

February 7, 2018

US Meat Producers

Consumer Staples – Packaged Foods & Meat

Industry Rating

Underweight

Investment Thesis

We recommend an **Underweight** position in this industry. Historical increases in per-capita consumption of meat are expected flatten. Meat prices are expected to fall or remain at current levels for the next several years. Rising labor and transportation costs are expected to tighten margins leaving little growth for investors.

Drivers of Thesis

- Projected meat consumption remains flat through 2024 with a CAGR from 2018 to 2024 of -0.01.
- Individual meat prices per hundredweight are projected to fall through 2024 with beef falling from a projected 2018 price of \$116.50 to \$98.84 in 2024
- Excess production is expected to outpace growth in demand

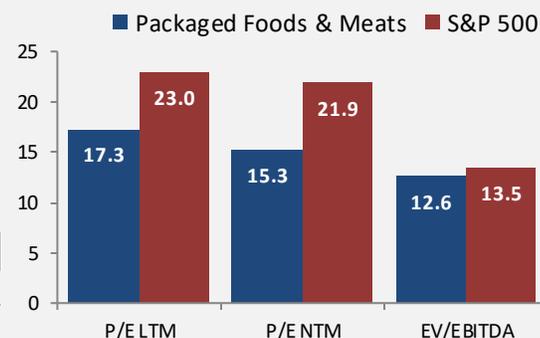
Risks to Thesis

- Rising income and overall economic improvement may cause consumers to purchase more and higher quality meat.
- International demand may provide demand from growing middle classes in developing nations.

Key Statistics

Top Competitors	Market Cap (\$Bn.)
Tyson Foods	26.8
Pilgrim's Pride Co.	6.8
Hormel Food Co.	17.8
Conagra Brands	14.7
P/E	
Tyson Foods	13.3
Pilgrim's Pride Co.	10.7
Hormel Food Co.	19.8
Conagra Brands	19.7
ROA	
Tyson Foods	6.4%
Pilgrim's Pride Co.	16.1%
Hormel Food Co.	12.1%
Conagra Brands	2.1%
EPS	
Tyson Foods	5.31
Pilgrim's Pride Co.	2.90
Hormel Food Co.	1.57
Conagra Brands	1.74

Source: FactSet



Per Capita Meat Consumption (US) Source: USDA

Year	2016	2017	2018E	2019E	2020E	2021E
Lbs.	214.3	217.5	215.7	215.5	215.8	216.1
growth	1.7%	1.5%	-0.1%	-0.1%	0.1%	0.1%

12 Month Performance vs. S&P 500



Source: FactSet

Industry Description

This industry engages in the slaughter of animals and the processing of animal carcasses to produce processed meats and meat by-products. This industry is responsible for the packaging and distribution of fresh and frozen products to restaurants, grocers, and consumers. The industry primarily produces poultry, beef and pork.

EXECUTIVE SUMMARY

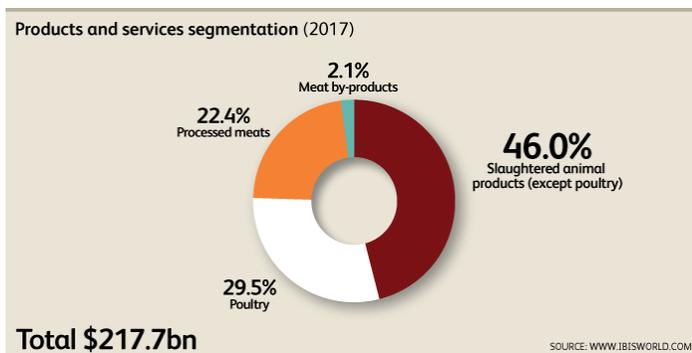
The meat production industry is a mature sector that holds some little for investors. Should population growth and per capita consumption of meat increase as projected, firms in this industry should see minimal growth. The industry has benefited recently from low prices of corn and other feeds, which are projected to remain low. There is also an expectation of an increase in export sales.

However, the industry does pose risk for investors who should be cautious of the loss of profits caused by either an excess of supply or potential disruption to livestock or feed inputs from natural disaster or disease. Furthermore, should the U.S. dollar gain against other currencies, the projected international growth may be tempered as trade partners look to other, cheaper sources, such as Brazil.

Although meat remains a consumer staple, consumer behavior during the Great Recession has shown that consumers are willing to trade down quality of meat products or switch to alternate protein sources. Furthermore, increased consumer interest in fish or plant-based diets will likely reduce consumers intake of meat.

INDUSTRY OVERVIEW

The major firms operating in this market segment are Tyson Foods (TSN), JBS SA (JBS), Hormel Food (HRL), Pilgrim’s Pride Company (PPC), and Conagra Brands (CAG). These firms produce three primary food segments: chicken, beef and pork.



These firms purchase livestock from private growers and auctions. Some firms, such as Tyson Foods, have high

levels of vertical integration and have inputs from feed companies as they raise their own chickens.

Chicken Production

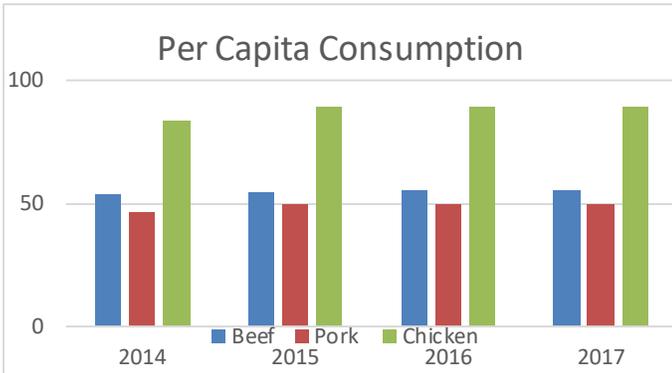
Poultry was listed as the number one most desired source of protein among surveyed US consumers in 2016₄ and was the most consumed protein by weight in 2017. Per the USDA, the demand for chicken grew at 1.1% annually from 2005 to 2015 and is projected to grow at 1.2% annually through 2025. Firms in this sector produce “broilers” or chickens that are specifically raised for consumption. This is the most vertically integrated segment of the sector with companies such as Tyson and Pilgrim’s Pride controlling all levels of production. The input for this segment is feed, mostly corn and soybeans.

Beef Production

Beef was listed as the sixth most desirable source of protein among US consumers in 2016₄. US beef consumption has dropped by around 15% since 2006. Beef is the highest priced product in this sector, costing over 50% more per pound than pork and 200% more per pound to consumers than chicken. Beef is a less vertically integrated section of this sector. The main input for this segment comes in the form of purchasing live stock on the open market. The animals are purchased from live feed lots and independent auctions. Tyson has acknowledged in their annual reports that this dependence on outside sources could result in what they term temporary imbalances in supply and demand.

Pork Production

Pork is the seventh most desirable source of protein for US consumers surveyed in 2016₄. However, globally pork is the most consumed protein. Inputs for this segment are live stock purchased from independent suppliers.



Pork consumption has increased since 8% 2014, the highest gain of any segment and production of pork has increased to meet this demand.

Sector Analysis

The Packaged Foods & Meats sector consists of eleven listed members of the S&P 500.

KEY DEVELOPMENTS

For the meat production industry to remain profitable, the industry is relying on projections that include increased demand and a continuing low cost for animal feeds.

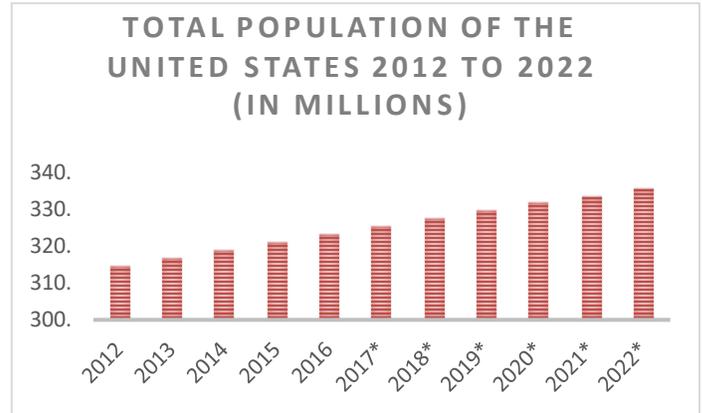
US Disposable Wages & Consumer Confidence are on the rise

As the economic outlook of Americans improves, consumers are more comfortable purchasing better quality meat with increasing frequency.



Source: IbisWorld

This increase, in conjunction with the normal population growth of the United States and the per capita increase in consumption of meat area the main drivers of growth in this industry



Source: Statista

Buyer Consolidation and Power

Firms that operate in this sector sell to large buyers such as grocery stores, restaurants, food distributors and large box stores. These entities have consolidated in recent years, which leaves meat producers with fewer customers to sell to who hold larger buying power. For example, one buyer, the box store chain WalMart accounted for 24% of Conagra’s net revenue and 17.3%₂ of Tyson’s consolidated sales₁. Both companies note in their annual reports that should this single buyer cease to do business with them, those revenues would not be replaceable. With this level of strength, it is difficult for firms in this sector to successfully pass along cost increases to their buyers. Many of these same customers operate at high efficiency levels regarding their inventory, allowing them to keep low levels of inventory on hand.

Disease Outbreaks

Disease outbreaks can occur in any segment of this sector.

In 2014 PEDv, a disease that affected young pigs, caused the death of up to seven million pigs across thirty states in the US and was credited with driving up meat prices across the board₅.

In 2014 & 2015, during an outbreak of HPAI, almost 50 million chickens were killed in the US and egg prices reached record highs⁶.

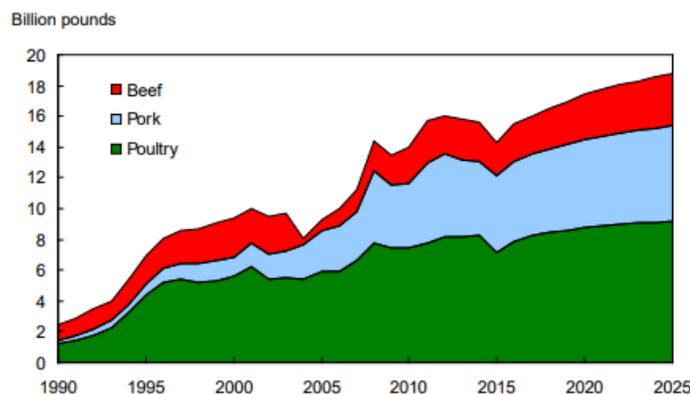
Such events have several negative effects on meat producers. First, is the destruction of large numbers of affected animals. This decreases supply and increases input costs for meat producers. Second, the reporting of disease outbreaks has a negative effect on the public's interest in the affected segment causing a lower demand for multiple years. Third, disease outbreaks can hamper entry to foreign markets that may be closed by government food quality regulators. Fourth, there may be additional cost to firms that have their own livestock or poultry as they will need to increase spending on biosecurity to prevent future outbreaks. Finally, these events can put unexpected levels of demand on the remaining sectors as consumers shift away to another protein source.

INDUSTRY TRENDS

Foreign Markets

The USDA has projected that the US exports of beef, chicken and pork will all increase over the next decade.

U.S. meat exports



Source: USDA

The main importers of US meat products are Mexico, Canada and Pacific Rim countries for beef and pork. The main importers of US chicken are Mexico and China.

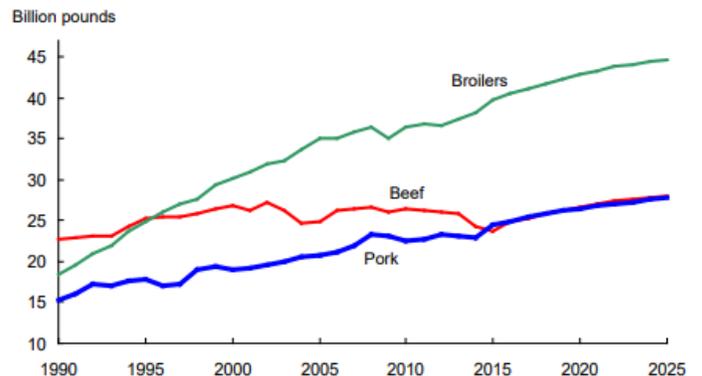
Projections of increased chicken demand are bolstered by the lifting of restrictions on poultry from previous HPIA outbreaks.

There are some areas of concern for international demand, especially a strong US dollar. If the dollar strengthens versus other currencies, the importing countries may look to other sources that would offer a better exchange rate. Also, the exit of various trade deals, such as NAFTA, could complicate international trade projections and in extreme circumstances, countries could impose tariffs or ban US products outright.

Increased Production

As the demand for meat has grown and is forecasted to continue to grow, firms have increased production to meet demand. All segments are predicted to increase production for the next decade with the highest growth coming in the chicken segment.

U.S. red meat and poultry production



Source: USDA

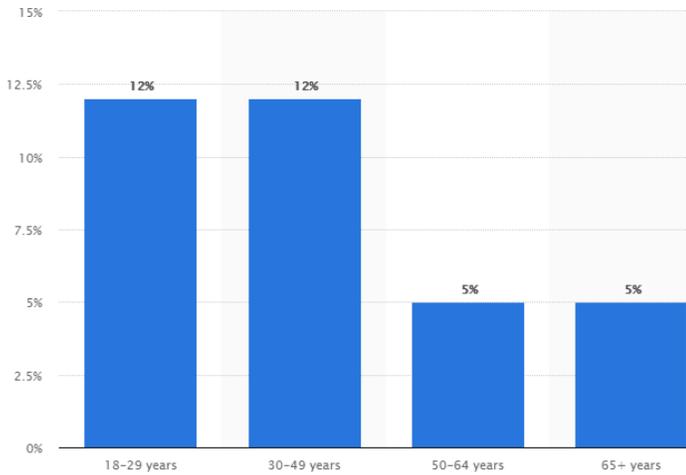
This production increase comes not only from larger herds or flocks but also from the average weight of the livestock increasing, providing more meat for harvest per animal.

Plant Based Diets

A major threat to this industry is the growing trend toward consumers preference for plant-based diets. The percentage of consumers that identify themselves as

vegetarian or vegan is over twice as high in consumers under 50.

Percent of Consumers Who Consider Themselves Vegan or Vegetarian



Source: Statista

This trend is showing in the growth of plant-based foods went up by 8.1% in 2017. Furthermore, the global meat substitutes market is expected to grow at a CAGR of 8.4% from 2015-2020¹⁰.

Firms are already starting to hedge against this risk as evidenced by Tyson’s purchase of additional stake in plant-based Beyond Meats in late 2017. Tyson purchased an undisclosed amount in addition to the 5% stake that they already owned.

Firm Comparisons

Firms that operate in this sector vary in size and performance.

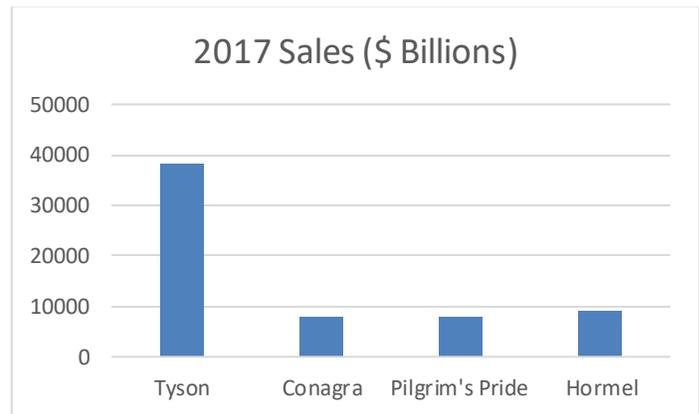
The largest public company is Tyson (TSN) with 2017 sales of \$38 billion. Tyson Foods is a leading producer of food products headquartered in Springdale, AR and employing around 122,000 in total. The company is focused on protein and contains four main segments: pork, chicken beef, and processed foods. They sell their products to large grocers, food distributors, and restaurant chains. They operate a fully integrated chicken segment, while

cattle and pork are segments are supplied with the purchase of grown livestock¹.

Pilgrim’s Pride is located in Greenly Co. They operate exclusively in the chicken segment of the industry and had 2017 sales of \$10.7 billion. Their sales are primarily in the U.S, U.K., Europe, and Mexico. They sell to both foodservice and deli customers. They sell chicken raw, frozen, or ready to eat³.

Conagra is a packaged foods manufacturer located in Omaha NE, that employs around 12,000 workers. They participate in meat processing through their Frozen & Refrigerated Meals and Snacks & Treats segments which combine for around 70% of total sales. The company focuses on single meal frozen offerings. Conagra had 2017 total sales of \$7.8 billion².

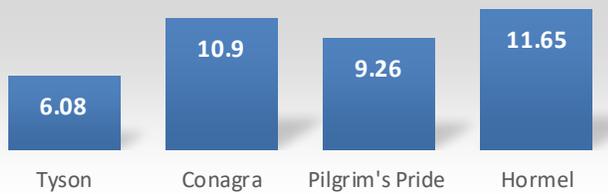
Hormel is a 125-year-old food service company headquartered in Austin MN. The company has around 20,000 employees and had 2017 sales of \$9.8 billion in 2017. They sell grocery products and specialty goods and participate in the meat producers industry through their offerings in refrigerated foods and Jennie-O Turkey. These lines account for around two thirds of their business¹³.



Source: FactSet

Looking at the operating margin across a five-year average, Conagra and Hormel are the industry leaders with an average ratio of over ten. Pilgrim’s pride is also in that range with a ratio of slightly under ten. Tyson has the lowest ratio at just over 6.

Operating Margin (5 Year Avg.)

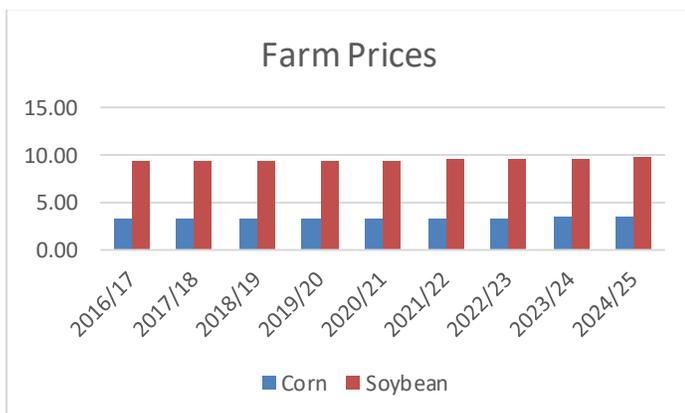


Looking at the total debt as a percentage of total equity, we can see that there is a wide variety of capital structures across the sector. Hormel is the least leveraged with on 5.1% while Pilgrim's Pride is much higher at 145%. Tyson and Conagra fall in the middle at 96.8% and 75.1% respectively. Tyson's percent debt of equity is higher this year after a large acquisition (AdvancePierre) was partially financed with debt in 2017.

ECONOMIC OUTLOOK

Steady Feed Prices

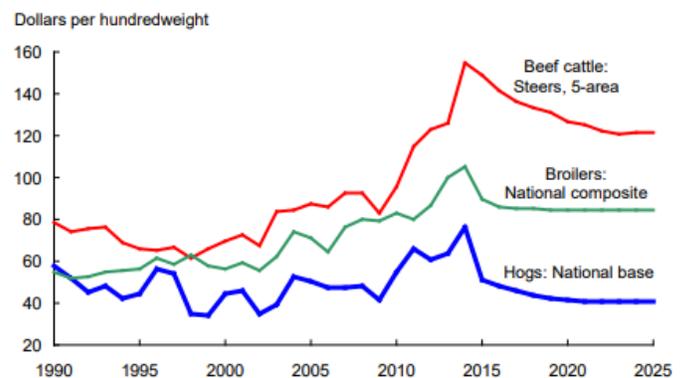
The meat production industry has benefitted over the past several years from low prices on feed, corn and soybeans. Tyson identifies feed costs as 55% of the total costs of growing a chicken domestically. Conagra states that feed accounts for 29.6% of COGS. As these are major costs, the continuation of low prices is a strong positive for this sector. Currently, the USDA projects only a slight rise in these prices.



Potential Price Decrease

The projected increase in production has also led to a projected decrease in meat prices as supply overtakes demand. This flattening or declining of prices will prevent future increases in per-capita consumption from raising revenues at rates that beat the general market performance.

Nominal U.S. livestock prices



CATALYSTS FOR GROWTH

Increased international sales increases, especially to the Asian Rim countries may offer the best chance for growth in this sector.

Domestically, increased offering of packaged goods as consumers trend more toward frozen single serve meals will provide growth to firms that can appeal to changing tastes and dietary preferences. Other unforeseen dietary trends may surface that encourage consumers to purchase and consume more meat.

INVESTMENT POSITIVES

- Internationally, per capita meat consumption is projected to rise across all the segments.
- This is a mature industry with established firms that are experienced in marketing and creating consumer demand.

- Meat remains a consumer staple and among the most preferred protein sources for most Americans.

INVESTMENT NEGATIVES

- Supply of livestock and poultry is expected to rise in the near term. If this growth causes a glut of supply, meat prices could fall across the board.
- This sector is vulnerable to rising costs, either gradually from higher than expected feed costs or suddenly from disease or climate disruptions.

KEYS TO MONITOR

The production levels of all segments of this industry are projected to rise. Will this cause an excess of supply, or can the firms correctly forecast the increasing demand and maintain current prices.

Will disease outbreak cause disruption to the supply chain of the firms in this sector?

Will meat consumption fall as the US population ages and consumers turn to more plant-based diets to maintain health?

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