



ATTAINING COMPETITIVE ADVANTAGE IN THE FOOD INDUSTRY

Global Operations and Supply Chain Management
Research Assignment

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Executive Summary

The pandemic drastically shifted how supply chain operators manage and operate their business. (World Economic Forum, 2022) With so much reliance on the international supply chain in the food industry there were serious issues with stocking, supplying, and processing within the trade throughout the pandemic highlighting the faults of global supply chain reliance. (CBSNewYork, 2022) This research examines supply chain competition issues that have occurred within the meat processing supply chain, confirming industry suspicions that were only highlighted by a Tyson factory fire and the effects of the Covid-19 pandemic on the food industry where price spreads increased by as much as 300% even though overall purchases were lower. (TysonFoods, 2021) While the focus on these competitive issues is from a USA industry perspective, it can be highlighted that this was, and still is a global issue in several areas of the food supply chain, (Sova & Man, 2021) and legal actions in other countries with the same concerns are likely to follow. The activities of market supply price fixation and sale price inflation of global industry leaders JBS and Tyson Foods proves how their competitive advantage in the industry also has severe consequences by pushing out competition and creating a monopolistic market. (Deese, et al., 2021) This leaves the suppliers to these companies stuck in a non-competitive market dictated by company greed which is severely detrimental to the global food industry from an economic value viewpoint. (How 4 companies control the beef industry, 2021) The pandemic only heightened these issues by highlighting them through weaknesses in the supply chain, causing the United States government to begin to open incentives for businesses owners and entrepreneurs to initiate new developments in the industry creating diversity in the market to foster a sustainable competition in the supply chain market. (The White House, 2021)

Introduction

If the pandemic has taught us anything it is how interconnected we are to each other in the form of trade. Global supply chains are everywhere today, from our electronics and machinery, oil, and gas, to clothing, and groceries. Supply chain disruptions due to covid brought forth several issues for grocery stores when it came to stocking and shipping. Currently much of the global food supply is managed by a handful of large companies and their supply chains that rely on systematic success, with any break in these systems proving devastating for the rest of the supply chain (EATER, 2022). This essay is going to focus on one sector of the global supply chain that saw massive disruptions during the pandemic, the meat and protein industry, focusing on two of the largest global companies looking at their actions in the industry prior to the pandemic, that have now sparked investigations into the ethics of their industry competitive advantage. (Reuters, 2022)

Firstly, we will look at the definitions and key points of the global supply chain in the food industry, and how the industry has developed throughout history in relation to the companies we will be investigating. Then a deeper look at the industry and the factors of supply chain management down to the local levels that impact the industry globally will be analysed to understand the complexities in the industry and get a deeper understanding of the politics that govern the decisions of these companies. The competitive advantages these companies have will then be analysed with statistical data and quarterly reports to prove our findings, and lastly, we will look at the accusations facing these companies because of the questioning of their competitive gains and the economical ethics issues that have developed from them before final thoughts and conclusions.

Defining the Global Supply Chain

Supply chain management is the management of goods and services carried out in a structured flow from initial production of raw materials to final product in the customers hands. How companies leverage their sales, marketing, assets, and manage their expenses is the competitive advantage they gain over other companies or producers, and when these companies become global brands, it takes their influence and economic purchase power to higher levels.

Much of supply chain management can be broken down to five differing parts each with their own importance in the value chain market: (Investopedia, 2021)

- Strategy
- Sourcing
- Manufacturing
- Delivery and logistics
- The return system

Looking at the food industry, we can compare strategies with the planning of harvests, crops, or in this case livestock, with pricing strategies, and sales management. Sourcing is a derivative of companies looking for specific qualities, quantities, and direct location sourcing or which area they go to find their produce, like farm to fork traceability for local initiatives. (Carthy, et al., 2011) Manufacturing is tied to processing, butchering, or partner companies they plan to work with in distribution and packaging. Delivery and logistics is related to the direct sales and shipping from country to country with emphasis on accurate cold chain logistics and planning. (Syahputri & Sucipto, 2021) The return system in this case is going to deal with disease control, and contamination after shipping, or as we can see in one example, prevention of shipping. (TheBrazilianReport, 2021)

Development of the Global Supply Chain

The food product industry owes much of its success and growth to the development of new technologies in the 1950s when food availability needed to meet the global population increases. (Roser, 2013) This has resulted in the global meat supply being processed by four international companies that now manage over 80% of the international market. (Stempel, 2019) While the leader board shifts, two of these companies, Tyson and JBS, have stood as historical leaders, and are the focus for this research.

Our Companies

Tyson Foods is a direct leader in food sales as a USA company, and produces as much as 20% of the beef, poultry, and pork to the USA with 34 different product brands to market under. They began in the 1930s as chicken producers and processors feeding the country through the second world war when poultry was not listed on the food rationing list catapulting company growth and success. Today they operate in ten different countries allowing them to work their supply chain flexibly. (TysonFoods, 2022)

JBS is a Brazilian family-owned meat processing company with operations in 15 different countries and owning 120 different food product brands. They started in the 1950s as a small butchering factory and now rank as the top beef and poultry producers in the world. (JBS, 2022) JBS Brazilian beef exports on their own hold over 20% of the global market (Lui, 2021) with China and Hong Kong as their top importers, and the US just behind them. When China banned imports of Brazilian beef due to BSE contamination issues, it halted the Brazilian beef market by 47% showing just how dependant global trade is for their economy. (TheBrazilianReport, 2021)

Industry Supply Chain

The meat industry supply chain is a four-tier system that relies on the actions and work of the initial producer to rear an animal to an appropriate age where it can go on to a feedlot. They are then feed and cared for until growth milestones are reached. This feeder then negotiates or contracts a certain number of cattle with the packing plants that slaughter and process the carcass for grocery store use where it is then picked up by the consumer. (How 4 companies control the beef industry, 2021)

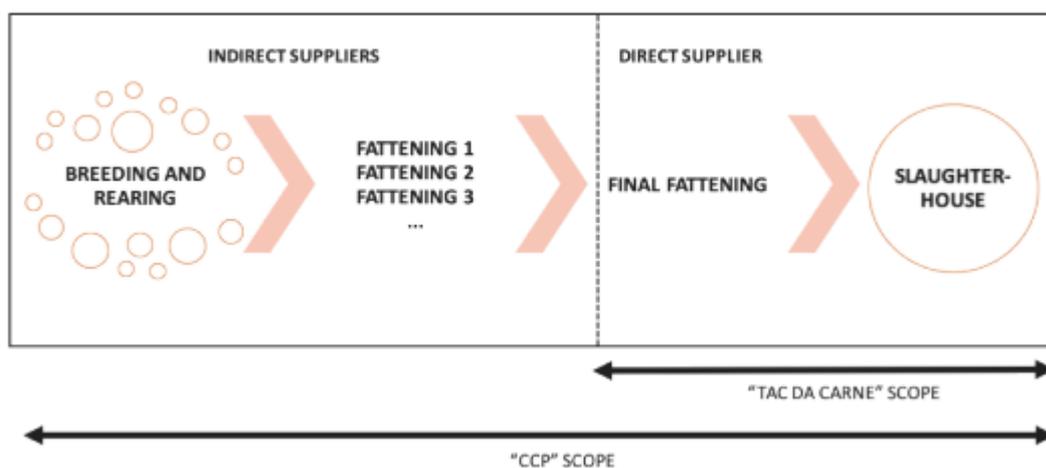


Figure 1 Four-tier system of animal protein production (Lui, 2021)

Supply Chain Complexities

While it is simple in theory there are many factors that influence the supply chain, and each aspect of the industry could be broken down into supply chains of their own. Since agriculture is a weather impacted industry, and the weather is often unpredictable and uncontrollable, localized supply chains can be greatly affected by droughts, crop disruptions, and environmental issues which then has a domino effect on global supply. (Pierson & Hsu, 2014) Brazilian deforestation issues that impact the global weather patterns have caused JBS to initiate a tracing system to track where their animals are being reared. If a producer is found to be using unsustainable and illegal deforestation practices, they can essentially

choose to not work with that producer, shifting who supplies them, potentially causing them to purchase from alternative countries. (Lui, 2021)

Governing industry issues such as politics, economy, culture, religion, and regulation implications play a role in dictating how the supply chains are influenced. Brexit trade impacts the Irish beef economy influencing how and where stock is traded in relation to the EU and UK border. (FitzGerald, 2019) Religious impacts can have an influence on trading areas and consumption levels, as well as the shifting cultural influxes that impact the demands of differing protein sources like beef, lamb, and chicken. Animal rights groups and “green” parties rallying for more plant-based diets are another factor of current consumption as well. (Appetite, 2019) Income levels also play a role in dietary consumption factors where higher income equates to higher qualities of consumption, and even gender impacts dietary habits with studies finding that men eat more red meat than women. (Clonan, et al., 2016)

Attaining competitive advantage

Pandemic caused supply chain issues that lead to empty grocery store shelves and an excess of livestock in the feedlots waiting to be slaughtered, caused an investigation into the supply management of the processing plants to see what was really going on. Historically there have been four companies that control up to 85% of the global meat processing supply chain and concerns with operations have been flagged before. (How 4 companies control the beef industry, 2021) But the supply chain issues caused by covid brought increased attention, and it was found that aside from ignoring Covid regulations and overall high levels of infection due to the amount of close contact in packing plants, these companies were also using their lack of market competition to inflate their sale prices not because of a supply issue, but for their own ability to underpay the suppliers and manipulate their supply markets keeping their purchase prices low and income levels high. (Fischer, et al., 2021)

Quarterly reports from these companies stated that gross profits increased 120% before the pandemic and net income was up by 500%. Tyson foods openly stated that their pricing actions more than offset the cost of goods sold (TysonFoods, 2021)and noted that they made 35% more profits while selling less product than the year before. (Tyson, 2021) “Here is the bottom line: the meat price increases we are seeing are not just the natural consequences of supply and demand in a free market—they are also the result of corporate decisions to take advantage of their market power in an uncompetitive market, to the detriment of consumers, farmers and ranchers, and our economy.” (Deese, et al., 2021)

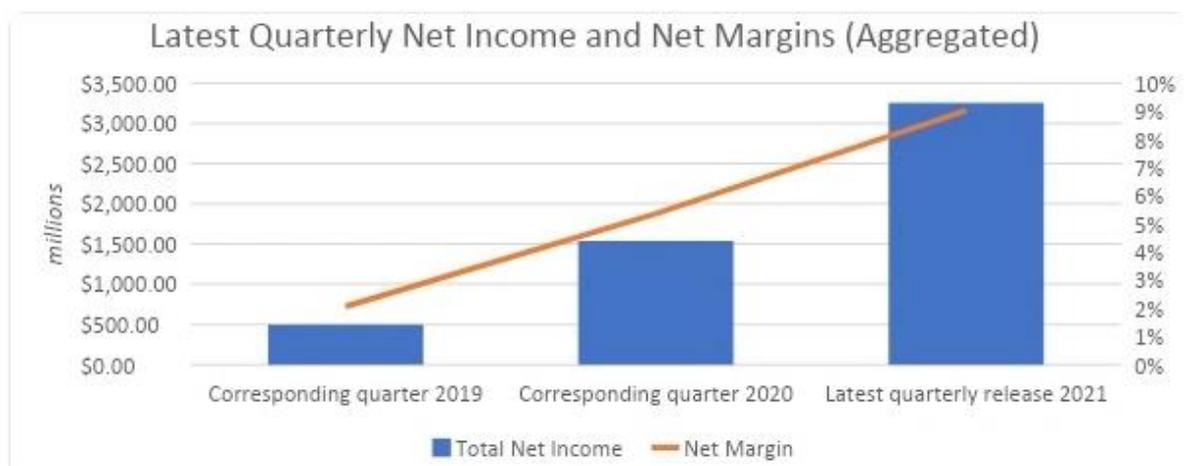
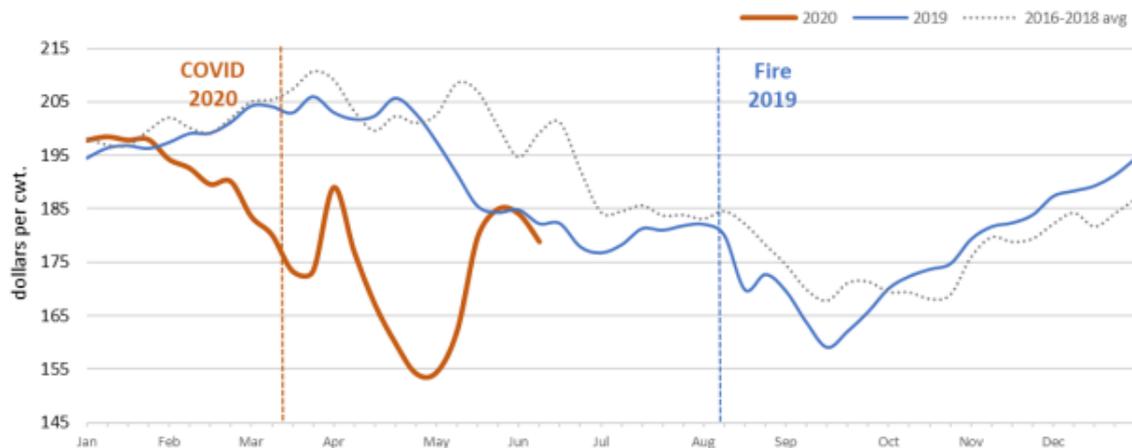


Figure 2 Net Income and Net Margins (Deese, et al., 2021)

Disruptions in the market due to a fire closed a branch of the Tyson company which managed up to 6% of the USAs beef processing capacity, resulting in a price spread (or difference in paid price versus final sale price) of 143% within one year even though their supply purchases were halted for a time. The pandemic disruptions also caused a 323% price spread in beef when 40% of the processing market was halted due to covid cases in the processing plants. These instances further proved the power these companies have over commodity price which have initiated official investigations upon them to determine GDP economic viability for the future and legalities of these price violations. (USDA, 2020)

Figure 1.

Average Weekly Negotiated Price - All Cattle Dressed Basis

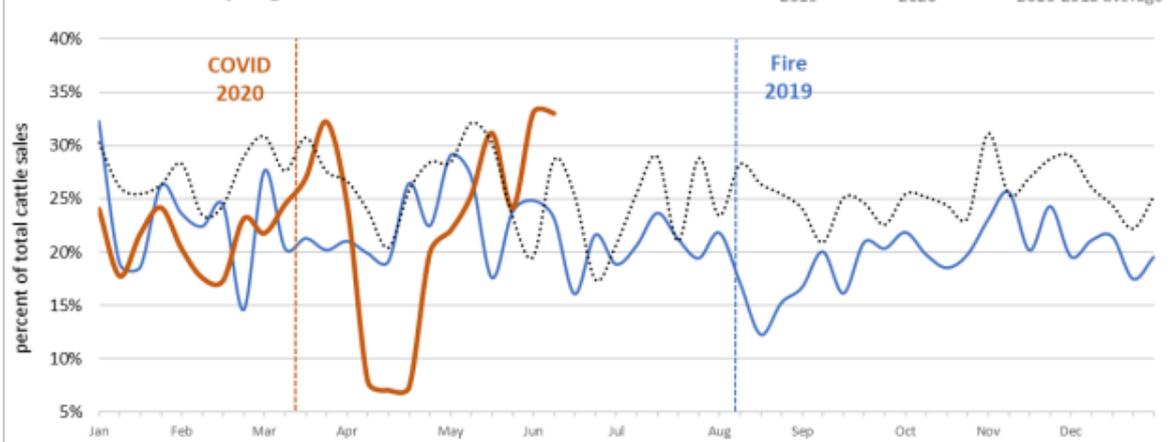


Weekly average negotiated cash basis prices for all cattle on a dressed basis in dollars per cwt. comparing 2020 to 2019 and to the 2016-2018 average. Source: USDA Agricultural Marketing Service

Figure 3

Figure 4.

Fed Cattle - % Weekly Negotiated Cash Sales



Weekly average percentage of negotiated fed cattle cash sales of total fed cattle sales comparing 2020 to 2019 and to the 2016-2018 average and highlighting the immediate post-plant closure period. Source: USDA Agricultural Marketing Service

Figure 4

Tyson Foods and other poultry companies (one a subsidiary company of JBS) paid out \$221.5 million (Reuters, 2022) in antitrust litigations when they were accused of price fixing broiler chickens, essentially pushing chicken producers out of the global competitive market. As many as 1.2 million customers have filed claims against the companies, and “while damages in this case are estimated to be in the billions, the risks of non-recovery have been significant” and success going forward is “no guarantee,” meaning it is too late for many producers to get back into business. (Bloomberg Law, 2021)

What is Happening Now

These findings have sparked new initiatives such as the Department of Agriculture Food Supply Chain Guaranteed Loan Program for small meat processors and distributors creating options for producers to work with and help resolve food supply chain issues that were intensified because of the pandemic. (USDA, 2021) Other state governors are also working towards creating more transparency in the industry and working on introducing bills that would publicise price information and other reportable relevant information. (ChuckGrassley, 2021)

The Packers and Stockyards Act is a US based regulation that aims "to assure fair competition and fair-trade practices, to safeguard farmers and ranchers...to protect consumers...and to protect members of the livestock, meat, and poultry industries from unfair, deceptive, unjustly discriminatory, and monopolistic practices...." (USDA, 2022) While this regulation has been in place in the USA since the 1970s, it could be questioned as to why the momentum to challenge these companies has taken this long initiate when it is a global supply issue.

Conclusion

The pandemic drastically shifted ideas in the how the global food supply chain is and should be operated. (Fortune, 2022) After analysing this supply chain and the companies that govern it, we can deduce that while their competitive advantage has proven financially beneficial for them, it may not be ethical or sustainable for the global business economy. Systematically pushing out competition to the point of bankrupting your raw materials supply chain also initiates these companies to start their own raw materials-based supply, further amassing the market.

To conclude, we can see that reducing competition in the supply chain market is great for business in the short term but may have long term consequences if industry stability is not considered. The power of a company's history plays a role in their current state of success by way of market domination, name recognition, and pure size with economic consequences for their business failure. Supply chain complexities on a local but global impact level need to be considered, and as proven by the pandemic, fully international integration and nonlocalized supply chains in the food industry should be managed with caution noting consideration for the political, environmental, and industrial economy. Challenging the ethics of the advantages these companies have on the price spreads across the market should not only be investigated in this industry but potentially across the entire global food industry. (The White House, 2021) In the same way that some state that the large tech companies should be capped and broken down when it comes to pure industry consolidation, similar is being considered in the food industry with government initiatives now coming into place to ensure stability not only on the store shelves, but in the industry as well. (World Economic Forum, 2022)

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