

## Tyson Foods Inc. (TSN)

**\$62.46** (As of 08/06/20)

Price Target (6-12 Months): **\$75.00**

Long Term: 6-12 Months

**Zacks Recommendation:**

**Outperform**

(Since: 08/06/20)

Prior Recommendation: Neutral

Short Term: 1-3 Months

**Zacks Rank:** (1-5)

**1-Strong Buy**

Zacks Style Scores:

VGM:B

Value: A

Growth: C

Momentum: D

### Summary

Tyson Foods, which named Dean Banks as its new CEO, has outperformed the industry in the past three months. The company has been gaining on its brand strength, wide reach and ability to cater to evolving demand. Of late, Tyson Foods has been seeing rising pandemic-led demand in its retail channel. This, along with solid e-commerce sales and export market strength, aided third-quarter fiscal 2020 results, which were otherwise battered by soft foodservice volumes and high COVID-19 costs. During the quarter, both earnings and sales fell year over year. Tyson Foods expects to continue facing capacity utilization slowdown at its production facilities. Though the company is shifting focus toward retail, retail volume increases have not been enough to compensate for soft foodservice volumes. Thus, management expects volumes to drop in the fourth quarter.

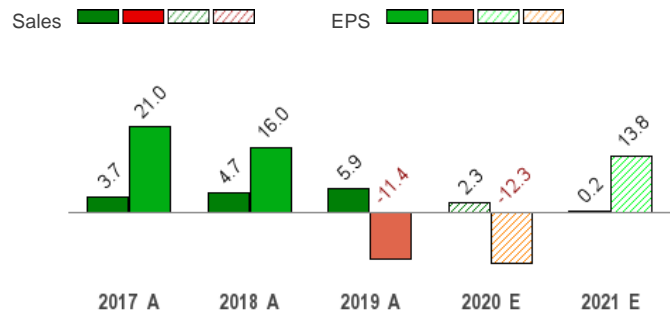
### Price, Consensus & Surprise



### Data Overview

52 Week High-Low	\$94.24 - \$42.57
20 Day Average Volume (sh)	2,224,340
Market Cap	\$22.8 B
YTD Price Change	-31.4%
Beta	0.64
Dividend / Div Yld	\$1.68 / 2.7%
Industry	<a href="#">Food - Meat Products</a>
Zacks Industry Rank	Bottom 49% (129 out of 252)

### Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	55.6%
Last Sales Surprise	-5.5%
EPS F1 Est- 4 week change	8.8%
Expected Report Date	11/10/2020
Earnings ESP	-7.2%

### Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	11,008 E	11,171 E	10,363 E	11,045 E	43,474 E
2020	10,815 A	10,888 A	10,022 A	11,326 E	43,387 E
2019	10,193 A	10,443 A	10,885 A	10,884 A	42,405 A

### EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$1.58 E	\$1.27 E	\$1.42 E	\$1.52 E	\$5.45 E
2020	\$1.66 A	\$0.77 A	\$1.40 A	\$1.24 E	\$4.79 E
2019	\$1.58 A	\$1.20 A	\$1.47 A	\$1.21 A	\$5.46 A

\*Quarterly figures may not add up to annual.

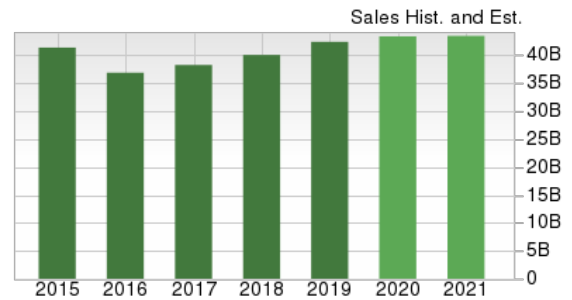
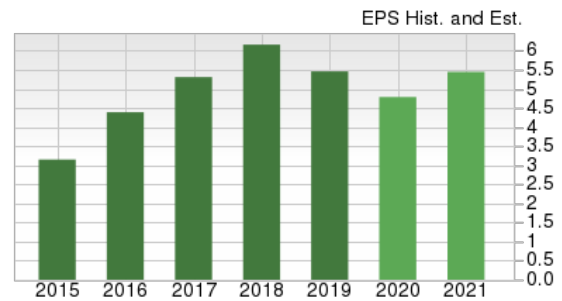
P/E TTM	12.4
P/E F1	13.0
PEG F1	3.3
P/S TTM	0.5

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 08/06/2020. The reports text is as of 08/07/2020.

## 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** (31.3% of FY19 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** (37.2% of FY19 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** (8.8% of FY19 Sales): This segment's operations comprise processing market hogs and preparing pork carcasses into meat products.
- **Prepared Foods** (19.8% of FY19 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** (3% of FY19 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.



## Reasons To Buy:

▲ **Robust Retail Demand, Solid E-Commerce Sales:** Tyson Foods' shares have gained 4.2% in the past three months compared with the industry's growth of 1.6%. The company, which recently named Dean Banks as its new CEO, continues to see burgeoning demand in its retail channel, thanks to increased at-home consumption amid the pandemic. In third-quarter fiscal 2020, the company saw considerable demand for its key retail and branded products, with core retail line volumes rising more than 26%. The company witnessed higher demand at supermarkets, club stores and other retail channels. In fact, given the rising demand, the company has also shifted part of its foodservice production to concentrate on retail. Such efforts are yielding results. Apart from this, Tyson Foods is benefiting from its brand strength, robust geographical reach and ability to manufacture locally in its international markets and catering well to the evolving global demand.

Another channel performing well for Tyson Foods is e-commerce, which saw its sales double in the third quarter as more consumers are buying online amid the pandemic. Management expects e-commerce demand in the grocery and foodservice channel to remain high. The company expects continued strength in 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 3% in fiscal 2021. For pork, domestic production is likely to rise about 1%, per the USDA. 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.

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 divestiture 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.

▲ **Export Markets & International Performance Strong:** Tyson Foods' exports to several parts of the world performed well in the third quarter of fiscal 2020. During the quarter, the company witnessed major strength in exports to Japan and Mexico. The company noted that lower hog supplies stemming from African swine fever present solid opportunities for U.S. exports as well as in-country production to cater to international demand. Also, a major part of the company's export sales includes items, which don't fit in traditional Americans' diet. Thus, exports help the company undertake optimum livestock utilization. The company expects export markets to remain strong for the beef and pork segments.

In the third quarter, International/Other segment sales were \$402 million, up 12.9% from \$356 million reported in the prior-year quarter. Sales volume improved 25%. The company's in-market performance was robust in China. Even in other countries where Tyson Foods operates, adversities from COVID-19 were lower than anticipated. In fiscal 2021, the company expects better results from its operations in the International/Other segment.

▲ **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.

▲ **Liquidity Status:** Even amid the coronavirus crisis, Tyson Foods remains financially sound enough to run its business and meet obligations. The company had solid liquidity of \$3.1 billion as of Jun 27, which increased \$600 million on a sequential basis on the back of robust operating cash flow. In the first nine months of fiscal 2020, cash provided by operating activities was \$2,708 million. Further, management expects total liquidity to stay above its minimum target of \$1 billion in the remainder of fiscal 2020. As of the end of the third quarter of fiscal 2020 (Jun 27, 2020), Tyson Foods' had current debt of \$750 million, while its cash and cash equivalents stood at \$1,365 million. At a juncture where companies are suspending dividends to preserve financial flexibility, Tyson Foods recently announced a quarterly dividend of 42 cents a share on its Class A shares, and 37.8 cents per share on Class B shares.

Tyson Foods is benefiting from its brand strength, robust geographical reach and ability to manufacture locally in its international markets and catering well to the evolving global demand.

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## Risks

- **COVID-19 Hurts Q3 Results & Volumes Outlook:** Tyson Foods posted third-quarter fiscal 2020 results, wherein both earnings and sales declined year over year and the latter fell short of the Zacks Consensus Estimate. Sales were hurt by reduced volumes, which bore the brunt of major declines in the foodservice channel – somewhat compensated by rising demand for key retail and branded products. Further, results were affected by coronavirus-led reduced production across all segments stemming from team member shortages and other disruptions. Also, the company saw higher-than-usual operating costs in all segments due to the pandemic.

Tyson Foods expects to continue facing a slowdown in capacity utilization at its production facilities due to member shortages. Moreover, though every segment is seeing a demand shift from food service to retail, retail volume increases have not been enough to compensate for soft foodservice volumes. Consequently, management expects volumes to decline in the fourth quarter of fiscal 2020, especially in its Chicken and Prepared Foods units. In fact, constraints related to coronavirus are expected to weigh on volumes in the remainder of fiscal 2020 and also 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 the remainder of fiscal 2020 and also fiscal 2021. Even in third-quarter fiscal 2020, the company's gross profit slipped 1.7% to \$1,313 million. Further, adjusted operating income decreased 4.5% to \$760 million.

During the quarter, the company incurred \$340 million as direct incremental expenses associated with COVID-19. These include escalated costs related to workers' health, such as personal protection equipment, sanitization of production facilities, testing for coronavirus, various professional fees and bonuses to frontline workers. 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 dragged results. Persistence of these factors remains a threat to margins.

- **Chicken Unit Hurdles:** During the third quarter of fiscal 2020, sales in the segment dropped 6.6% to \$3,112 million due to adverse volumes and prices. Sales volume declined 4.2% on account of lower production and soft foodservice demand, somewhat countered by higher consumer product volumes. Average sales price in the quarter declined due to weak chicken prices stemming from tough market conditions. Notably, this segment was most impacted by COVID-19. The segment's operating income was also largely hurt by soft volumes, COVID-19 related costs and adverse mix stemming from shifting capacity to cater to retail channels. Though Tyson Foods adjusted parts of its production capacity to meet retail demand, foodservice losses have not been entirely offset. Though foodservice demand started recovering gradually in the fourth quarter, retail demand still remains stronger.
  - **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.
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## Last Earnings Report

### Tyson Foods Q3 Earnings Beat Estimates, Sales Miss

Tyson Foods posted third-quarter fiscal 2020 results. Nevertheless, earnings topped the consensus mark. Also, in a separate press release, management named Dean Banks as the company's new CEO, who will succeed Noel White on Oct 3. Notably, Banks will continue to serve as the company's president, while White will serve Tyson Foods as the executive vice chairman of the board of directors.

Adjusted earnings for the reported quarter were \$1.40 per share, beating the Zacks Consensus Estimate of 90 cents. However, the bottom line declined 5% year over year. Net sales declined 7.9% to \$10,022 million. Also, the top line fell short of the Zacks Consensus Estimate of \$10,605 million.

Gross profit for the quarter came in at \$1,313 million, down 1.7% from the prior-year quarter. Tyson Foods' adjusted operating income decreased 4.5% to \$760 million. During the quarter, the company incurred \$340 million as direct incremental expenses associated with COVID-19. These include escalated costs related to workers' health, such as personal protection equipment, sanitization of production facilities, testing for coronavirus, various professional fees and bonuses to frontline workers. 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 dragged results.

#### Segment Details

**Beef:** Sales in the segment dropped 12.1% to \$3,653 million. Sales volume declined 23.8% year over year due to reduced production throughout the quarter stemming from coronavirus. Also, a fall in live cattle harvest capacity due to a temporary facility closure for most parts of the first quarter due to a fire breakout hampered results. Average sales price saw a rise in the quarter, thanks to higher demand amid supply hurdles amid the pandemic.

**Pork:** Sales in the segment dropped 15.7% year over year to \$1,115 million. Sales volume fell 16.5% year over year due to reduced pandemic-led production, even though demand was robust and there was higher availability of live hogs. Average sales price rose due to the same factors that drove pricing in the beef segment.

**Chicken:** Sales in the segment dropped 6.6% to \$3,112 million. Sales volume declined 4.2% on account of lower production and soft foodservice demand, somewhat countered by higher consumer product volumes. Average sales price in the quarter declined due to weak chicken prices stemming from tough market conditions.

**Prepared Foods:** Sales in the segment slipped 2.6% to \$2,035 million. Prepared Foods' sales volume fell 6% as volume growth in the consumer products business was countered by softness in the foodservice channel and reduced production. Average sales price increased on account of favorable product mix and pass-through of higher raw-material costs.

**International/Other:** Sales in the segment were \$402 million, up 12.9% from \$356 million reported in the prior-year quarter. Sales volume improved 25%, whereas average sales price declined.

#### Other Financial Updates & Outlook

The company exited the quarter with cash and cash equivalents of \$1,365 million, long-term debt of \$11,270 million and total shareholders' equity (including noncontrolling interests) of \$15,004 million. In the first nine months of fiscal 2020, cash provided by operating activities was \$2,708 million. Management projects capital expenditure to be approximately \$1.2 billion for fiscal 2020 and fiscal 2021.

For fiscal 2021, USDA expects overall domestic protein production (chicken, beef, pork and turkey) to rise about 1% year over year. Management 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 increase over time.

The company is battling several hurdles related to the pandemic, which are expected to elevate its operating cost burden and weigh on volumes in the remainder of fiscal 2020 and also fiscal 2021. Tyson Foods expects to continue facing a slowdown in capacity utilization at its production facilities due to member shortages. Moreover, though every segment is seeing a demand shift from food service to retail, retail volume increases have not been enough to compensate for soft foodservice volumes. Consequently, management expects volumes to decline in the fourth quarter of fiscal 2020, especially in its Chicken and Prepared Foods units.

While the company is unable to forecast the impacts of COVID-19 on its short and long-term demand, management said that it is well placed in terms of liquidity to run its business and meet obligations. The company expects its total liquidity to stay above the minimum target of \$1 billion.

In the beef segment, USDA projects domestic production to grow about 3% in fiscal 2021. In the fiscal, management anticipates adequate supplies in the markets where its plans operate. For pork, domestic production is likely to rise about 1%, 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.

Quarter Ending **06/2020**

Report Date	Aug 03, 2020
Sales Surprise	-5.50%
EPS Surprise	55.56%
Quarterly EPS	1.40
Annual EPS (TTM)	5.04

## Recent News

### Tyson Foods Declares Quarterly Dividend – Aug 6, 2020

Tyson Foods announced a quarterly dividend of 42 cents a share on its Class A shares, and 37.8 cents per share on Class B shares. The dividends are payable on Dec 15, 2020, to stockholders of record as on Dec 1.

### Tyson Foods Pauses Facility Operations Due to Coronavirus – Apr 24, 2020

Tyson Foods is undertaking some concrete measures to ensure safety of its employees as the world continues to strive against the coronavirus menace. In this regard, the company announced that it will temporarily cease production at its beef facility located at Pasco, WA. This decision was caused by labor absenteeism, coronavirus cases as well as community concerns. Nevertheless, the members will be provided with compensation while the plant remains temporarily closed. In an earlier press release, Tyson Foods had undertaken similar decision to halt production at its Logansport, IN-based production facility to enable COVID-19 testing for workers. The Logansport facility which had suspended production for a day on Apr 20 for deep cleaning and sanitization has been operating at limited capacity since it reopened.

Earlier, Tyson Foods announced its decision to suspend production at its Waterloo, IA-based pork plant for an indefinite period. We believe that the decision to pause production at these plants is likely to affect the overall production at a juncture where consumer demand is increasing in grocery stores. Nevertheless, the company's other meat and poultry facilities are operational although a few of these plants are functioning at limited capacity due to labor absenteeism among other reasons. Notably, the company recently resumed operations at its pork plant in Columbus Junction, Iowa. The Iowa plant which was non-operational for two weeks due to coronavirus outbreak will run at limited capacity for now. Nonetheless, management expects to gradually increase manufacturing activities in this particular plant.

Also, Tyson Food has been implementing high-level deep cleaning and sanitizing at its facilities. Moreover, as social distancing is the key to contain COVID-19, it has installed dividers between workplaces to increase distance between employees. Additionally, Tyson Food's workers are required to use personal protective equipment like face covers as a precautionary measure to contain the spread of the coronavirus. Last month, Tyson Foods stated that it will pay around \$60 million as bonuses to its 116,000 frontline employees and Tyson truckers in the United States.

## Valuation

Tyson Foods shares are down 30.5% in the year-to-date period and 28% over the trailing 12-month period. Stocks in the Zacks sub-industry are down 12.1% in the year-to-date period, while the Zacks Consumer Staples sector down 6.4%. Over the past year, the Zacks sub-industry is down 13.9%, while the sector declined 3.5%.

The S&P 500 index is up 4.4% in the year-to-date period and 15.7% in the past year.

The stock is currently trading at 12X forward 12-month earnings, which compares to 18.63X for the Zacks sub-industry, 19.94X for the Zacks sector and 22.69X 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 12.44X. Our Outperform recommendation indicates that the stock will perform better than the market. Our \$75 price target reflects 14.41X 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	18.63	19.94	22.69
	5-Year High	16.69	19.1	22.37	22.69
	5-Year Low	6.76	11.48	16.63	15.25
	5-Year Median	12.44	14.88	19.57	17.55
P/S F12M	Current	0.52	0.92	9.44	3.63
	5-Year High	0.76	1.11	11.15	3.63
	5-Year Low	0.35	0.63	8.1	2.53
	5-Year Median	0.61	0.94	9.89	3.04
EV/EBITDA F12M	Current	8.14	10.39	32.76	13.21
	5-Year High	9.61	19.94	37.28	14.2
	5-Year Low	6.7	7.49	25.89	9.15
	5-Year Median	8.25	9.8	33.7	11

As of 08/06/2020



## Industry Analysis Zacks Industry Rank: Bottom 49% (129 out of 252)



## Top Peers

Company (Ticker)	Rec	Rank
BG Foods, Inc. (BGS)	Neutral	2
Beyond Meat, Inc. (BYND)	Neutral	3
Campbell Soup Company (CPB)	Neutral	2
Flowers Foods, Inc. (FLO)	Neutral	2
Hormel Foods Corporation (HRL)	Neutral	3
Pilgrims Pride Corporation (PPC)	Neutral	5
Industrias Bachoco, S.A. de C.V. (IBA)	Underperform	NA
Sanderson Farms, Inc. (SAFM)	Underperform	3

Industry Comparison Industry: Food - Meat Products				Industry Peers		
	TSN	X Industry	S&P 500	HRL	PPC	SAFM
Zacks Recommendation (Long Term)	Outperform	-	-	Neutral	Neutral	Underperform
Zacks Rank (Short Term)	1	-	-	3	5	3
VGM Score	B	-	-	B	A	C
Market Cap	22.76 B	3.73 B	23.20 B	27.58 B	3.73 B	2.49 B
# of Analysts	5	3	14	6	2	1
Dividend Yield	2.69%	0.00%	1.78%	1.82%	0.00%	1.14%
Value Score	A	-	-	C	A	B
Cash/Price	0.02	0.03	0.07	0.02	0.14	0.02
EV/EBITDA	8.42	7.10	13.21	19.40	5.78	12.30
PEG Ratio	3.28	2.40	2.94	4.12	1.93	NA
Price/Book (P/B)	1.52	1.52	3.12	4.46	1.57	1.81
Price/Cash Flow (P/CF)	7.38	7.24	12.27	24.64	5.47	12.18
P/E (F1)	13.04	13.05	21.69	30.92	12.94	NA
Price/Sales (P/S)	0.53	0.61	2.48	2.87	0.32	0.71
Earnings Yield	7.67%	5.45%	4.39%	3.22%	7.73%	-1.30%
Debt/Equity	0.75	0.05	0.77	0.01	1.19	0.17
Cash Flow (\$/share)	8.46	2.08	6.94	2.08	2.79	9.19
Growth Score	C	-	-	A	B	B
Hist. EPS Growth (3-5 yrs)	12.83%	-7.08%	10.46%	5.79%	-13.84%	-31.56%
Proj. EPS Growth (F1/F0)	-12.31%	-8.42%	-6.80%	-4.89%	-27.16%	-157.77%
Curr. Cash Flow Growth	-3.73%	-5.88%	5.39%	-8.04%	16.70%	3.93%
Hist. Cash Flow Growth (3-5 yrs)	13.92%	3.13%	8.55%	8.67%	-4.98%	-8.98%
Current Ratio	1.80	1.89	1.33	1.70	1.89	3.04
Debt/Capital	42.91%	4.34%	44.50%	0.91%	54.38%	14.40%
Net Margin	4.26%	2.24%	10.13%	9.64%	2.24%	-0.06%
Return on Equity	12.63%	7.89%	14.39%	15.38%	7.89%	-2.65%
Sales/Assets	1.26	1.26	0.51	1.17	1.67	1.91
Proj. Sales Growth (F1/F0)	2.32%	1.57%	-1.51%	2.12%	0.00%	1.57%
Momentum Score	D	-	-	C	C	F
Daily Price Chg	-0.75%	0.00%	-0.04%	0.63%	-0.33%	-1.24%
1 Week Price Chg	1.04%	0.00%	0.14%	1.17%	-3.00%	-1.38%
4 Week Price Chg	12.38%	1.96%	7.78%	8.87%	-2.43%	0.32%
12 Week Price Chg	5.58%	5.58%	17.48%	7.57%	-27.15%	-18.08%
52 Week Price Chg	-29.58%	-24.29%	0.68%	22.50%	-47.54%	-19.00%
20 Day Average Volume	2,224,340	287,311	2,057,775	1,413,362	1,185,574	287,311
(F1) EPS Est 1 week change	8.03%	0.00%	0.00%	0.00%	0.00%	0.00%
(F1) EPS Est 4 week change	8.82%	0.00%	1.36%	0.00%	-35.17%	0.00%
(F1) EPS Est 12 week change	-0.46%	0.63%	1.57%	-5.16%	1.72%	-165.93%
(Q1) EPS Est Mthly Chg	-6.79%	0.00%	0.54%	0.00%	NA	0.00%

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## 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 have an excellent 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.

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### 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	A
Growth Score	C
Momentum Score	D
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.

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### 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.

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