

RECOMMENDATION BUY

Company name	Tyson Foods, Inc.
Stock Exchange	NYSE
Ticker	TSN
Sector	Consumer staples
Industry	Food processing

Date	22.12.2021
Current Price	USD 84.93
Target Price	USD 103.68
Upside	22%

Tyson Foods Inc. (TSN) is an American multinational corporation operates in the food industry. The company is the world's second-largest processor and marketer of chicken, beef, and pork after JBS S.A, and annually exports the largest percentage of beef out of the United States. In 2019, TSN also introduced a line of plant-based products called Raised & Rooted that produce vegetarian burgers, nuggets, and sausages.

INVESTMENT SUMMARY

We issue a BUY recommendation for TSN with a one-year target price of \$103.68, presenting a 22% upside potential on the closing price of \$84.93. The target price is based on a Discounted Cash Flow method (DCF) and supported by Relative Valuation and Technical analysis using The Elliot Wave Theory. Our recommendation lays on the following key catalysts: (1) continued strength in Protein demand resulting in strong financial performance (2) efficiency-building endeavors such as automation and supply chain efficiency programs (3) TSN's growth strategy to expand offerings of value-added protein in global markets and (4) its huge effort to regain chicken profit as new competitor looms.

SOLID Q4 RESULTS

The company posted impressive fourth-quarter fiscal 2021 results, with the top and the bottom line increasing year over year. Adjusted earnings came in at \$2.30 per share, which rallied 35% year over year, driven by robust operating income performance. Total sales came in at \$12,811 million, up 11.8% from \$11,460 million reported in the year-ago quarter, thanks to higher average sales price despite the ongoing inflationary environment. Gains from average price change were 22.5% in the quarter. The quarterly performance gained from continued strength in consumer demand for protein. The company's retail core business lines, including popular brands like Tyson, Jimmy Dean, Hillshire Farm and Ball Park, delivered solid share growth in the retail channel. Moreover, continued recovery in the foodservice channel led by QSRs was an upside. Another area of focus for TSN has been its e-commerce, as consumers are shifting to online shopping, especially amid the pandemic.

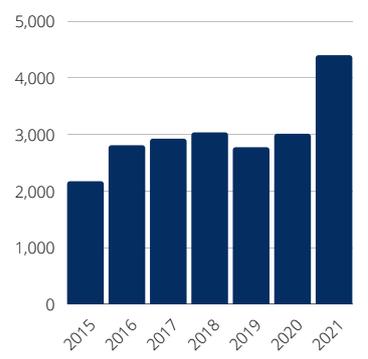
MEASURES TO BOOST EFFICIENCY

TSN is undertaking a number of operational and supply chain efficiency programs to place itself better for the long run. In this regard, the company is investing in capacity expansion and automation technology investments. According to Bloomberg, TSN announced its plans for the coming years at the meat company's virtual investor event on Thursday 9th. TSN will open 12 new plants over the next two years, increasing capacity 1.3 billion pounds (Figure 2). In addition, the company will invest \$1.3 billion over the next three years in automation to help with labour costs and other areas of the business. The company expects its new "productivity program" to yield \$1 billion in recurring savings by fiscal 2024.

STRATEGIC ACQUISITIONS OF THE EUROPEAN AND THAI OPERATIONS OF BRF S.A.

TSN has been focusing on acquisitions to expand its portfolio and boost sales volumes. The acquisition of the Thai and European businesses from BRF S.A boosts TSN's global growth strategy to reach new markets and expand offerings of value-added protein in international markets, specifically in Europe, the Middle East, and Asia.

Figure 1
Operating Income of Tyson Foods from 2015 to 2021



Source: Company Data

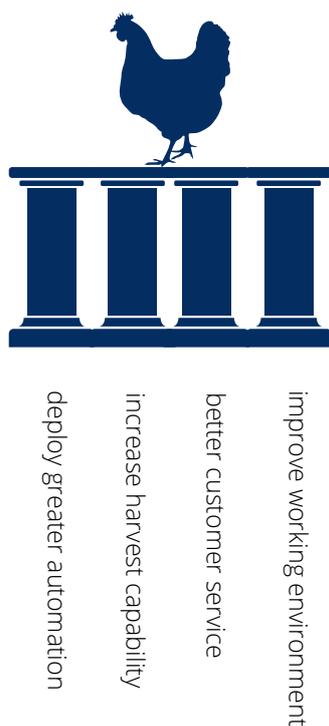
Figure 2
12 new plants to increase 1.3 billion capacity



Source: Company Data

Figure 3

4-pillar strategy to get chicken business back on track



MASSIVE ATTEMPTS TO RESTORE ITS CHICKEN SEGMENT

In order to reverse sharp earnings declines in poultry despite steadily increasing sales in the category over the past five years, TSN is aggressively repositioning itself by using the 4-pillar strategy (Figure 3). The first pillar in TSN’s strategy to regain a sustainable leadership position in chicken is to “become the most sought-after place to work” by using broader investments to reinforce safety such as hiring a chief medical officer, investing in health clinics and wellness programs, and investing in process control optimization to create a better workflow. The second pillar in TSN’s plan to turn around the poultry business is to better serve customers. To meet the company’s mission to deliver on time and in full, Bray (Group President Poultry at TSN) said TSN is working to restore its hatch rates, and this increased chick supply from improved hatch together with other investments is estimated to increase harvest capacity closer to 98% plus target utilization. Moreover, increasing harvest capacity will lay the foundation for TSN’s third pillar to grow its business from approximately 12.5b pounds in fiscal 2021 to 13b in fiscal 2022 with a longer-term goal of 15b. Lastly, The company’s fourth pillar – improving operational performance – will reinforce the third pillar and will hinge in part on increased automation. Bray explained that TSN has an aggressive play to deploy automation, largely around a proprietary deboning technology that will alleviate labor challenges.

BUSINESS DESCRIPTION

Headquartered in Arkansas, TSN 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 and international sales(Figure 4). 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 (28% of FY21 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.

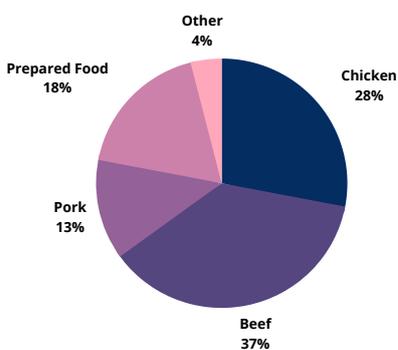
Beef (37% of FY21 Sales): This segment’s operations include processing cattle and preparing dressed beef carcasses into meat cuts and case-ready products. The revenues from this segment also come from sales of allied products such as hides and meats. Allied products are marketed to manufacturers of pharmaceuticals and technical products.

Pork(13% of FY21 Sales): This segment’s operations comprise processing market hogs and preparing pork carcasses into meat products.

Prepared Foods (18% of FY21 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.

Figure 4

Sale of Tyson Foods worldwide in 2021 by segments



Source: Company Data

International/Other (4% of FY21 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 mergers, integration costs, and corporate overhead related to Tyson New Ventures, LLC.

COMPANY STRATEGIES

QUALITY FROM FARM TO TABLE

TSN partners with over 11,000 independent farmers, some who have been successfully working with them for decades, and in some cases, for generations. They work closely with Farmers to provide healthy chicken, cattle and hogs. For example, to ensure healthy, high-quality chickens, TSN starts by hatching them in their own hatcheries. They then provide independent family farmers the nutrient-rich feed farmers need to raise the chickens. In terms of distribution, TSN has their own distribution system with a vast network of distribution centers, warehouses, and drivers who can quickly get products to customers. In fact, TSN has one of the largest cold-chain distribution networks in the industry ensuring quick and safe deliveries.

CULINARY INNOVATION

Disruption is not just reserved for the tech industry. From the chicken nugget to portable snacking solutions like Hillshire Snacking, TSN has always stayed in front of emerging food trends (Figure 5). TSN have some of the most highly skilled, passionate, and inventive culinary professionals. They look at trends and listen to consumers, retailers, and restaurants for insights into how people eat and how they can make that experience better. There are 173 Research & Development Team Members who work at the Tyson Discovery Center which helped create breakthrough new products like Jimmy Dean Delights and Tyson Tastemaker Fresh Meal Kits.

QUALITY COUNTS

To ensure quality, TSN plants and related facilities have on-site branch labs where they continuously train their plant management and lab technicians. They also perform regularly scheduled audits both internally and by third parties to maintain precise and consistent methodology and test results. There is also the Sentinel Site Program, a rigorous method for testing for post-processing contamination to ensure safe, responsible food for consumers.

ESG

ENVIRONMENTAL

TSN operates with robust company-wide environmental governance for various natural resources as well as material resources (Figure 6&7). For water, TSN adheres to a water stewardship strategy informed by local watershed contexts. TSN also aims to reduce greenhouse gas (GHG) emissions 30% by 2030 against a 2016 baseline year. This target is designed to meet the criteria of the Science Based Targets initiative (SBTi) which approved TSN's target in 2018, making TSN the first U.S. protein company in the food and beverage sector to receive such an approval. On top of that, The Tyson Foods Packaging Development group is a member of two significant sustainability organizations which will give TSN insight and participation into legislative initiatives around packaging materials and formats.

Figure 5

355

New products in 2020 and spend \$98 million in R&D

173

Research & Development Team Members who work at the Tyson Discovery Center

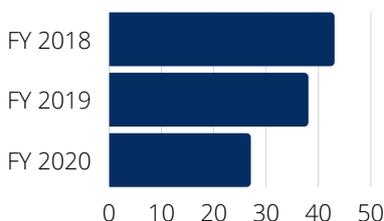
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Team Members achieved a CCS Culinologist certification from the Research Chefs Association

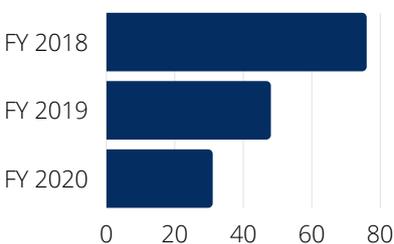
Source: Company Data

Figure 6

Total Reportable Chemical Spills



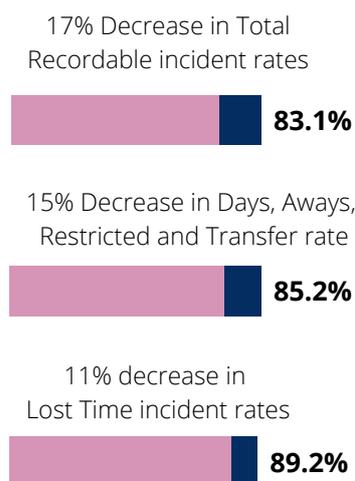
Notices of Violation (NOV)



Source: Company Data

Figure 7

Safety Improvement 2020



Source: Company Data

Figure 8

30+

million pounds of food donated, totaling 124 million meals, valued at \$65 million

Source: Company Data

Figure 9

NAME OF SHAREHOLDERS

The Vanguard Group, Inc.	11.81%
BlackRock Fund Advisors	7.13%
T. Rowe Price Associates, Inc.	4.80%
SSgA Funds Management, Inc.	4.65%
Aristotle Capital Management LLC	3.52%
Geode Capital Management LLC	2.00%
Victory Capital Management, Inc.	1.91%
Columbia Management Investment Advisers	1.90%
Northern Trust Investments, Inc.	1.71%
LSV Asset Management	1.68%

Source: Company Data

Figure 10

EXECUTIVE MANAGEMENT

Donnie King	Noelle O'Mara
David Bray	Ildefonso Silva
Steward F. Glendinning	Johanna
Chris Langholz	Mariner
Sandy Miller	Söderström
Shane Miller	Scott Spradley
Jason Nichol	Amy Tu
	John R. Tyson

Source: Company Data

Figure 11

BOARD OF DIRECTORS

John Tyson	Mikel A. Durham
Noel White	Jonathan D.
Kevin M. McNamara	Mariner
Les R. Baledge	Cheryl S. Miller
Gaurdie E. Banister Jr.	Jeffrey K.
Mike Beebe	Schomburger
Maria Claudia Borras	Robert C. Thurber
David J. Bronczek	Barbara A. Tyson

Source: Company Data

SOCIAL

TSN is enhancing long-term shareholder return by its commitment to social responsibility. They take into account of all stakeholders' interests.

1. Employees - TSN offer programs to better support team members in the areas of workplace training, compensation and benefits, life skills and most importantly safety (Figure 7) . They also cultivate an inclusive workplace that supports and empowers all team members, regardless of their race, national origin, religion, age, disability, sex (including pregnancy) or any other protected status.
2. Communities - TSN owns and operates facilities in more than 100 communities across the U.S. Most of the communities are in rural areas where, in many cases, TSN is the largest employer. TSN emphasizes on improving the quality of life in the communities where team members live and work (Figure 8).
3. Consumers - The innovation in TSN is going strong to deliver new and improved product attributes to consumers, For instance, TSN Innovation Lab in which the lab's framework uses a startup mindset. There is also The Tyson Venture which invests in companies that range from supply chain technology to emerging protein research to food safety technologies in which Four of their investments are in emerging protein companies: Future Meat Technologies, Memphis Meats, Myco Technologies and New Wave Foods.

GOVERNANCE

SHAREHOLDING STRUCTURE

TSN has an adverse group of institutional investors, which own over 80% of the company. Research has generally shown that more than half of the company's shares are owned by the top 10 shareholders, indicating that the interests of the larger shareholders are balanced out by the interests of the smaller shareholders, according to the corporation. TSN Limited Partnership is the largest shareholder at the moment, holding 20% of outstanding shares. The general public, which holds 12% ownership in the company, may not be sufficient to swing the company's policy choice in their favor. However, their 12% stake will not be easily disregarded, they can have an impact on corporate policies collectively.

EXECUTIVE MANAGEMENT

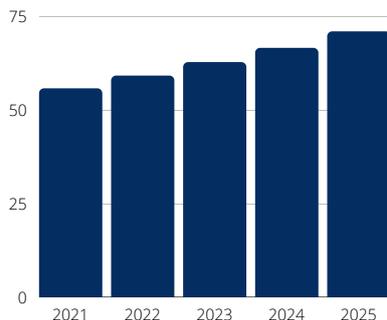
The executive management consists of 13 people, 30% of whom are females, building high-performing teams. The executive team is led and managed by experienced and high calibre business leaders with high competent leadership and management. They possess a broad range of core competencies, various skill sets and extensive experience in business development and industry knowledge, global operations, international growth strategy, innovation, culinary, and R&D, which assists TSN in achieving their objectives, purpose and vision.

BOARD OF DIRECTORS

The Board of directors consist of 14 Directors with a diversified set of experiences, backgrounds and leadership skills. The Board members consist of 5 committees, such as the Audit Committee, Compensation and Leadership Development Committee, Executive Committee, Governance and Nominating Committee, and Strategy and Acquisitions Committee. The members of TSN's board of directors are experienced business leaders with 6.2 years average tenure. Additionally, only 28.57% of the board members are women, which we expected to have a possible improvement in the gender ratio. Kevin M. McNamara, the lead independent director, has been appointed to the additional position of vice chairman of the board.

Figure 12

Forecast value of the protein ingredients market worldwide from 2021 to 2025



Source: Statista; Global Market Insights

Figure 13

See detailed analysis in Appendix

Porter's Five Forces Analysis



Score with 1-5, with 5 representing the biggest threat and 1 being the lowest threat (though non-existent)

Source: Team Analysis

INDUSTRY OVERVIEW

SURGE IN DEMAND FOR PROTEIN PRODUCTS IS DRIVING GROWTH

The protein market continues to present strong growth opportunities for the food industry. Projections suggest that the worldwide market for protein ingredients (plant and animal based) is set to grow to over 70 billion U.S. dollars by 2025, increasing massively from the 2021 figure of 55 billion U.S. dollars (Figure 12). This is mostly due to growing population, rising opulence and urbanization across the world. In 2020, TSN was among the leading protein food companies worldwide. Sales of protein food products of TSN amounted to about 42.61 billion U.S. dollars that year.

A NUTRITIONAL CHALLENGE ESPECIALLY IN BEEF MARKET

With more than 10,000 baby boomers turning 65 every day in the U.S, the future decades will bring with them a changing shift on how to feed the aging population, many of whom will be in nursing homes at some point during their aging years. But with such a focus on health, it has also created a perplexing issue. Eighty percent of U.S. consumers claim to be health-conscious, yet, the incidence of diabetes and obesity is on the rise at an alarming rate. “Beef has a clean label, but we can make it even healthier based on genetics, production practices and nutrition we use,” says Zerby (vice-president of protein procurement and innovation for Quality Supply Chain Co-op, Inc). Beef is an excellent source of protein, B-vitamins, and has a high bioavailability of micronutrients such as iron and zinc. “We need to shape the story we want to tell about animal proteins.”

COMPETITIVE POSITIONING

FOCUS ON PROTEIN-PACKED BRANDS

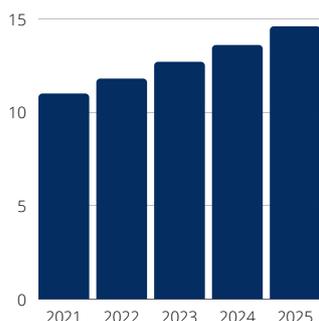
TSN remains focused on higher protein production to cater to the rising demand for protein-packed food. For fiscal 2022, TSN expects to grow its total volumes up to 3%, which comes from the chicken segment and optimized product portfolio. Enhanced capacities and initiatives to improve operations are likely to boost growth. USDA forecasts domestic production in the Chicken segment to improve slightly in fiscal 2022. The company expects better results from its operations in the International/Other segment. Management anticipates sales in the bracket of \$49-\$51 billion in fiscal 2022, which reflects sales growth of 5-7%.

HELPING PEOPLE TO EAT WELL, INCLUDING PLANT-BASED ALTERNATIVES

Today, consumers are looking for healthier meal options that fit into their active lifestyles. That’s why TSN’s team of chefs, nutritionists, and dietitians are constantly working to develop products that meet these needs—products that are all-natural, organic, gluten-free and more. The company has been steadily expanding fresh prepared foods offerings, owing to consumers’ rising demand for natural fresh meat offerings without any added hormones or antibiotics. In this respect, TSN’s 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 TSN’s portfolio. Additionally, they have been venturing into alternative sources for meat and protein products, evident from the investment in Memphis Meats. In this regard, the company’s nationwide launch of Raised & Rooted that includes three new products bodes well amid rising demand for plant-based protein options (Figure 14). In June 2021, TSN announced that it is rolling out a range of plant-based products in chosen retail markets and digital platforms in Asia Pacific under the First Pride brand. The introduction of plant-based alternatives brings them closer to its objective of building an impressive portfolio of plant protein brands.

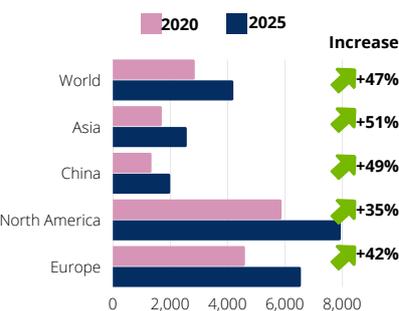
Figure 14

Forecast Plant Protein market value worldwide from 2021 to 2025



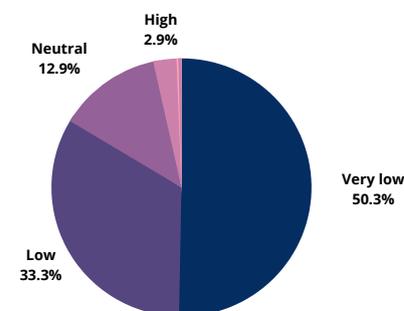
Source: Statista; GlobeNewswire

Figure 15
Where E-Commerce is growing Fastest



Source: Statista ; Digital Market Outlook

Figure 16
Confidence in the current economic situation

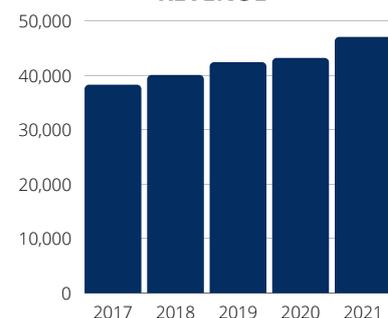


Source: ResearchGate

Figure 17
KEY FINANCIALS

Year	2019	2020	2021
DIV/SHR	1.5	1.68	1.7
EPS	5.56	5.79	8.57
EBITDA (m)	3,921	4,331	5,670
EBIT (m)	2,823	3,139	4,456
PROFIT MARGIN	4.67%	4.77%	6.48%
GROSS MARGIN	11.84%	12.47%	13.87%
NET INCOME (m)	1,980	2,061	3,047

Figure 18
REVENUE



Source: Company Data

SWOT ANALYSIS

STRENGTH OF TYSON FOODS

REACHING AND ALLOCATION

-A significant number of stores in practically every state, backed up by a robust distribution network that ensures its products are widely accessible to a large number of customers in a timely way.

THE COST MODEL

-Low-cost framework provides it to manufacture at a low cost and sell its products at an affordable rate.

-First company that comes to mind when consumers wish to buy prepared food or meat.

WEAKNESSES OF TYSON FOODS

CASH FLOW ISSUES

-Financial planning is ineffective and inefficient, resulting in situations when there is insufficient cash flow, leading to increased unscheduled borrowing.

COMPETITIVENESS

-Chicken business' competitiveness and earnings drop

-Since 2016, TSN's poultry business has suffered a dramatic mismatch between its earnings and operating margins and its sales.

OPPORTUNITIES OF TYSON FOODS

E-COMMERCE

-The e-commerce business has seen a new trend and a rise in sales (Figure 15). As a result, more individuals are increasingly making purchases online.

GLOBALISATION

-Targeting a geographically dispersed consumer base, and boosting profitability because of the reducing boundaries and expanding global interconnection. As a result, TSN is not limited to its own nation.

THREATS OF TYSON FOODS

COMPETITORS

-The sector has seen a rise in competitiveness, placing downward pressure on pricing.

-New rivals are entering the market and expanding the market by acquiring the market share of the existing corporations.

ECONOMIC CONDITIONS

-The weakening of economic conditions has an impact on business success since it has a direct impact on customers' purchasing behavior and spending power (Figure 16).

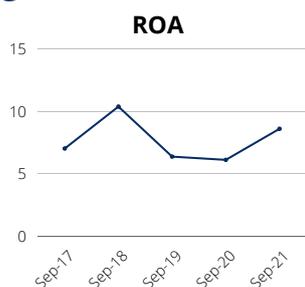
FINANCIAL ANALYSIS

TSN's market capitalization is currently quite robust as compared to the previous year. The company's current market capitalization was increased to over 30 billion dollars. Tangible Asset Value is predicted to increase to around 7.8 billion this year, while Net Income Per Employee is expected to decrease to around 19.4 thousand.

REVENUE GROWTH

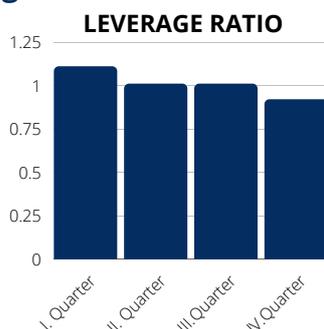
TSN's revenue streams are reported in five segments which are Beef, Chicken Pork, Processed Foods, and International. TSN's revenue for the quarter ending September 30, 2021, was \$12.811B, an 11.79% increase year-over-year due to an increase in Demand for Alternative Protein Products. This puts it 28th out of the food processing industry for the year-on-year revenue growth. Furthermore, revenue for the 12-month period ending September 30, 2021, was \$47.049B, indicating a 8.95% rise over the previous year (Figure 18).

Figure 19



Source: Gurufocus

Figure 20



Source: CSIMarket

ROA

ROA has been increasing in the historical years, from 7.03% in 2017 to 8.59% in 2021, although the impact of the epidemic has occasionally led to a decline in 2019 and 2020, they have also managed to overcome the difficulties in 2021 (Figure 19). This reflects their revenue-generating efficiency and is a green flag for financial and operational performance.

LEVERAGE RATIO

TSN Inc reduced its Leverage Ratio in the fourth quarter of 2021 to 0.92, which was lower than the company's average Leverage Ratio (Figure 20). In the fourth quarter of 2021, 29 other businesses in the Food Processing category had a lower Leverage Ratio than TSN. While Leverage Ratio's overall rating has climbed to 1892, from 2045 in the previous quarter.

ALTMAN Z-SCORE

TSN's financial health and probability of bankruptcy are determined using the Altman Z-score. This industry has a score of > 3.1, which is 64.68 percent lower than the Consumer Defensive sector and 3.56% higher than the Farm Products sector. The Z-Score for all equities in the United States is 63.3% greater than the company. As a result, Tyson Foods' chances of going bankrupt are slim. Nonetheless, the TSN Z-Score has been rising, from 3.11 in 2017 to 3.43 in 2021, indicating a positive trend. This implies a long-term benefit since its leverage ratio improved to 0.92 in the fourth quarter of 2021, which is lower than the company's average leverage ratio.

VALUATION

We arrive at a one-year target price of \$103.68, driven by our DCF Model. We used a DCF model due to its flexible nature of being able to input various assumptions for Capital Expenditures, as well as the growth rates for different business segments, allowing us to construct a more thorough analysis.

DISCOUNTED CASH FLOW

This model was chosen due to the relatively stable earnings and cash flow that TSN has been generating over the years. Our DCF model is forecasted based on the Company's historical performance, industry, economic outlook, and TSN's competitive positioning. This DCF consists of a 4-year forecast up to the year 2025. Based on our DCF analysis, the estimated one-year target price is \$103.68, a 22% upside.

WACC

We estimate a WACC of 6.27% for TSN (Figure 21). By adding TSN's debt rating implied corporate spread to the risk-free rate, we arrive at the cost of debt. We use a US 10-year bond as a risk-free rate as even though it operates in many countries (account for about 4% of sales), most of them are the countries where country risk premium is 0%. The same case also applies for equity risk premium to be in consistent with the risk free rate. Whilst the cost of equity is calculated with the CAPM formula, reflecting the USA's equity risk premium, the risk-free rate, and a re-levered beta from industry peers, of 1.35. We use a target market D/E ratio of 47% indicating our long-term expectations for TSN's debt level.

Figure 21

Input	Rate	Source
Risk - free rate	1.80%	USA 10-y bond rate
Beta	1.35	Re-levered and risk-adjusted
Equity risk premium	4.72%	USA (Damodaran)
Cost of equity	8.06%	CAPM
Cost of debt	3.20%	Corporate bond spread + risk-free rate
Tax rate	25%	From FY 2021 tax rate of 24.3%
Market D/E ratio	47%	Target level
WACC	6.27	

TERMINAL GROWTH RATE

We expect the terminal growth rate to stabilize at 2% after 2025 based on (1) projected real GDP growth in core markets, (2) a strong global focus on transitioning to organic protein and plant-based protein markets, and (3) long term inflation goals of TSN’s main countries of operation. We see potential upside for the terminal growth rate based on the anticipated all-natural, organic healthier food option over the next decades and TSN’s favorable market position in particular. This will result in further appreciation of the share price far beyond our target price. Our terminal value of EUR 52bn implies an exit EV/EBITDA multiple of 7.9x.

RELATIVE VALUATION

To confirm our recommendation, we conduct multiples valuation where we compare Tyson Foods to other companies in the same industry with similar market capitalizations. Overall, TSN multiples are far below peers' mean and median, for example, 7.9x EV/EBITDA ratio and 12.5x P/E ratio compared to peers' mean and median of about 18x and 24x respectively. This indicates that Tyson Foods might be undervalued and hence have a potential upside opportunity that aligns with our buy recommendation and DCF model.

As of 08.01.2022

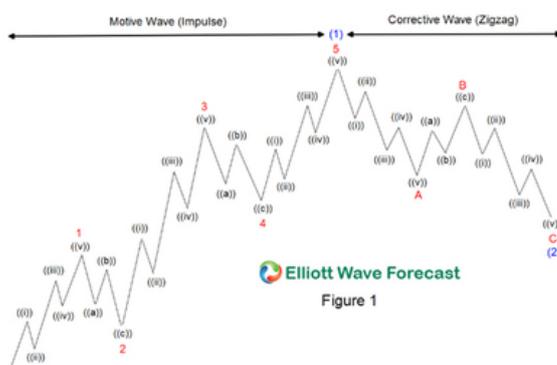
*EV/REV, EV/EBITDA, EV/EBIT,P/E are all from 2022 (FY1)

Company Name	Market Cap (bn)	Share Price	EV/REV	EV/EBITDA	EV/EBIT	P/E
General Mills, Inc	\$41,361.9	\$68.49	2.8x	14.4x	11.1x	18.2x
Hormel Foods Corporations	\$27,047.1	\$49.33	2.4x	18.1x	21.2x	25.3x
The Hershey Company	\$40,345.8	\$45.03	5.0x	19.2x	22.2x	27.6x
Kellogg Company	\$22,718.8	\$65.96	2.1x	13.2x	16.6x	16.1x
McCormick & Company, Inc	\$25,692.1	\$96.04	4.9x	24.0x	28.4x	31.9x
High		\$96.04	5.0x	19.2x	28.4x	31.9x
Low		\$45.03	2.4x	14.4x	11.1x	16.1x
Mean		\$57.65	2.8x	18.1x	16.6x	25.3x
Median		\$57.20	3.4x	17.8x	16.6x	23.8x
Tyson Foods, Inc	\$33,044.0	\$90.84	0.8x	7.9x	10.5x	12.5x

TECHNICAL ANALYSIS

We use The Elliot Wave Theory to help with Technical Analysis. Here is the brief explanation of what it is

- The Elliott Wave Theory is a form of technical analysis that looks for recurrent long-term price patterns related to persistent changes in investor sentiment and psychology.
- Simply put, movement in the direction of the trend is unfolding in 5 waves (called motive wave) while any correction against the trend is in 3 waves (called corrective wave). The movement in the direction of the trend is labelled as 1, 2, 3, 4, and 5. The three wave correction is labelled as a, b, and c. These patterns can be seen in long term as well as short term charts.
- Ideally, smaller patterns can be identified within bigger patterns which is described as a fractal approach to investing. This information (about smaller patterns fitting into bigger patterns), coupled with the Fibonacci relationships between the waves, offers the trader a level of anticipation and/or prediction when searching for and identifying trading opportunities.



As of 22.12.2021



**a closer look
of this part**

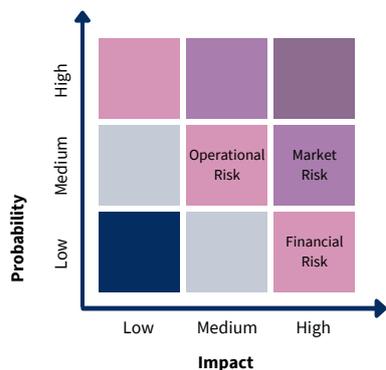


First, we look at the overall picture of TSN by looking at TF Month (First Picture), We can see that TSN is currently in Wave 5 (According to Elliot Wave Theory and our team analysis). After that, we take a closer look at Wave 4 and 5 by using TF Day (Second Picture), we then use Fibonacci Retracement to estimate the target of Wave 5 (about 161.8% Wave 4 - we choose this as the first target thus prices could go further beyond this as soon as it starts forming wave 1 of the new supercycle). Therefore, we come to a target price of about \$106.12 at 1.618 Fibonacci Retracement ratio which is in line with our DCF target price of \$103.68.

INVESTMENT RISK

Figure 24

Risk Matrix



Source: Team Analysis

Figure 25

Summary of Key Risks and Mitigation Measures in Place

RISKS	MITIGATION
FINANCIAL RISK	
F1. Indebtedness	Utilize excess cash for debt reduction Improved EBITDA and deploying FCF
F2. Goodwill Impairment	Strategic acquisitions Branding and visibility
MARKET RISK	
M1. Macroeconomic factors	Strong management and financial results
M2. Competitive rivalry	Continual innovation and distinguished products
BUSINESS AND OPERATIONAL RISK	
O1. Business Disruption	New productivity savings initiative Artificial intelligence and predictive analytics
O2. Supply chain disruptions	Operational and supply chain efficiency program

Source: Team Analysis

FINANCIAL RISK (Probability: LOW, Impact: HIGH)

F1. Indebtedness

The quantity and the terms of indebtedness could have a detrimental effect on business and liquidity position as it may restrict capacity to acquire funding and pay dividends.

Mitigation: TSN's credit profile has significantly improved, aided by higher-than-expected EBITDA generated by robust operating performance in the Beef segment and debt repayment. By deploying FCF and utilizing excess cash with net leverage of 2x or less, gross leverage might fall to the low 2x range in 2022.

F2. Impairment of Goodwill or Indefinite Life Intangible Assets

Consolidated results of operations and net worth will be impacted. The estimated sales growth, operating margins, EBITDA multiples, and future cash flows are uncertain, which may cause substantial impairment charges in the future.

Mitigation: TSN undertakes strategic acquisitions in the European and Thai operations to further strengthen its position, which will mitigate the impairment of goodwill. In addition, TSN focuses on branding and visibility to enhance efforts made.

MARKET RISK (Probability: MODERATE, Impact: HIGH)

M1. Macroeconomic Factors

Interest rate risk, which exists as a result of their pension and post-retirement benefit obligations, has an effect on both liabilities and revenue for these benefit schemes. Global credit and deterioration of economic conditions affect goods demand, cost and availability of raw materials, affecting TSN's financial results.

Mitigation: Through strong management and financial position, as can be seen from its strong fourth quarter and fiscal 2021 results, TSN will most likely withstand inflation by giving up some profit margins or pass it on to consumers.

M2. Competitive Rivalry

TSN disposable industry is highly competitive with similar items, zero switching costs of the buyers, and diverse strategies of competitors.

Mitigation: TSN innovates continually in product offerings that they have been focusing on distinguishing its products by the debut of its new plant-based products.

OPERATIONAL RISK (Probability: MODERATE, Impact: MODERATE)

O1. Business Disruption

Sustained negative impact on demand and lower production volumes incurred direct increased expenses of about \$335 million in 2021. As a result of the economic downturn, demand for their food service and retail consumption may remain below expectations.

Mitigation: TSN is initiating a new productivity initiative in fiscal 2022 while working diligently to achieve cost savings. Using artificial intelligence and predictive analytics to improve operations, supply chain planning, logistics, and warehousing will save the company over \$250 million. TSN estimates to save up to \$400 million in 2022.

O2. Supply Chain Disruption

Transit, storage, environmental issues affecting raw materials, causing supply chain disruptions. Producers' activities may be limited due to travel restrictions, resulting in increased costs and insufficient quantities of raw materials.

Mitigation: TSN is undertaking an operational and supply chain efficiency program to boost its workforce efficiency and productivity in the long run.

APPENDIX

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APPENDIX

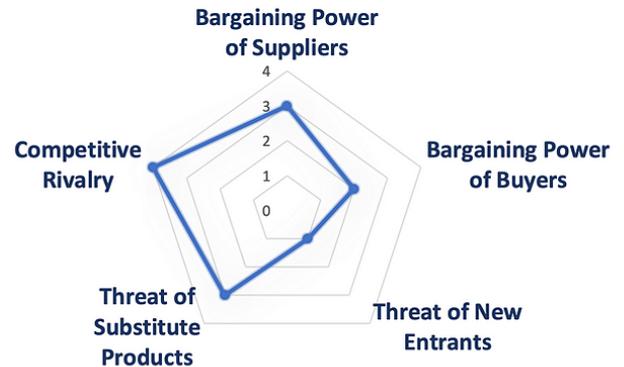
PORTER'S FIVE FORCES ANALYSIS

BARGAINING POWER OF SUPPLIERS

- Small number of large food processors who are the buyer of livestock and commodity (corn and flour) producers
- Zero switching cost and little alternatives of the livestock provided by its suppliers
- TSN's dependency of manufacturer upon the raw material suppliers (eg. plastic)

Mitigation:

- Establish a long-term streamlined supply chain of several suppliers
- Redesign and diversification of products using different materials to reduce price sensitivity of one raw material



Score with 1-5, with 5 representing the biggest threat and 1 being the lowest threat (though non-existent)

Source: Team Analysis

BARGAINING POWER OF BUYERS

- Grocery chains, such as Walmart Inc. who accounted for 18.3% of TSN's total sales, have immense bargaining power in price and shelf space
- Customers are more fragmented in food service industry

Mitigation:

- TSN has a strong brand image, high quality and environmentally sustainable
- TSN utilize its economies of scale to establish a cost advantage

THREAT OF NEW ENTRANTS

- The U.S. food processing sector is strictly regulated by state and federal agencies, primarily by USDA and FDA
- High initial capital expenditure for construction of processing plants
- Strong economies of scale within the food processing industry

Mitigation:

- TSN has been investing in R&D such as Discovery Center in Arkansas and Innovation Center in Illinois
- Establish long-term contractual partnerships with distributors to increase market access

COMPETITIVE RIVALRY

- Moderate company concentration in food processing industry
- Minimal product differentiation of meat
- High exit barriers due to government restrictions

Mitigation:

- Establishing a viable differentiating strategy such as branding, pricing and quality
- TSN has acquired several brands to expand its Prepared Foods sector
- TSN utilizes its national distribution systems and customer support services

THREAT OF SUBSTITUTE PRODUCTS

- Low switching cost of buyers
- Growing alternatives to meat-based protein from Sanderson Farms and Hormel Foods

Mitigation:

- Increasing the switching cost for the buyers
- Beef, chicken, and pork can be substituted for one another
- TSN has filed a number of patent applications for its processes and products to protect its marketing efforts in brand name and product line advertising