Momentum: A



# Tyson Foods Inc. (TSN) Long Term: 6-12 Months | Zacks Recommendation: Neutral (Since: 07/08/20) Price Target (6-12 Months): \$59.00 Short Term: 1-3 Months | Zacks Rank: (1-5) Zacks Style Scores: VGM:A

# **Summary**

Tyson Foods' shares have lagged the industry in the past three months. The stock got a further hit after the company posted dismal second-quarter fiscal 2020 results, wherein earnings and sales missed the consensus mark. Results were hurt by coronavirus-related woes. A shift in demand from foodservice to retail, a fall in team member attendance, a volatile supply chain and temporary plant shutdowns have been deterrents. These hurdles are expected to raise production and operating costs and dent volumes in the remainder of fiscal 2020. Apart from this, the company has been battling high input costs. Nonetheless, Tyson Foods' focus on the Financial Fitness program bodes well. Also, the company has been seeing strength in export markets and e-commerce channel. Moreover, focus on building a protein-packed portfolio has been yielding results.

# **Data Overview**

52 Week High-Low	\$94.24 - \$42.57
20 Day Average Volume (sh)	2,607,562
Market Cap	\$20.2 B
YTD Price Change	-39.0%
Beta	0.65
Dividend / Div Yld	\$1.68 / 3.0%
Industry	Food - Meat Products
Zacks Industry Rank	Bottom 28% (181 out of 252)

Last EPS Surprise	-36.4%
Last Sales Surprise	-6.5%
EPS F1 Est- 4 week change	0.7%
Expected Report Date	08/03/2020
Earnings ESP	10.3%

P/E TTM	10.9
P/E F1	12.6
PEG F1	3.2
P/S TTM	0.5

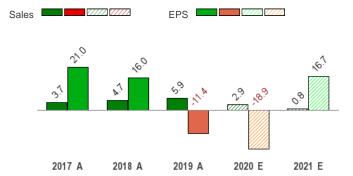
### Price, Consensus & Surprise



Value: A

Growth: B

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



# Sales Estimates (millions of \$)

\*Quarterly figures may not add up to annual.

	Q1	Q2	Q3	Q4	Annual*
2021	11,053 E	11,254 E	11,207 E	11,227 E	43,994 E
2020	10,815 A	10,888 A	10,487 E	11,437 E	43,627 E
2019	10,193 A	10,443 A	10,885 A	10,884 A	42,405 A

# **EPS Estimates**

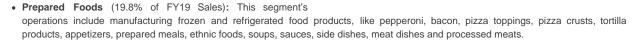
	Q1	Q2	Q3	Q4	Annual*
2021	\$1.64 E	\$0.93 E	\$1.25 E	\$1.58 E	\$5.17 E
2020	\$1.66 A	\$0.77 A	\$0.91 E	\$1.33 E	\$4.43 E
2019	\$1.58 A	\$1.20 A	\$1.47 A	\$1.21 A	\$5.46 A

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 07/09/2020. The reports text is as of 07/10/2020.

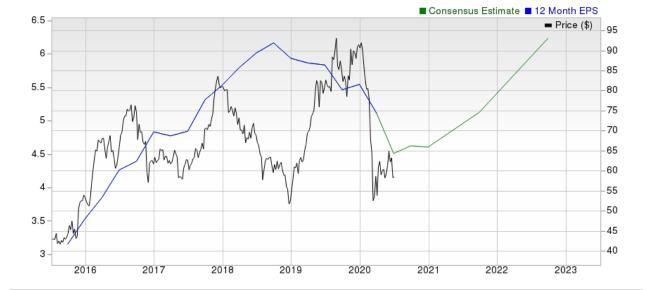
#### Overview

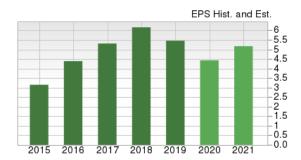
Headquartered in Arkansas, Tyson Foods Inc. was founded in 1935. It is the biggest U.S. chicken company and produces, distributes and markets chicken, beef, pork as well as prepared foods. Its products are marketed and sold primarily by sales staff to grocery retailers, grocery wholesalers, meat distributors,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



• 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:**

▲ Focus on Protein-Packed Brands: Tyson Foods expects demand for protein to rise and is well positioned to exploit opportunities in the space. For fiscal 2020, USDA expects overall domestic protein production (chicken, beef, pork and turkey) to rise roughly 3-4% year over year. A greater portion of the upside is likely to be absorbed by export markets. The rising demand for protein-packed food products is a fueling factor for higher protein production. In fact, Tyson Foods boasts a rich portfolio of protein packed brands that are growing rapidly across the globe.

Tyson Foods gains from rising demand for protein-packed food. Further, the company undertakes strategic buyouts to strengthen portfolio.

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.

- ▲ Export Markets Strong: Tyson Foods' exports to several parts of the world performed well in the second quarter of fiscal 2020. During the quarter, the company witnessed major strength in exports to Japan and Mexico, including double-digit gains in market share. Management said that in fiscal 2020, a large portion of overall domestic protein production (chicken, beef, pork and turkey) is likely to be absorbed by export markets. In the pork segment, the company envisions more available export markets for the remaining part of fiscal 2020. Another channel performing well is e-commerce, which saw considerable sales growth in the second quarter. The company expects such favorable trends to continue.
- ▲ 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

- ▲ Financial Fitness Program to Boost Efficiency: Toward the latter half of 2017, Tyson Foods announced a Financial Fitness Program, with the motive to enhance operating and supply-chain efficiencies, reduce overheads and fuel bottom line in the forthcoming periods. The company aims to generate savings from this program, through synergies from acquisition integration, along with incremental cost optimization which involves removal of non-value-added costs. Majority of these savings are expected to benefit the Prepared Foods and Chicken segments. During first-quarter fiscal 2020, Tyson Foods announced a restructuring program (the "2020 Program"), which is likely to contribute to the company's previously initiated Financial Fitness Program. This involves elimination of overhead and consolidation of certain enterprise functions.
- ▲ Geographic and Product Diversity: Tyson Foods has significant presence in markets outside the U.S. The company has operations in Australia, China, South Korea, Malaysia, Mexico, the Netherlands, Thailand and the United Kingdom. Moving to its product portfolio, Tyson Foods offers a wide array of meat products and commands a strong presence in all beef, pork, chicken as well as processed and fresh meat food products categories. This acts as a buffer to the company's sales and margins if one category fails, the others can aid recovery. Also, Tyson Foods continuously innovates and adds products to an already rich food line up. The company has a broad portfolio of products and brands such as Tyson, Jimmy Dean, Hillshire Farm, Ball Park, Wright, Aidells, ibp and State Fair.
- ▲ Liquidity Status: Even amid the coronavirus crisis, Tyson Foods remains financially sound enough to run its business and meet obligations. The company entered into a term-loan agreement worth \$1.5 billion on Mar 27 and borrowed the amount in the first week of third-quarter fiscal 2020. Management said that the company had solid liquidity of \$2.5 billion as of Mar 28 (including the undrawn loan). Further, it expects total liquidity to stay above its minimum target of \$1 billion in the back half of fiscal 2020. Tyson Foods further stated that debt reduction will remain a key priority to its capital allocation plans.

Apart from this, the company looks well placed on the dividend-payout front. At a juncture where many companies are suspending dividends to preserve financial flexibility, Tyson Foods recently declared quarterly dividends of 42 cents per share and 37.8 cents a share on its Clas A and Class B shares. Notably, Tyson Foods has a dividend payout of 32.9%, dividend yield of 2.8% and free cash flow yield of 7.4%.

#### **Reasons To Sell:**

✓ Dismal Q2 Earnings: Shares of Tyson Foods have dropped 10.6% in the past three months against the industry's growth of 0.7%. The stock got a further hit after the company posted dismal second-quarter fiscal 2020 results, wherein earnings and sales fell short of the Zacks Consensus Estimate and the bottom line also plunged year over year. Results in the quarter were affected by coronavirus-related concerns. A shift in demand from foodservice to retail, decline in team member attendance, volatile supply chain and temporary plant shutdowns were hurdles. Further, temporary plant closures elevated the company's operating and production costs, leading to soft margins. Gross margin contracted 200 basis points (bps) to 9.4%. Also, adjusted operating margin for the second quarter was 4.6%, down 150 bps year over year. These costs are likely to continue until production resumes.

Tyson Foods expects to continue facing a slowdown and temporary idleness at its production facilities due to member shortages. Management expects volumes to decline in the second half of fiscal 2020.

- ▼ Coronavirus to Hurt Costs & Volumes: Tyson Foods has been battling several hurdles on account of the coronavirus outbreak and the resultant shutdown of some manufacturing facilities. The company is being adversely impacted by lower workforce, supply-chain volatility and the temporary idling of facilities. Such hurdles are expected to elevate the company's operating and production cost burden and also weigh on its volumes for the remainder of fiscal 2020. Tyson Foods expects to continue facing a slowdown and temporary idleness at its production facilities due to member shortages. Moreover, though every segment is seeing a demand shift from foodservice to retail, retail volume increases have not been enough to compensate for soft foodservice volumes. Management expects volumes to decline in the second half of fiscal 2020. The company particularly said that it expects the current market scenario to continue in the third quarter.
- ▼ Chicken Unit Hurdles: During the second quarter of fiscal 2020, sales in the segment dipped 0.3% to \$3,397 million on account of reduced volumes from the rendering and blending business. Sales volume declined 1.5%. Though average sales price in the quarter rose, it was hurt by weak chicken prices stemming from tough market conditions. Further, operating income in the unit was battered by a rise in net feed ingredient costs and unfavorable derivative mark to market adjustments.

Management said that weak pricing in the chicken segment persisted in the third quarter. Notably, this segment has greater exposure to the foodservice channel compared with other segments. Though Tyson Foods adjusted parts of its production capacity to meet retail demand, foodservice losses have not been entirely offset. Moreover, the channel shift is weighing on margins and a reduced workforce has lowered plant efficiency, leading to elevated production costs. Given the increased domestic supplies but lower foodservice consumption and high production costs, chicken operations are expected to incur losses in the back half of fiscal 2020.

- ▼ International Segment Troubled: Sales in the segment were \$465 million in the second quarter, down from \$277 million reported in the prior-year quarter. Quite Operations in China were most affected by COVID-19. Though the conditions in China are improving, other regions where the company operates are bearing the brunt of coronavirus woes, especially because the international business is highly exposed to the foodservice channel. Management expects profitability in this segment to remain affected by COVID-19-related woes in the short term. The segment is anticipated to be troubled in the back half of the fiscal due to coronavirus-related market hurdles.
- ✓ High Input Costs: Tyson Foods is experiencing high input costs across some of its categories. This is weighing on the respective segment's operating profits. In the second quarter, operating income in the Chicken unit declined and was affected by increase in feed-ingredients costs. Further, high raw-material costs continued to weigh on the operating income in the Prepared Foods unit. In the Prepared Foods segment, the company anticipates disruptions from coronavirus to affect raw-material availability in the remainder of fiscal 2020.

# **Last Earnings Report**

#### Tyson Foods Q2 Earnings Lag, View Reflects Coronavirus Woes

Tyson Foods posted dismal second-quarter fiscal 2020 results. Adjusted earnings for the reported quarter were 77 cents per share, missing the Zacks Consensus Estimate of \$1.21. Additionally, the bottom line declined 36% year over year. Net sales advanced 4.3% to \$10,888 million. However, the top line fell short of the Zacks Consensus Estimate of \$11,641 million.

Gross profit for the fiscal second quarter came in at \$1,021 million, down 14.3% from the prioryear quarter. Gross margin contracted 200 basis points (bps) to 9.4%. Tyson Foods' adjusted operating income decreased 23.4% to \$501 million. Also, adjusted operating margin for the period was 4.6%, down 150 bps year over year.

Quarter Ending	03/2020
Report Date	May 04, 2020
Sales Surprise	-6.47%
EPS Surprise	-36.36%
Quarterly EPS	0.77
Annual EPS (TTM)	5.11

#### **Segment Details**

**Beef:** Sales in the segment dropped 2.4% to \$3,979 million. Sales volume rose 2.7% year over year owing to robust demand for beef products. Average sales price remained flat.

**Pork**: Sales in the segment grew 8% year over year to \$1,266 million. Sales volume increased 2% year over year, owing to higher domestic availability of hogs and solid demand for pork products, especially in the consumer products and export sales networks. Average sales price rose due to higher livestock costs as well as stronger export markets.

**Chicken**: Sales in the segment dipped 0.3% to \$3,397 million on account of reduced volumes from the rendering and blending business. Sales volume declined 1.5%. Average sales price in the quarter rose owing to reduced rendering and blending sales, partly offset by weak chicken prices due to tough market conditions.

**Prepared Foods:** Sales in the segment rose 2.6% to \$2,080 million. Prepared Foods' sales volume remained flat as volume growth in the consumer products business was countered by softness in the foodservice channel and other intersegment sales channel shifts. Average sales price increased on account of favorable product mix and higher raw-material costs.

International/Other: Sales in the segment were \$465 million, down from \$277 million reported in the prior-year quarter. Sales volume improved remarkably, whereas average sales price tumbled.

The company exited the quarter with cash and cash equivalents of \$437 million, long-term debt of \$10,978 million and total shareholders' equity (including noncontrolling interests) of \$14,594 million. In the first six months of fiscal 2020, cash provided by operating activities was \$1,260 million. Management projects capital expenditure to be approximately \$1.2 billion for fiscal 2020.

#### Guidance

For fiscal 2020, USDA still expects overall domestic protein production (chicken, beef, pork and turkey) to rise 3-4% year over year. A large portion of the upside is likely to be absorbed by export markets. However, the company expects certain disruptions from coronavirus. 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 the company's operating cost burden and weigh on its volumes in the remainder of fiscal 2020. Tyson Foods expects to continue facing a slowdown and temporary idleness at its production facilities due to member shortages. Moreover, though every segment is seeing a demand shift from foodservice to retail, retail volume increases have not been enough to compensate for soft foodservice volumes. Management expects volumes to decline in the second half of fiscal 2020.

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. In fiscal 2020, it expects total liquidity to stay above its minimum target of \$1 billion. Moving on, management anticipates industry-fed cattle supplies in the beef unit to rise roughly 2% in fiscal 2020 compared with 1% growth projected earlier. For pork, the company envisions increased industry hog supplies to the tune of nearly 5% year over year compared with the prior view of 4% growth. Also, livestock costs are projected to decline in the remainder of fiscal 2020 with more available export markets.

Additionally, chicken production is now estimated to rise 3-4% in fiscal 2020, per USDA. Earlier, it was anticipated to rise 4%. For the remainder of fiscal 2020, management doesn't expect pricing to improve. Also, it doesn't expect elevated consumer products demand to completely make up for the expected declines in foodservice. The company anticipates disruptions from coronavirus to impact raw material availability in the Prepared Foods segment. Overall raw-material costs are anticipated to fall in the remainder of fiscal 2020 from the same period in fiscal 2019. Management expects higher retail sales to dent foodservice demand in the remaining part of fiscal 2020. Moreover, its international segment is anticipated to be troubled in the back half of the fiscal due to coronavirus-related market hurdles.

#### **Recent News**

#### Tyson Foods Declares Quarterly Dividend - May 9, 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 September 15, 2020, to stockholders of record as on September 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 39% in the year-to-date period and 31.7% over the trailing 12-month period. Stocks in the Zacks sub-industry are down 16.6% in the year-to-date period, while the Zacks Consumer Staples sector down 11.9%. Over the past year, the Zacks sub-industry is down 15.5%, while the sector declined 10.4%.

The S&P 500 index is down 1.4% in the year-to-date period and up 6.2% in the past year.

The stock is currently trading at 11.2X forward 12-month earnings, which compares to 18.21X for the Zacks sub-industry, 19.45X for the Zacks sector and 22.62X 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 Neutral recommendation indicates that the stock will perform in line with the market. Our \$59 price target reflects 11.89X forward 12-month earnings.

The table below shows summary valuation data for TSN

Valuation Multiples - TSN					
		Stock	Sub-Industry	Sector	S&P 500
	Current	11.2	18.21	19.45	22.62
P/E F12M	5-Year High	16.69	19.1	22.4	22.62
	5-Year Low	6.76	11.48	16.63	15.27
	5-Year Median	12.44	14.69	19.57	17.59
	Current	0.46	0.89	9.3	3.53
P/S F12M	5-Year High	0.76	1.11	11.16	3.53
	5-Year Low	0.35	0.64	8.11	2.52
	5-Year Median	0.61	0.95	9.85	3.04
	Current	8.54	10.39	32.76	13.21
EV/EBITDA F12M	5-Year High	9.61	19.95	37.5	14.2
	5-Year Low	6.7	7.4	25.26	8.81
	5-Year Median	8.24	9.86	33.62	10.88

As of 07/09/2020

# Industry Analysis Zacks Industry Rank: Bottom 28% (181 out of 252)

#### ■ Industry Price 1.1k - Industry ■ Price \_95 90 1k 85 -80 900 - 75 70 800 65 .MA 60 700 -55 600 50 45 500 40 2017 2018 2019 2020

# **Top Peers**

Company (Ticker)	Rec	Rank
BG Foods, Inc. (BGS)	Outperform	1
Pilgrims Pride Corporation (PPC)	Outperform	3
Beyond Meat, Inc. (BYND)	Neutral	3
Campbell Soup Company (CPB)	Neutral	3
Flowers Foods, Inc. (FLO)	Neutral	2
Hormel Foods Corporation (HRL)	Neutral	4
Industrias Bachoco, S.A. de C.V. (IBA)	Neutral	3
Sanderson Farms, Inc. (SAFM)	Neutral	3

Industry Comparison Industry: Food - Meat Products			Industry Peers			
	TSN	X Industry	S&P 500	HRL	PPC	SAFN
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Outperform	Neutra
Zacks Rank (Short Term)	3	-	-	4	3	3
VGM Score	Α	-	-	Α	Α	В
Market Cap	20.25 B	3.86 B	21.19 B	25.34 B	3.86 B	2.48 E
# of Analysts	4	2.5	14	6	2	•
Dividend Yield	3.02%	0.00%	1.96%	1.98%	0.00%	1.15%
Value Score	Α	-	-	С	Α	В
Cash/Price	0.02	0.03	0.07	0.02	0.13	0.02
EV/EBITDA	7.71	6.82	12.56	17.78	5.92	12.27
PEG Ratio	3.30	2.31	2.85	3.79	2.13	N.A
Price/Book (P/B)	1.39	1.39	3.00	4.10	1.56	1.8
Price/Cash Flow (P/CF)	6.57	6.57	11.41	22.64	5.61	12.14
P/E (F1)	13.14	14.29	20.79	28.41	14.29	N/
Price/Sales (P/S)	0.47	0.56	2.19	2.64	0.33	0.70
Earnings Yield	7.97%	5.27%	4.52%	3.51%	7.03%	-1.30%
Debt/Equity	0.75	0.05	0.76	0.01	1.15	0.17
Cash Flow (\$/share)	8.46	2.08	6.94	2.08	2.79	9.19
Growth Score	В	-	-	Α	A	В
Hist. EPS Growth (3-5 yrs)	12.83%	-7.65%	10.90%	5.79%	-12.21%	-31.56%
Proj. EPS Growth (F1/F0)	-18.86%	-11.70%	-9.99%	-4.89%	-32.41%	-157.77%
Curr. Cash Flow Growth	-3.73%	-5.88%	5.51%	-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	1.61	1.89	1.30	1.70	1.89	3.04
Debt/Capital	42.93%	4.34%	44.46%	0.91%	53.42%	14.40%
Net Margin	4.52%	3.73%	10.62%	9.64%	3.73%	-0.06%
Return on Equity	13.01%	13.01%	15.75%	15.38%	15.14%	-2.65%
Sales/Assets	1.29	1.29	0.55	1.17	1.71	1.91
Proj. Sales Growth (F1/F0)	2.88%	1.57%	-2.52%	2.12%	0.00%	1.57%
Momentum Score	Α	-	-	В	F	C
Daily Price Chg	-4.06%	-1.41%	-1.52%	-1.88%	-1.88%	-1.41%
1 Week Price Chg	0.29%	-0.13%	3.66%	-0.27%	0.24%	-3.25%
4 Week Price Chg	-7.13%	-0.62%	0.36%	0.36%	-12.52%	-6.78%
12 Week Price Chg	-8.71%	-7.54%	10.41%	-6.37%	-19.60%	-12.25%
52 Week Price Chg	-31.75%	-31.75%	-8.70%	14.05%	-40.68%	-18.51%
20 Day Average Volume	2,607,562	305,067	2,339,510	1,931,154	1,088,734	305,067
(F1) EPS Est 1 week change	0.68%	0.00%	0.00%	0.00%	-39.84%	0.00%
(F1) EPS Est 4 week change	0.68%	0.00%	0.00%	0.00%	-39.84%	0.00%
(F1) EPS Est 12 week change	-25.86%	-20.28%	-7.77%	-6.41%	-34.04%	-165.93%
(Q1) EPS Est Mthly Chg	0.00%	0.00%	0.00%	0.00%	NA	0.00%

# **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.

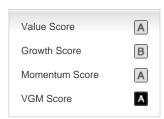
#### **Zacks Rank**

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.

# **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.

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