost structure, alongside achieving operational improvements and customer service. The company is focused on its operational improvement programs, which are likely to generate cost savings of $200 million.

▲ **Liquidity Status:** Even amid the coronavirus crisis, Tyson Foods remains financially sound enough to run its business and meet obligations. The company had total liquidity of around $3.2 billion as of Oct 3. In fiscal 2020, cash provided by operating activities was $3,874 million. Further, management expects total liquidity to stay above its minimum target of $1 billion in fiscal 2021. As of the end of fiscal 2020 (Oct 3, 2020), Tyson Foods' had current debt of $548 million, while its cash and cash equivalents stood at $1,420 million.

Tyson Foods looks strong on the dividend payout front. The company raised its quarterly dividend to 44.5 cents on Class A shares and 40.05 cents for Class B shares, which took effect from Nov 13. The raised dividend is payable on Dec 15 to shareholders of record as on Dec 1. This takes the annual dividend rate for fiscal 2021 to $1.78 for Class A shares and $1.602 for Class B, reflecting a 6% hike from fiscal 2020 levels. The company has a dividend payout of 31.6%, dividend yield of 2.6% and free cash flow yield of 10.6%.

▲ **Strategic Acquisitions:** Tyson Foods has been focusing on acquisitions to expand portfolio and boost sales volumes. In particular, acquisitions are aiding the Chicken segment. We note that the company completed the acquisition of the European and Thai operations of BRF S.A. in June 2019. The buyout has strengthened Tyson Foods' footing in the Thai poultry space as well as expanded presence in the United Kingdom and Netherlands. Prior to this, on Nov 30, 2018, the company completed acquiring Keystone Foods business, which supplies a broad array of meat and chicken products internationally. This buyout has particularly been bolstering the company's Chicken as well as the International and Other segments' performances. The company has acquired a 40% ownership in Brazilian poultry producer and exporter, Grupo Vibra.

Other notable acquisitions of Tyson Foods in the past include; AdvancePierre, Original Philly Holdings, Hillshire as well as Mexican food restaurant chain, Don Julio Foods. Moreover, the company has acquired poultry rendering and blending assets of AMPRO Products, Inc. and American Proteins, Inc. The deal has enabled Tyson Foods to bolster animal products recycling capabilities, which will aid in expanding animal feed business.

Reasons To Sell:

- **COVID-19 Hurts Volumes Outlook:** Tyson Foods has been encountering hurdles related to coronavirus. We note that reduced production throughput due to the pandemic in some parts of fiscal 2020 affected sales volumes in the Pork and Chicken segments. Though the company is seeing increased retail demand, foodservice demand continues to be affected by below normal operations at schools and cafeterias. These factors, along with increased staff absenteeism amid the pandemic, has been elevating costs and complexities regarding the company's operations in the United States as well as Europe. The company expects to continue facing pandemic-related hurdles in the first half of fiscal 2021. Tyson Foods expects food and protein demand to shift among different sales networks and witness short-term hiccups amid the pandemic. These headwinds are likely to put pressure on volumes in fiscal 2021.

Tyson Foods continues to face COVID-19 challenges like below normal operations in certain foodservice locations, staff absenteeism and high costs. Volumes are likely to be under pressure in fiscal 2021.

- **Escalated Costs & Margin Concerns:** Tyson Foods is battling several hurdles related to the pandemic, which are expected to elevate its operating cost burden in fiscal 2021. During the fourth quarter of fiscal 2020, the company incurred $200 million as direct incremental expenses associated with COVID-19, which put pressure on results to an extent. Additional COVID-19 costs amounted to $540 million for fiscal 2020. These include escalated costs related to workers' health and production facility downtime, such as personal protection equipment, sanitization of production facilities, testing for coronavirus and product downgrades, to name some.

  Apart from these, certain indirect COVID-19 costs like raw materials, transportation, underutilization and reconfiguration of plant, premiums offered to cattle producers and discounts on pricing dented results. Management expects COVID-19 costs worth roughly $330 million in fiscal 2021.

- **Chicken Unit Hurdles:** During the fourth quarter of fiscal 2020, sales in the segment dipped 0.4% to $3,433 million. Average sales price declined 2.3% due to weak chicken prices stemming from tough market conditions. Further, adjusted volumes fell 5.4% largely due to the pandemic effects like soft foodservice volumes. Results in the segment were hurt by operational hurdles associated with COVID-19 as well as channel shift. The company noted that it continues to see challenges in the Chicken segment, though it is undertaking all efforts to improve performance.

- **Food Industry Headwinds:** The food industry is grappling with stiff competition and aggressive promotional environment. The company faces intense competition from other food companies on the grounds of quality, prices and availability. To meet such competitive pressure effectively, Tyson Foods may have to lower prices for its products or indulge in marketing activities to maintain market share.

Last Earnings Report

Tyson Foods Q4 Earnings & Sales Top Estimates, Rise Y/Y

Quarter Ending	09/2020
Report Date	Nov 16, 2020
Sales Surprise	3.15%
EPS Surprise	57.39%
Quarterly EPS	1.81
Annual EPS (TTM)	5.64

Tyson Foods posted solid fourth-quarter fiscal 2020 results. Adjusted earnings came in at $1.81 per share, which beat the Zacks Consensus Estimate of $1.15. Moreover, the bottom line surged 50% year over year.

Total sales advanced 5.3% to $11,460 million, including volume gains of 5.9% and an adverse impact of 0.6% from average price change. Also, the top line surpassed the Zacks Consensus Estimate of $11,110 million.

Gross profit in the quarter came in at $1,610 million, up 41.4% from the prior-year quarter's levels. Tyson Foods' adjusted operating income soared 40% to $961 million. During the quarter, the company incurred $200 million as direct incremental expenses associated with COVID-19, which put pressure on results to an extent. Additional COVID-19 costs amounted to $540 million for fiscal 2020. These include escalated costs related to workers' health and production facility downtime, such as personal protection equipment, sanitization of production facilities, testing for coronavirus and product downgrades to name some. Apart from these, certain indirect COVID-19 costs like raw materials, transportation, underutilization and reconfiguration of plant, premiums offered to cattle producers and discounts on pricing dented results.

Segment Details

Beef: Sales in the segment increased 10.6% to $4,272 million. Sales volume rose 11.8% year over year, whereas average sales price declined 1.2% due to higher availability of live cattle supply along with reduced cost of livestock.

Pork: Sales in the segment jumped 8.7% year over year to $1,368 million. Sales volume rose 15.2% year over year due to solid demand and higher availability of live hogs. Average sales price dropped 6.4% owing to lower livestock cost.

Chicken: Sales in the segment inched down 0.4% to $3,433 million. Sales volume climbed 1.9% but average sales price declined 2.3% due to weak chicken prices stemming from tough market conditions.

Prepared Foods: Sales in the segment rose 5.8% to $2,277 million. Prepared Foods' sales volume rose 1.6% and average sales price increased 4.2% on account of favorable product mix related to higher retail demand.

International/Other: Sales in the segment were $491 million, down 4.3% year over year. Sales volume dipped 3.5% and average sales price slipped 1%.

Other Financial Updates

The company exited the quarter with cash and cash equivalents of $1,420 million, long-term debt of $10,791 million and total shareholders' equity (including noncontrolling interests) of $15,597 million. In fiscal 2020, cash provided by operating activities was $3,874 million.

Total liquidity was about $3.2 billion as of Oct 3, 2020. Management expects its liquidity to remain more than the company's minimum target of $1 billion. Management projects capital expenditures to be nearly $1.2-$1.4 billion for fiscal 2021. Additionally, the company raised its quarterly dividend to 44.5 cents on Class A shares and 40.05 cents for Class B shares, which took effect from Nov 13. The raised dividend is payable on Dec 15 to shareholders of record as on Dec 1. This takes the annual dividend rate for fiscal 2021 to $1.78 for Class A shares and $1.602 for Class B, reflecting a 6% hike from fiscal 2020 levels.

Outlook

For fiscal 2021, USDA expects domestic protein production (chicken, beef, pork and turkey) to rise about 1% year over year. On an adjusted basis, the company expects Beef and Pork units to remain sturdy, while the Chicken and Prepared Foods segments are also expected to strengthen year over year in fiscal 2021. Management anticipates sales to be $42-$44 billion in fiscal 2021.

Tyson Foods expects food and protein demand to shift among different sales networks and witness short-term hiccups amid the pandemic. Nonetheless, worldwide demand is expected to keep increasing. The company is battling several hurdles related to the pandemic, which are expected to elevate operating costs and put pressure volumes in fiscal 2021. While the company is unable to forecast the impacts of COVID-19 on its short- and long-term demand, management stated that it is well placed in terms of liquidity to run its business and meet obligations.

In the Beef segment, USDA projects domestic production to grow about 2% in fiscal 2021. In the fiscal, management anticipates adequate supplies in the markets where its plans operate. For Pork, domestic production growth is likely to be flat to up slightly, per the USDA. Further, USDA forecasts domestic production in the Chicken segment to be flat to a slight increase from the fiscal 2020 level. For the Prepared Foods segment, the company continues to focus on responding to the changing consumer behavior as it goes into fiscal 2021. Finally, the company expects better results from its operations in the International/Other segment.

Recent News

Tyson Foods Reveals Plans to Bolster Overseas Presence – Nov 10, 2020

Tyson Foods unveiled plans to construct new manufacturing facilities in China and Thailand. Along with this, the company plans to expand its production unit located in the Netherlands. The envisioned expansions will add more than 100,000 metric tons of fully-cooked poultry capacity. Management believes that global population and income growth will continue to drive the demand for protein. Markedly, such investment plans help the company enhance its in-country operations as well as export capabilities worldwide. Moreover, the newly-announced expansion plan is likely to generate numerous direct and indirect jobs.

Tyson Foods' Raised & Rooted Expansion to Boost Growth – Nov 9, 2020

Tyson Foods announced the expansion of Raised & Rooted— a plant-based protein brand— in Europe. The European Raised & Rooted range will offer five types of plant-based products including Light & Crispy Battered Nuggets, Crunchy Breaded Nuggets, Garlic & Herb Dipping Fries, Hot & Spicy Popcorn and Extra Crunchy Tortilla Nachos. These offerings will be launched via foodservice customers across Europe. Manufactured in Netherlands, the plant-based products are made using locally-sourced good quality ingredients. These products are non-GMO, non-palm oil, egg-free and contain no artificial colors, flavors or preservatives. Moreover, the packaging of the items is made of recyclable 60% bio-based plastic material and includes labeling in eight languages.

Valuation

Tyson Foods shares are down 24.1% in the year-to-date period and 22.7% over the trailing 12-month period. Stocks in the Zacks sub-industry are down 11.2% and the Zacks Consumer Staples declined 3% in the year-to-date period. Over the past year, the Zacks sub-industry is down 10.3% while the sector declined 0.9%.

The S&P 500 index is up 14.2% in the year-to-date period and 18.1% in the past year.

The stock is currently trading at 12.03X forward 12-month earnings, which compares to 18.38X for the Zacks sub-industry, 20.13X for the Zacks sector and 22.7X for the S&P 500 index.

Over the past five years, the stock has traded as high as 16.69X and as low as 6.76X, with a 5-year median of 12.34X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our $73 price target reflects 12.7X forward 12-month earnings.

The table below shows summary valuation data for TSN

Valuation Multiples - TSN

		Stock	Sub-Industry	Sector	S&P 500
P/E F12M	Current	12.03	18.38	20.13	22.7
	5-Year High	16.69	19.1	22.37	23.47
	5-Year Low	6.76	11.48	16.62	15.27
	5-Year Median	12.34	15.43	19.57	17.75
P/S F12M	Current	0.57	0.93	10.47	4.28
	5-Year High	0.76	1.11	11.17	4.3
	5-Year Low	0.35	0.8	8.14	3.17
	5-Year Median	0.61	0.94	9.91	3.67
EV/EBITDA F12M	Current	7.99	9.4	35.22	15.04
	5-Year High	10.32	19.91	37.47	15.48
	5-Year Low	6.03	8.35	25.86	10.69
	5-Year Median	8.27	9.91	33.8	13.28

As of 12/03/2020 *Source: Zacks Investment Research*

Industry Analysis Zacks Industry Rank: Top 50% (126 out of 254)

Source: Zacks Investment Research

Top Peers

Company (Ticker)	Rec	Rank
B&G Foods, Inc. **(BGS)**	Neutral	3
Campbell Soup Company **(CPB)**	Neutral	3
Flowers Foods, Inc. **(FLO)**	Neutral	4
Hormel Foods Corporation **(HRL)**	Neutral	3
Pilgrims Pride Corporation **(PPC)**	Neutral	3
Tyson Foods, Inc. **(TSN)**	Neutral	3
Beyond Meat, Inc. **(BYND)**	Underperform	4
Sanderson Farms, Inc. **(SAFM)**	Underperform	4

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

Industry Comparison Industry: Food - Meat Products

	TSN	X Industry	S&P 500	HRL	PPC	SAFM
				Industry Peers		
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Underperform
Zacks Rank (Short Term)	3	-	-	3	3	4
VGM Score	B	-	-	F	A	B
Market Cap	25.17 B	5.03 B	26.33 B	25.49 B	5.03 B	3.23 B
# of Analysts	5	3.5	13	7	2	1
Dividend Yield	2.57%	0.00%	1.49%	1.97%	0.00%	1.21%
Value Score	B	-	-	D	A	C
Cash/Price	0.06	0.07	0.07	0.07	0.17	0.02
EV/EBITDA	7.68	7.13	14.58	18.49	6.58	15.09
PEG F1	3.15	5.88	2.76	4.44	7.31	18.94
P/B	1.62	1.87	3.53	3.96	2.07	2.31
P/CF	7.65	8.16	13.76	22.89	7.40	15.81
P/E F1	12.55	18.94	21.83	26.82	18.94	427.09
P/S TTM	0.58	0.72	2.81	2.65	0.42	0.91
Earnings Yield	8.01%	4.50%	4.41%	3.73%	5.28%	0.23%
Debt/Equity	0.69	0.15	0.70	0.16	1.07	0.07
Cash Flow ($/share)	9.04	2.25	6.94	2.06	2.79	9.19
Growth Score	A	-	-	C	A	A
Historical EPS Growth (3-5 Years)	7.69%	-1.56%	9.72%	3.32%	-14.26%	-32.09%
Projected EPS Growth (F1/F0)	-1.84%	-0.11%	0.83%	6.11%	-32.72%	141.46%
Current Cash Flow Growth	3.37%	1.83%	5.23%	0.30%	16.70%	3.93%
Historical Cash Flow Growth (3-5 Years)	10.38%	5.08%	8.33%	5.08%	-4.98%	-8.98%
Current Ratio	1.86	2.12	1.38	2.38	1.80	2.79
Debt/Capital	40.89%	12.83%	42.00%	13.98%	51.78%	6.36%
Net Margin	4.96%	1.55%	10.40%	9.45%	1.55%	-0.64%
Return on Equity	13.79%	9.83%	14.99%	14.55%	9.83%	-4.15%
Sales/Assets	1.26	1.26	0.50	1.06	1.66	1.88
Projected Sales Growth (F1/F0)	1.33%	0.66%	0.35%	2.69%	0.00%	9.83%
Momentum Score	F	-	-	F	A	F
Daily Price Change	4.58%	0.59%	0.20%	0.57%	3.82%	2.20%
1-Week Price Change	7.01%	3.88%	2.18%	-5.84%	4.30%	1.48%
4-Week Price Change	19.79%	11.80%	6.65%	-4.68%	21.06%	11.80%
12-Week Price Change	8.95%	8.95%	14.39%	-4.99%	23.52%	14.56%
52-Week Price Change	-22.73%	-18.03%	6.09%	3.23%	-36.08%	-13.33%
20-Day Average Volume (Shares)	2,782,611	294,346	2,053,456	2,009,928	659,822	294,346
EPS F1 Estimate 1-Week Change	-2.09%	-0.28%	0.00%	-0.56%	14.74%	-81.87%
EPS F1 Estimate 4-Week Change	-2.81%	-2.55%	0.00%	-2.30%	14.74%	-81.87%
EPS F1 Estimate 12-Week Change	-2.05%	-2.05%	3.77%	-2.05%	60.29%	-91.14%
EPS Q1 Estimate Monthly Change	-6.80%	-3.40%	0.00%	-8.18%	0.00%	0.00%

Source: Zacks Investment Research

Zacks Stock Rating System

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

Zacks Recommendation

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

Zacks Rank

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

Zacks Style Scores

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

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

Value Score	B
Growth Score	A
Momentum Score	F
VGM Score	B

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

Disclosures

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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.

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 4-week price change, this is a medium-term price change metric. It shows whether a stock has been enjoying strong investor demand, or if it has been in consolidation, or distress over this period.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Periods:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

However, this ratio can vary widely from industry to industry, the ideal amount of required debt being different. Some businesses are more capital intensive than others and typically require higher debt to finance their operations. So, a company's debt-to-capital ratio should be compared with the same for its industry.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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