THE OHIO STATE UNIVERSITY
FISHER COLLEGE OF BUSINESS

SIM Equity Research
Date of report: March 28, 2023

Tyson Foods Incorporated NYSE: TSN

Price on 3/22/2023: $57.85
Target Price: **$131.59 (127.4% upside)**
Recommendation: **BUY**

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Company Description

Tyson foods, Inc. is a multinational food corporation based in Springdale, Arkansas. It is one of the largest producers and distributors of meat products in the world, operating in 4 segments: beef, pork, chicken, and prepared foods. Its customers are grocery retailers, grocery wholesalers, meat distributors, warehouse club stores, food processing companies, and military commissaries.

Investment Thesis

Tyson's recent selloff due to inflationary and operational concerns has left it severely undervalued when considering its pre-COVID performance and relative valuation. DCF model suggests a **BUY recommendation with a target price of $131.59 with upside of 127.4%.**

Market Data	
Current Price	**$57.85**
Market Cap	**$20.63 B**
Beta	**0.68**
Dividend Yield	**3.31%**
52 Week Range	**$56.07 - $99.54**
Diluted Shares Outstanding	**285.6 M**

Figure 1: TSN Stock Performance LTM. Data from market close 3/28/2023. Source: Bloomberg

Highlights

- After poor performance in 2022, Tyson is poised to return to pre-COVID performance levels in the coming years. Returning to historic operating margins will be a boon for future profit levels.
- Tyson's undervalue compared to peers is largely unjustified. Tyson is poised to outperform as it approaches industry average valuation ratios.

Risks

- Tyson may return to pre-COVID performance slower than expected, potentially never. Continued headwinds or volatility will have a strong impact on Tyson, and therefore will impact our recommendation.
- Long-term changes in consumer preferences may impact cash flows later in the future.

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Overview of Tyson Foods

General Overview

Tyson foods, Inc. is a multinational food corporation headquartered in Springdale, Arkansas. Founded in 1935 by John W. Tyson to support his family during the Great Depression, the company has been led largely by the Tyson family over 4 generations. It has become one of the largest producers and distributors of meat products around the world, operating in 4 segments: beef, pork, chicken, and prepared foods. Its customers are grocery retailers, grocery wholesalers, meat distributors, warehouse club stores, food processing companies, and military commissaries. Tyson sells its products in 140 different countries and reports its international sales separately.

Business Segments

Chicken

Historically, Tyson's staple segment is its chicken business, which includes seven different processes[1], listed below:

1. A grandparent breeder flock produces fertile eggs.
2. Pullet (young female) chickens are hatched and sent to breeder houses.
3. Pullets produce fertile eggs that are sent to hatcheries.
4. Fertilized eggs are hatched.
5. Chicks are sent to broiler farms where they are raised.
6. Once the chickens reach processing weight, they are taken to processing plants. This takes typically 6-8 weeks[2].
7. After the chicken is processed, it is taken to distribution centers.

Each of these processes was once a different enterprise, but today much of the chicken industry is vertically integrated. Tyson is no exception. The company produces its breeding supply through its subsidiary, Cobb-Vantress, and has ownership in nearly every stage of the process. Additionally, it owns feed mills, blending mills, and grain elevators to produce specifically formulated feeds from corn and soybean meal. The feed it produces supplies all its chicken operations. However, Tyson contracts out farming operations in the 5th stage to independent farmers who are required to raise broilers (chickens for consumption) by the company's standards, with Tyson providing technical assistance and feed supply. The chicken segment also includes the logistics systems Tyson uses to transport poultry between different stages of the production process.

At the end of the production process, Tyson's processing operation includes harvesting, dressing, cutting, deboning, packaging, and further processing. Further processing produces Tyson's value-added chicken products, which include breaded chicken strips, nuggets, patties, and other prepared chicken products. These products are sold to "food retailers, foodservice distributors, restaurant operators, hotel chains and noncommercial foodservice establishments such as schools, convenience stores, healthcare facilities, the military and other food processors, [and] to international export markets"[3].

For references, see corresponding citation in References section. Figures are self-created unless noted.

Beef
Tyson is one of the country's largest beef producers, having capacity to process 155,000 head of cattle per week[3]. Unlike its chicken segment, Tyson is not vertically integrated. The cattle production process works in the following steps:

1. Mother cows give birth to calves once a year. Calves are weaned off milk around 6-10 months and begin feeding on grass.
2. Cattle are moved to a background ranch, where they are raised until they reach a specific weight.
3. Mature cattle are moved to feed yards where they spend 4-6 months.
4. Cattle are harvested and processed at around 1,200-1,400 pounds, or after 18-22 months[4].

As the process of raising cattle is much more time and resource intensive, Tyson only participates in the harvesting stage, purchasing cattle from feed lots through open auctions and contractual agreements. After purchase, Tyson's production plants process the cattle into primal and sub-primal cuts as well as specialty products like hides and variety meats. The segment also includes logistic operations to transport products. Customers for this segment are similar to other segments.

Pork
Tyson's pork segment operates similarly to its beef segment. The pork life cycle is very similar to the beef life cycle, with the main difference being that pigs are ready for harvest at 6 months. Like beef, Tyson's operations consist of processing pork into primal and sub-primal cuts. Hogs are supplied through hog buyers who make purchase agreements in advance and a few days before processing. However, Tyson does have a small live hog division that raises weaning swine and sells some to finishing farms and processes the rest internally.

The segment includes logistical operations for transporting pork products. Customers for this segment are similar to other segments.

Prepared Foods
The prepared foods segment includes frozen and refrigerated food products under Tyson-owned brands. These brands include Jimmy Dean®, Hillshire Farm®, Ball Park®, Wright®, State Fair®, and artisanal brands Aidells® and Gallo Salame®.

Products in this segment include ready-to-eat sandwiches, hamburgers, hot dogs, pepperoni, bacon, sausage, lunchmeat, tortilla products, and other appetizers, prepared meals, and side dishes. Tyson supplies some of these raw materials through its own meat processing operations. This segment also includes a small vertically integrated turkey operation. Customers for this segment are similar to other segments.

International Sales/Other
Tyson also distinguishes between its domestic sales and its international sales. Through its subsidiaries, it sells its products in 140 foreign countries, with major markets including Australia, Canada, Central America, Chile, China, the EU, the UK, Japan, Mexico, Malaysia, the Middle East, Singapore, South Korea, Taiwan, and Thailand. In financial reporting, this segment also bears the company's expenses related to corporate activities.

Revenue and Operating Income Makeup

In 2022, Tyson's segments produced revenues of $53.2 billion and operating income of $4.4 billion, minus intersegment sales. Importantly, the international sales segment only includes product fully produced and sold outside the United States. Last year, exports from Tyson's U.S. operations totaled $5.8 billion[3].

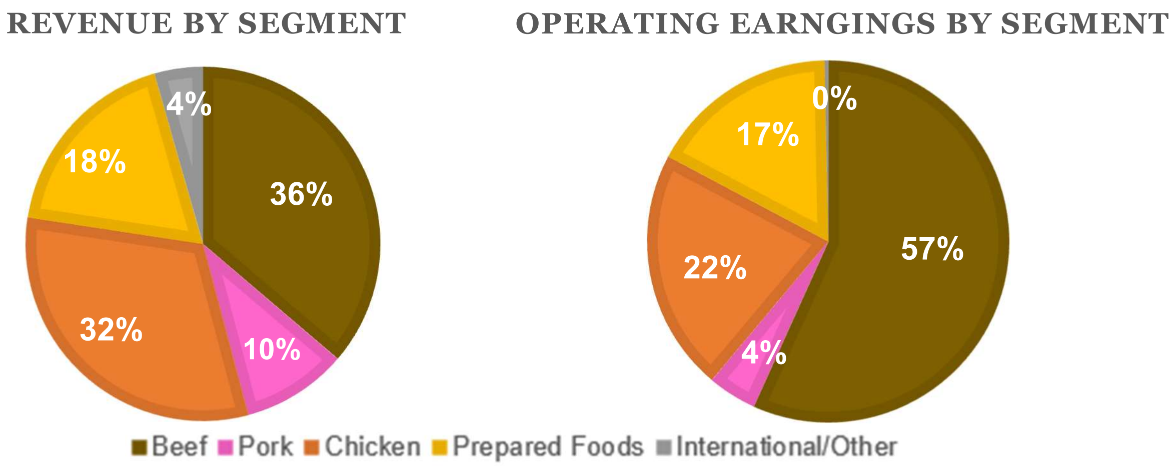

Figure 2: Segment and Revenue Makeup. Data as of end of FY 2022.

Competitive Advantages

Vertical Integration

In the poultry industry, Tyson has benefited from years of experience managing its supply chain, strong acquisitions, and robust researching capabilities. These have combined to give Tyson a competitive advantage through vertical integration.

First, its subsidiary Cobb-Vantress, fully acquired in 1994, is the oldest broiler chicken breeding company in the world. Through Cobb-Vantress, Tyson is one of the world's leading poultry breeding stock suppliers and can draw on genetic research expertise to breed flocks with the most desirable characteristics. Furthermore, Tyson operates its own feed mills to develop specifically formulated feeds for its chickens to promote growth, uniformity, and overall health. As broilers move through the production process, nearly every part of it is owned and carefully managed by Tyson. The high expertise and capital expenditure required to recreate this system represent a barrier to entry and a sustained competitive advantage.

Across its segments, Tyson has capabilities to distribute fresh, frozen, and refrigerated products around the world. In the U.S., it owns and leases cold storage warehouses and operates a fleet of refrigerated trucks. Through its distribution system, Tyson ensures that partial truckload orders are consolidated and can provide a wide range of products that don't require large-volume orders. This investment in distribution represents cost savings and supply chain risk management, translating into sustained competitive advantage.

Economies of Scale

Tyson also benefits from economies of scale within its operations. By revenue, Tyson is the largest packaged foods producer in the United States[5]. Using its bargaining power, Tyson can control its input costs as its main inputs are commodity-like products. In the poultry industry, inputs include corn and soy meal, both of which are commoditized and inexpensive, but not immune from price increases, as recently seen. With many more producers than buyers in this space, Tyson is primed to leverage its size for favorable pricing. Tyson also contracts out its broiler farming operations, but again due to its size, Tyson can heavily dictate terms for these contracts to ensure its chickens are raised exactly to standards at the best price.

Outside the poultry space, Tyson is one of the few firms that processes beef and pork at its volume, with four companies controlling 85% of the beef industry[6]. Its size ensures that it receives the best prices when buying beef and pork.

From a production perspective, Tyson owns 233 separate facilities across its segments, with capacity to process over a billion pounds of meat per week[3]. High volume leads to cost efficiencies, resulting in lower costs per unit. Also, the size of Tyson's operations allows it to focus heavily on process innovation and technological advancement, which it does through continued investments in its operations, but also through Tyson New Ventures, its subsidiary that invests in companies developing new technologies and products.

Diverse and Recognizable Product Offerings

In the meat and prepared foods industries, Tyson is uniquely positioned to mitigate seasonal demand swings. In the summer, demand generally increases for hamburgers, hot dogs, and other grilling foods, and decreases in the winter. Pork and other prepared foods products are generally more demanded in winter and less demanded in summer. Through its diverse product offerings across its meat and prepared food divisions, Tyson can expect to face less seasonality in its revenue as opposed to a competitor with a less diverse product portfolio.

Tyson has also built and maintained large, recognizable brands across its segments. In many ways, Tyson has become synonymous with chicken, and it uses this to its advantage in both value-added and regular chicken products. It also holds several large brands in its prepared food business, including Hillshire Farm®, Jimmy Dean®, and Ball Park®. These brand holdings have paved the way for relationships with the world's largest retailers, including Wal-Mart, which accounted for $10+ billion in revenue for Tyson last year[3]. These relationships with large-scale customers are largely possible due to Tyson's brand recognition. As shelf space represents a key barrier to entry in the food industry, Tyson's existing brands and relationships with retailers represent a key competitive advantage[7].

Industry Competition and Market Share

Across Tyson's segments, it faces strong competition from well-established players. Companies like JBS, Hormel, Cargill, Sysco, Pilgrim's Pride, and Conagra all are large competitors in a well-defined market. The U.S. meat market is projected to grow at a CAGR of 3.2% over the next 5 years, showing that domestically, the fight is more for market share than new markets[8]. In this saturated market, companies compete by reducing costs per unit, producing consistent and better tasting products, ensuring that orders don't go unfilled, and by creating unique value-added products, such as those found in Tyson's chicken and prepared foods segments. Currently, Tyson accounts for about 19% of all revenue generated by U.S. packaged foods & meats companies, and 4.5% of the market cap of the industry[5].

Tyson, through its prepared foods segment, is the second largest prepared meat products producer in the world. However, when compared to all prepared food brands, it holds relatively little market share next to PepsiCo, Mondelez, Kraft Heinz, and others. Additionally, Tyson is subject to competition from private label brands across its product offerings, particularly in its prepared foods segment if consumers choose to trade down from brand names.

Internationally, companies compete through exports and through the establishment of business operations abroad. In Tyson's case, international sales contribute little to both revenue and earnings.

Growth Drivers

As mentioned, Tyson does not compete in many high-growth areas. Overall, the meat industry in the U.S. is projected to grow only marginally more than GDP. While Tyson's revenues grew by double-digits in 2022, this is explained by the inflationary environment and not organic, top-line growth[3].

In recent years, Tyson has chosen to focus on improving its bottom line through efficiency measures. The company is targeting $1 billion in productivity savings by the end of FY 2023 through improvements in Finance, HR, and Procurement practices, combined with implementing new digital solutions such as AI and automation in its operations. This initiative is designed to improve its poultry business, which has seen falling margins since the mid-2010s[15].Tyson is also restructuring its corporate functions through relocation to its Springdale, Arkansas headquarters to reduce redundancy and improve collaboration. Programs such as these show the incremental bottom-line growth opportunities that Tyson is currently pursuing.

Tyson also pursued growth through acquisitions. Its acquisition of Cobb-Vantress in 1994 is a prime example of how an acquisition helped Tyson develop its vertical supply chain and increase profitability. In 2016, Tyson acquired Hillshire Farms, a large, prepared meats producer.

Through Tyson New Ventures, Tyson invests in new technologies and products. In the protein industry, companies like Beyond Meat, of which Tyson owned a 5% stake until 2019, have sought to provide options for lifestyle and environmentally conscious consumers[9]. Tyson itself has launched meat alternatives in its prepared foods segment. However, these operations have yet to produce significant revenue or profits and investors are increasingly pessimistic, shown by Beyond Meat's fall of nearly 70% in the last 12 months.

Tyson's status as a large meat producer naturally leads to environmental challenges and questions about its sustainability practices. If ESG investing trends continue, Tyson may become increasingly popular to ESG investors if it can reduce its carbon footprint and develop attractive products with lower environmental impacts. In the long term, if consumers choose to shift away from traditional protein options, Tyson must innovate in this space to ensure its products remain relevant.

Recent News and Its Effect on Stock Price

In the previous twelve months, Tyson's stock price has fallen by over 35% after reaching its all-time high in February 2022. Its current price is at lows not reached since March 2020. After a strong rally from the financial crisis on and continued success during COVID-19, it is important to understand what has caused Tyson's stock price to plummet.

- In February 2022, Tyson releases its 2021 Q4 sales and revenue numbers, showing that inflation hasn't hurt the company's margins, nearly tripling net income from the same quarter in 2020[10]. The stock price reaches its high at $99.09.
- Throughout March 2022, Tyson is hit with repeated negative news: it is set to face a retrial on a poultry price-fixing case[11], a bird flu is rampant in chicken flocks[12], and cattle ranchers move to open up a processing plant to work around companies like Tyson[13]. The stock price falls to $85.50 on March 14.
- After a tumultuous April when it recovered some of its March losses, Tyson reports strong earnings for the three months ending April 2, 2022, and its stock price closes at $92.84[14].
- Tyson's stock falls through May and June based on a negative outlook on its beef and chicken business, with concerns of falling margins in its chicken business[15].
- In its earnings release covering the three months ended July 2, 2022, Tyson highlights lowering beef and pork prices and a shift by consumers into less-expensive beef cuts[16]. However, its chicken segment increases operating income to $270 million, up from $279 million in losses in Q2 2022. Income from its beef segment is cut in half, aided by an increase in input costs as drought and excessive heat shrink cattle herds. Due to Tyson's negative beef outlook, the stock falls 8.4% to $80.10.
- Tyson's stock falls through August, September, and October, as outlook worsens for its highly profitable beef business as meat price increases begin to taper[17], and it faces a tumultuous remainder of 2022, closing the year down 30% at $62.25.
- In February 2023, Tyson reports that in the previous quarter, it faced its largest drop in quarterly profits in over a decade[18]. The company reports on increasing supplies, higher transport costs, changing consumer preferences, higher feed costs, and continuing drought conditions increasing its cattle costs. Its stock price falls a further 7% in the following days, reaching $59.98.
- Most recently, Tyson reported that it is closing 2 poultry processing plants as part of its plans to revamp its poultry business due to downward trending margins[19]. The markets haven't had a strong reaction.

Investment Thesis

Fundamental Drivers

When considering an investment decision in Tyson, fundamental business factors should play the largest role, as Tyson is a mature company in a low growth industry. Discerning the story around Tyson's stock price, and determining if this is a fundamentally rational story, will be key for this process.

First, the story that the market has told must be identified. Over the past 2 years, Tyson's products have been subject to inflation due to higher transportation, labor, and input costs[10]. However, because it has been able to raise prices, margins in 2021 and early 2022 didn't face compression that often comes with inflation. Beef, its most profitable business segment, produced margins of 19% In the first 3 months of 2022, 6% higher than the year before. Faced with raising margins and profits, Tyson reached all-time highs in early 2022.

Later in the year, cracks began to show. Due to a weaker consumer, sales in its beef business decreased as consumers chose lower-prices options, such as chicken[16]. Through sales moving to a lower-margin business segment, Tyson's highly profitable beef business lost steam. Drought conditions in 2022 paired with high heat levels increased costs, further reducing margins in beef. Markets subsequently punished Tyson for the remainder of the year. In the beginning of 2023, Tyson shows no signs of immediate recovery.

While this is a logical story, there are missing pieces:

Outsized Impact of Tyson's Beef Business

Investors have rewarded and punished Tyson largely for the failure of one segment: beef. However, the problems with Tyson's beef industry do not reflect the quality of the underlying business. Drought conditions similar to 2022 are not to be taken as normal, as even though the west has been under drought over the past decade, 2022 had an impact on cattle herds not seen in 30 years[20]. With eventual recovery in input cattle costs, Tyson can expect beef margins to return at least to pre-COVID averages, particularly with easing inflation in the coming years.

Importantly, beef has not traditionally been Tyson's core competency – chicken has. When examining Tyson's competitive advantage, chicken is the segment that rises above the others. While there are certainly profit opportunities in the beef segment, it must not have an outsized effect on evaluation of Tyson's future.

Tyson's Strong Pre-Covid History

Before COVID-19, Tyson was having arguably its best decade on record. From below $5 per share in 2008, Tyson moved all the way to above $90 in January 2020 – a CAGR of 30%. In that timespan, revenues grew from $27 billion to $42.5 billion and operating margins grew from 1.37% to 7.22%. While it is unrealistic to expect this type of performance in the coming decade, returning to the status quo will be hugely beneficial for Tyson. In this timeframe, Tyson's fundamental business hasn't changed, nor has its competition. The company has proven that it can recover from down circumstances. It has faced these types of problems before – increasing input costs in 2008[21] and declining margins for its beef segment in the early-mid 2010s[24].

Macroeconomic Environment

Inflation

A key factor in Tyson's increased profits during 2021 and early 2022 was rising meat prices due to inflation. While Tyson's cost of goods sold rose, end prices for consumers rose quicker, widening margins and increasing stock price. However, inflation is expected to have peaked in June 2022 and should continue to fall due to the Fed's monetary policy actions[22].

For Tyson's future, this likely means that its margins should return to pre-COVID, pre-inflation averages as increases in input costs subside and price increases level out.

Discretionary Spending

Through the pandemic, consumers were flush with cash due to the $10 trillion in government stimulus. Likely, this led to consumers choosing higher priced beef cuts that correlate with higher profits for Tyson. However, the outlook may be different for 2023. As COVID stimulus dries up, many consumers will face the full effects of inflation for the first time[23]. Tyson has already seen consumers shift away from higher-priced beef cuts and a weakening consumer may cause a further shift towards lower-priced protein, such as chicken.

Due to its product mix, Tyson is positioned to capture revenues in different product segments as consumers trade down. Additionally, Tyson's resiliency as a food company should cushion it during economic downturn.

Financials

Over the next three years, our consensus falls just below EPS estimates. At the same time, our model prices Tyson well above current market price. This will be discussed in the Valuation section.

In the income statement model, included as Appendix 1, relatively little difference from consensus is shown. According to consensus, Tyson is poised to have a strong downturn in earnings per share due to slower increases in revenue and lower margins for fundamental reasons previously discussed. The company is also poised to face a higher effective tax rate in 2023.

From a balance sheet perspective, Tyson is currently investing more in capital expenditures from its efficiency initiative, particularly geared towards its chicken business. This leads to a resultant uptick in accumulated depreciation. In the future, there is no reason to expect an uptick in inventory levels or a debt crisis, as Tyson currently has an interest coverage ratio of just over 12 and no looming principal payments[3].

When comparing Tyson's key financial ratios to a group of peers, Tyson is shown to have similar revenue growth, the second highest dividend yield, and by far the highest earnings per share over the previous twelve months. This shows that investors are more pessimistic about Tyson's future than its peers. We believe that this pessimism towards Tyson is largely unwarranted and furthers the case that Tyson is strongly undervalued right now.

Name	Mkt Cap (M)	Last Price	EPS T12M	Dividend Yield	Revenue Growth
Tyson Foods	$ 20,623	$ 57.99	6.72	3.24	2.53
Pilgrim's Pride	$ 5,265	$ 22.24	3.07		2.19
Hormel Foods	$ 21,298	$ 38.97	1.79	2.71	(2.41)
Conagra Brands	$ 17,726	$ 37.19	1.41	3.50	8.30
Sysco	$ 38,598	$ 76.04	2.77	2.55	13.93

Figure 3: TSN Comparable Financial Data. Data as of 3/27/22.

Valuation and Price Target

When comparing Tyson to a group of peers, it is seen that overall, Tyson's stock is valued much lower on a multiples basis. Interestingly, its price to book ratio is near one, implying that the market value and book value of equity are equal. In its peer group, no other company has a P/B ratio lower than 1.83. Tyson's P/E, P/S, and P/CF ratios also fall far below the mean. This may indicate that on a relative basis, Tyson is cheaper than its competitors, and if the problems facing it are industry-driven and not internally driven, it is an attractive investment opportunity.

Name	Mkt Cap (M)	P/E	P/S	P/B	P/CF
Tyson Foods	$ 20,292	8.52	0.36	1.03	9.36
Pilgrim's Pride	$ 5,206	6.91	0.30	1.83	7.92
Hormel Foods	$ 21,123	22.37	1.70	2.77	22.10
Conagra Brands	$ 17,735	14.36	1.48	2.05	14.74
Sysco	$ 37,888	21.66	0.52	26.36	19.83
Average	**$ 20,449**	**14.76**	**0.87**	**6.81**	**14.79**

Figure 4: TSN Comparable Valuation Data. Data as of 3/27/22.

When examining our DCF forecast for Tyson, undervalue is shown more clearly. If Tyson's woes in its operating margin are short-lived, it shows modest increases in revenue, and other metrics remain constant, under our DCF Tyson's target price is $131.59 per share, showing 130.5% upside from current market value.

The main driver for this upside is in Tyson's future. Under the current price, Tyson's future revenue increases and margins are implied to be well below averages from the previous decade. In the DCF, we estimate revenue growth leveling out at 3% per year for the next 10 years and terminal free cash flow growth of 2%. Additionally, we project that over the next 10 years, Tyson's operating margins will return to their 30-year average of around 5.2%. While we've seen that Tyson's margins fluctuate a decent amount for a consumer staple, over the long run, a 5.2% average is reasonable, conservative estimate. Importantly, these numbers still represent a conservative estimate when considering Tyson's pre-COVID results. A 30-year graph of Tyson's operating margins is shown below.

Figure 5: TSN Historic Operating Margin Graph. Data as of end of FY 2022. Source: Bloomberg

Looking at Tyson's segments individually, we expect revenue growth in each segment to fall closer to pre-inflation levels, excluding International/Other as Tyson pursues growth opportunities abroad. The same is true for each segment's operating margins, with Prepared Foods and International/Other segments continuing their upticks.

Using the CAPM, Tyson's discount rate is lower than the overall market's at 7.2%, and terminal FCF growth is conservatively placed at 1.5% - slower than the overall economy. A sensitivity analysis for these rates is given below

Terminal Discount Rate

	$ 149.78	6.50%	7.00%	7.22%	8.00%	8.50%	9.00%
	1.0%	$ 152.62	$ 139.04	$ 133.75	$ 117.69	$ 109.15	$ 101.68
Terminal	1.5%	$ 162.67	$ 147.07	$ 141.06	$ 123.05	$ 113.61	$ 105.42
Growth	2.0%	$ 174.95	$ 156.70	**$ 149.78**	$ 129.30	$ 118.75	$ 109.69
Rate	2.5%	$ 190.31	$ 168.48	$ 160.34	$ 136.68	$ 124.74	$ 114.62
	3.0%	$ 210.05	$ 183.20	$ 173.40	$ 145.55	$ 131.83	$ 120.38

Figure 6: DCF Discount Rate/Growth Rate Sensitivity Analysis.

Risks

Slow or No Recovery

Many of the conclusions present in our prediction are based on Tyson moving back towards its pre-COVID performance. As discussed, much of our approach to modeling Tyson is based on a return to historical averages after multiple factors combined for a downtick in 2023.

Furthermore, our estimate predicts return to average operating margins by 2025. If drought conditions continue, feed prices and transportation costs remain high, and potentially other negative factors emerge, Tyson's recovery may be delayed. This would have an outsized impact on our valuation due to the time value of money.

Change in Consumer Preferences

As consumers become more environmentally conscious, more questions are emerging about the sustainability and negative environmental consequences of large meat processing operations, Tyson often being the main target[25]. In the near future, if Tyson fails to give adequate answers to these questions, consumers may choose to shift towards meat providers with more sustainable practices. Furthermore, the emergence of meat alternatives could further draw consumers away from Tyson's products, particularly if Tyson doesn't successfully enter this newer market.

Additional Risks

Currently, Tyson is facing multiple antitrust government investigations, wage rate litigation, and other legal proceedings, with the stance that of the cases that aren't settled, it has valid defenses to claims against it. If these or future cases prove to be material, Tyson could face material losses.

Outbreaks of livestock diseases, such as Avian Influenza, have negatively impacted Tyson in the past. If it faces livestock disease, its underlying profitability will certainly suffer.

Conclusion

Over the preceding twelve months, Tyson's stock price has faced the largest drawdown of any of its competitors. While the meat industry has faced headwinds over the preceding year, investors must account for this difference to justify Tyson's low valuation.

In the past 60 years, Tyson has emerged as a company with clear competitive advantages in the meat industry. Its vertically integrated poultry operations, economies of scale, and diverse mix of recognizable products have cemented Tyson into the meat industry. Despite little organic growth opportunities, Tyson has remained profitable through focusing on efficiency and strategic acquisitions.

Recent events have caused investors to become pessimistic about the beef industry. Inflation, which acted as a tailwind for meat producers in 2021, became a headwind as meat price increases tapered yet raw material costs remained high. Coupled with historic drought conditions in 2022, prospects for 2023 do not seem high.

Tyson is valued noticeably cheaper than its peers on a multiples basis. However, we believe that Tyson is well-positioned to emerge from these downturns, perhaps even better than its competitors. Coming off strong performance pre-COVID and a return to its historic average operating margins will lead to continued profitability, presenting an exciting investment opportunity. Taking these factors into account, **our target price is $131.59, 127.4% higher than the current market price of $57.85. This represents a buy rating.**

Appendices

Appendix 1: Income Statement Model

Income Statement Model for Tyson Foods (TSN)

$ in millions except per share data - FY End 10/01	2025E	2024E	2023E	2022	2021	2020	2019	2018	2017
Consensus	57,210	56,010	54,990						
Sales	58,743	56,773	55,011	53,282	47,409	43,185	42,405	40,052	38,260
Cost of sales	52,693	51,323	50,390	46,614	40,523	37,801	37,383	34,956	33,198
Gross profit	**6,051**	**5,450**	**4,621**	**6,668**	**6,886**	**5,384**	**5,022**	**5,096**	**5,062**
Selling, General, and Administrative	2,643	2,555	2,200	2,258	2,130	2,376	2,195	2,064	2,141
Operating income	**3,407**	**2,895**	**2,420**	**4,410**	**4,756**	**3,008**	**2,827**	**3,032**	**2,921**
Interest Income	(12)	(11)	(11)	(17)	(8)	(10)	(11)	(7)	(7)
Interest Expense	411	397	330	365	428	485	462	350	279
Other, net	(59)	(57)	(55)	(87)	(65)	(131)	(55)	(56)	21
Total Other (Income) Expense	341	329	264	261	355	344	396	287	293
Income before Income Taxes	**3,066**	**2,566**	**2,156**	**4,149**	**4,041**	**2,664**	**2,431**	**2,745**	**2,628**
Income Tax Expense	705	590	518	900	981	593	396	(282)	850
Net Income	**2,361**	**1,976**	**1,639**	**3,249**	**3,060**	**2,071**	**2,035**	**3,027**	**1,778**
Net Income Attributable to Noncontrolling Interests	9	8	7	11	13	10	13	3	4
Net Income Attributable to Tyson	**2,352**	**1,968**	**1,632**	**3,238**	**3,047**	**2,061**	**2,022**	**3,024**	**1,774**
Earnings Per Share									
Basic	**6.46**	**5.41**	**4.49**	**8.99**	**8.39**	**5.68**	**6.90**	**10.25**	**5.99**
Diluted	**6.46**	**5.41**	**4.49**	**8.92**	**8.35**	**5.65**	**5.52**	**8.20**	**4.79**
Consensus - GAAP	**6.62**	**5.53**	**4.36**						
Shares Outstanding									
Basic	**364**	**364**	**363**	**360**	**363**	**363**	**293**	**295**	**296**
Diluted	**364**	**364**	**363**	**363**	**365**	**365**	**366**	**369**	**370**
% Change from prior year	0.10%	0.10%	0.10%	0.10%	0.00%	-0.27%	-0.81%	-0.27%	

Sales Ratios (after excise tax unless stated)										**Averages Since 2017**
% Change from prior year	**3.5%**	**3.2%**	**3.2%**	**12.39%**	**9.78%**	**1.84%**	**5.87%**	**4.68%**		**6.9%**
Expenses as % of sales										
Gross Margin	10.3%	9.6%	8.4%	12.5%	14.5%	12.5%	11.8%	12.7%	13.2%	**13.0%**
Selling, General, and Administrative	4.5%	4.5%	4.0%	4.2%	4.5%	5.5%	5.2%	5.2%	5.6%	**5.2%**
Interest Income	-0.02%	-0.02%	-0.02%	-0.03%	-0.02%	-0.02%	-0.03%	-0.02%	-0.02%	**-0.02%**
Interest expense	0.7%	0.7%	0.6%	0.7%	0.9%	1.1%	1.1%	0.9%	0.7%	**0.9%**
Other, net	-0.1%	-0.1%	-0.1%	-0.2%	-0.1%	-0.3%	-0.1%	-0.1%	0.1%	**-0.1%**
Operating Margin	5.8%	5.1%	4.4%	8.3%	10.0%	7.0%	6.7%	7.6%	7.6%	**7.8%**
Earnings attributable to noncontrolling interests	0.4%	0.4%	0.4%	0.3%	0.4%	0.5%	0.6%	0.1%	0.2%	**0.4%**
Balance Sheet Items										
Effective Tax Rate	23.0%	23.0%	24.0%	22.0%	24.3%	22.3%	16.3%	-10.3%	32.3%	**17.0%**
CapEx	**2,056**	**2,157**	**2,475**	**1,887**	**1,209**	**1,199**	**1,259**	**1,200**	**1,069**	
as % of sales	3.5%	3.8%	4.5%	2.5%	2.6%	2.8%	3.0%	3.0%	2.8%	**2.8%**
D&A	**1,762**	**1,817**	**1,925**	**1,202**	**1,214**	**1,192**	**1,098**	**943**	**761**	
as % of sales	3.0%	3.2%	3.5%	3.2%	2.6%	2.8%	2.6%	2.4%	2.0%	**2.5%**
Recievables	**2,761**	**2,714**	**2,751**	**2,577**	**2,400**	**1,952**	**2,173**	**1,723**	**1,675**	
as % of sales	4.7%	4.8%	5.0%	4.8%	5.1%	4.5%	5.1%	4.3%	4.4%	**4.7%**
Inventory	**5,287**	**5,393**	**5,776**	**5,514**	**4,382**	**3,859**	**4,108**	**3,513**	**3,239**	
as % of sales	9.0%	9.5%	10.5%	10.3%	9.2%	8.9%	9.7%	8.8%	8.5%	**9.0%**
Payables	**2,643**	**2,612**	**2,586**	**2,483**	**2,225**	**1,876**	**1,926**	**1,694**	**1,698**	
as % of sales	4.5%	4.6%	4.7%	4.7%	4.7%	4.3%	4.5%	4.2%	4.4%	**4.4%**
Total Working Capital	5,404	5,496	5,941	5,608	4,557	3,935	4,355	3,542	3,216	
Change in WC	**(91)**	**(446)**	**333**	**1,051**	**622**	**(420)**	**813**	**326**		

Appendix 2: Discounted Cash Flow Model

DCF Model for Tyson Foods (TSN)

$ in millions except per share data - FY End 10/01	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Revenue	55,011	56,773	58,743	61,093	63,536	65,760	67,733	69,765	71,858	74,014	76,234
% Growth		3.2%	3.5%	4.0%	4.0%	3.5%	3.0%	3.0%	3.0%	3.0%	3.0%
Operating Income	2,420	2,895	3,407	3,177	3,304	3,420	3,522	3,628	3,737	3,849	3,964
Operating Margin	4.4%	5.1%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%
Net Interest Expense (Income)	319	386	399	489	508	592	610	628	647	666	686
Interest % of Sales	0.6%	0.7%	0.7%	0.8%	0.8%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%
Other expenses, Net	(55)	(57)	(59)	(61)	(64)	(66)	(68)	(70)	(72)	(74)	(76)
% of sales	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%
Income Before Taxes	2,156	2,566	3,066	2,749	2,859	2,893	2,980	3,070	3,162	3,257	3,354
Taxes	518	590	705	632	629	637	656	675	696	716	738
Tax Rate	24.0%	23.0%	23.0%	23.0%	22.0%	22.0%	22.0%	22.0%	22.0%	22.0%	22.0%
Net Income from Cont Ops	1,639	1,976	2,361	2,117	2,230	2,257	2,325	2,394	2,466	2,540	2,616
Less: Net inc attributable to noncont interests	7	8	9	8	9	9	9	10	10	10	10
% of NI from Cont Ops	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%
Net Income	**1,632**	**1,968**	**2,352**	**2,108**	**2,221**	**2,248**	**2,315**	**2,385**	**2,456**	**2,530**	**2,606**
% Growth		20.6%	19.5%	-10.3%	5.4%	1.2%	3.0%	3.0%	3.0%	3.0%	3.0%
Add Depreciation/Amort	1,925	1,817	1,762	1,955	1,906	1,841	1,761	1,814	1,868	1,924	1,982
% of Sales	3.5%	3.2%	3.0%	3.2%	3.0%	2.8%	2.6%	2.6%	2.6%	2.6%	2.6%
Minus (Plus) Change WC	333	(446)	(91)	(611)	(635)	(658)	(677)	(698)	(719)	(740)	(762)
% of Sales	0.6%	-0.8%	-0.2%	-1.0%	-1.0%	-1.0%	-1.0%	-1.0%	-1.0%	-1.0%	-1.0%
Subtract Cap Ex	2,475	2,157	2,056	1,833	1,906	1,973	2,032	2,093	2,156	2,220	2,287
Capex % of sales	4.5%	3.8%	3.5%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Free Cash Flow	**749**	**2,073**	**2,149**	**2,842**	**2,857**	**2,774**	**2,722**	**2,803**	**2,887**	**2,974**	**3,063**
% Growth		176.7%	3.7%	32.2%	0.5%	-2.9%	-1.9%	3.0%	3.0%	3.0%	3.0%

NPV of Cash Flows	**17,959**	38%	
NPV of terminal value	**29,810**	62%	
Projected Equity Value	**47,769**	100%	
Free Cash Flow Yield	**3.56%**		
Current P/E	**12.9**	**10.7**	**9.0**
Projected P/E	**29.3**	**24.3**	**20.3**
Current EV/EBITDA	**6.52**	**6.01**	**5.48**
Projected EV/EBITDA	**12.67**	**11.68**	**10.65**
Shares Outstanding	**363**		
Current Price	**$ 57.99**		
Implied equity value/share	**$ 131.59**		
Upside/(Downside) to DCF	**126.9%**		
Debt	**8,321**		
Cash	**1,031**		
Cash/share	**2.84**		

Terminal Discount Rate	**7.22%**
Terminal FCF Growth	**2.0%**

Discount Rate Calculation:

rF rate (10yr treasury):	3.374%
Equity Risk Premium:	5.5%
Beta of comps (BINAP	0.70
Discount Rate (CAPM)	**7.22%**

Terminal Value	**59,858**
Free Cash Yield	**5.12%**
Terminal P/E	**23.0**
Terminal EV/EBITDA	**11.3**

Appendix 3: Segment-By-Segment Model

$ in millions - FY End 10/01	2025E	2024E	2023E	2022	2021	2020	2019	2018	2017	
Sales										
Chicken	19,352	18,698	17,979	16,961	13,733	13,234	13,300	12,044	11,409	
Growth % YOY	*3.5%*	*4.0%*	*6.0%*	*23.5%*	*3.8%*	*-0.5%*	*10.4%*	*5.6%*		
Beef	19,750	19,458	19,556	19,854	17,999	15,742	15,828	15,473	14,823	
Growth % YOY	*1.5%*	*-0.5%*	*-1.5%*	*10.3%*	*14.3%*	*-0.5%*	*2.3%*	*4.4%*		
Pork	6,604	6,411	6,286	6,414	6,277	5,128	4,932	4,879	5,238	
Growth % YOY	*3.0%*	*2.0%*	*-2.0%*	*2.2%*	*22.4%*	*4.0%*	*1.1%*	*-6.9%*		
Prepared Foods	11,756	11,197	10,464	9,689	8,853	8,532	8,418	8,668	7,853	
Growth % YOY	*5.0%*	*7.0%*	*8.0%*	*9.4%*	*3.8%*	*1.4%*	*-2.9%*	*10.4%*		
International/Other	3,191	2,901	2,638	2,355	1,990	1,856	1,289	305	349	
Growth % YOY	*10.0%*	*10.0%*	*12.0%*	*18.3%*	*7.2%*	*44.0%*	*322.6%*	*-12.6%*		
Less: Intersegment Sales	(1,911)	(1,892)	(1,911)	(1,991)	(1,803)	(1,307)	(1,362)	(1,317)	(1,412)	
Growth % YOY	*1.0%*	*-1.0%*	*-4.0%*	*10.4%*	*37.9%*	*-4.0%*	*3.4%*	*-6.7%*		
Total Revenue	**58,743**	**56,773**	**55,011**	**53,282**	**47,049**	**43,185**	**42,405**	**40,052**	**38,260**	
Growth % YOY	*3.5%*	*3.2%*	*3.2%*	*13.2%*	*8.9%*	*1.8%*	*5.9%*	*4.7%*		
Operating Margin										**Averages since 2013**
Chicken	5.5%	5.0%	4.0%	5.5%	0.2%	1.1%	4.9%	7.9%	9.8%	6.13%
Beef	4.5%	3.5%	3.0%	12.5%	18.0%	10.1%	7.2%	6.7%	6.0%	6.68%
Pork	4.5%	3.0%	1.5%	3.1%	5.2%	11.0%	5.4%	7.7%	12.4%	7.61%
Prepared Foods	9.0%	9.0%	9.0%	8.1%	7.6%	9.0%	10.7%	11.0%	8.6%	7.78%
International/Other	3.0%	2.5%	2.0%	0.7%	-0.2%	-0.1%	-0.5%	-17.4%	-30.4%	
Weighed Average	**5.8%**	**5.1%**	**4.4%**	**8.3%**	**9.0%**	**7.1%**	**7.0%**	**8.2%**	**8.5%**	**6.97%**

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